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Telemarketing Violation of Consumer Protection Laws

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Introduction:

Mobile telephony has caused a unique revolution in the area of communication. Telemarketing has become a significant instrument of direct marketing because of the swift expansion of mobile telecommunications. It includes all the advantages of direct marketing but at a significantly reduced cost. India is also experiencing the growth in telemarketing alongside the increasing number of mobile users. The Indian mobile user count rose from around 5 million in 2001 to 7 million in 2010. (Telecom Regulatory Authority of India). The rural teledensity rose from 9.46% by the end of March 2008 to 15.11% by the end of March 2009, while urban teledensity rose from 66.39% to 88.84% throughout the identical timeframe. In this context, it is intriguing to explore which products and services are commonly promoted and well-accepted by consumers through this marketing approach. This study aims to examine customer perceptions and attitudes towards telemarketing, the advantages perceived by companies from this perspective and an overall evaluation of this marketing tool. Telemarketing has been chosen for this analysis to investigate the impact of various social-psychological factors related to this medium, particularly in the Indian setting. The survey results revealed a mixed response, leading to the conclusion that marketers need to put in more effort to enhance the effectiveness of this tool.

2.Review of Literature:

Telemarketing is the quickest method to directly contact a customer. Typically, some of the fastest methods for companies to contact their current or prospective customers are fax, phone, or the web. Such practices have been around for quite some time in business, and they have encountered a number of controversies. However, aside from this small aspect, this selling technique, recognized as Telemarketing, has been extremely successful. Telemarketing involves direct communication with potential customers, offering various benefits to businesses in several ways. Telemarketing ,also referred to as telesales or inside sales, is a type of direct marketing in which companies reach out to their prospective client through. Telphone, for instance, calls, pre-recorded sales messages, etc., facsimile, online, such as web meetings. naturally, the main goal is to market your goods or service s and create earnings, However, telemarketing excludes direct mail marketing.

Telemarketing

Definition:

The act of selling, soliciting, or promoting a good or service over the phone is known as telemarketing; the phone is the most economical, adaptable and statistically reliable medium available. The telephone is still very personal and intimate, though. It depends on the individual.

Meaning:

The process of generating leads, making sales, or gathering marketing data over the phone is known as telemarketing. When compared to personal selling, telemarketing can save time and money while providing many of the same advantages in terms of direct customer contact, making it a particularly useful tool for small businesses. To put it simply, telemarketing is marketing done over the phone, using the phone as the primary means of contacting potential customers. There is no direct face-to-face interaction involved. The practice of telemarketing gained popularity in the 1970s. It entails getting in touch with, screening and contacting possible clients.

Due to evolving work practices, businesses can now make calls from their offices, employ call centers, or have telemarketers do it from their homes. The primary objectives of telemarketing are to gauge the interest of a prospective customer. That said, a phone call enables companies to determine whether a particular customer shows any level of interest in their offerings. If the response is positive,

the telemarketer will close the deal during the call or may switch to other communication channels to turn that potential customer into a confirmed customer. Overall, telemarketing establishes a foundation for further engagement. Companies generate leads and assess consumers' spending patterns in relation to the company's own offerings, then narrow their focus to customers with the highest potential profitability. Converting one regular customer is preferable to concentrating on three potential customers with low profitability.

Example:

Consider the calls you receive from retail businesses urging you to visit and purchase the newe st collection at a reduced price. This is nothing more than "telemarketing."

2.Outbound Telemarketing:

Companies actively reach out to prospective customers and existing clients through outbound telemarketing calls, commonly referred to as "cold" calls. Outbound telemarketing is evidently more challenging than inbound marketing. Nevertheless, one cannot rely on people to express interest in your product; instead, you must contact individuals and generate their interest in your offerings. It would be accurate to assert that outbound telemarketing demands the highest levels of communication and marketing proficiency. A positive aspect of outbound telemarketing is that its costs are typically lower than those associated with inbound telemarketing. Inbound telemarketing only succeeds when you advertise or market your offerings across various platforms and encourage customers to contact you for more information. However, with outbound telemarketing, you must...

a) Call the customers

b) Educate them about your offering

c) Persuade them to buy your product/service

d) Close the deal (if the customer agrees)

Suppose you are a local internet service provider aiming to inform your customers about a new package or upgrade. It is not mandatory to run an advertisement for existing customers, as this can be costly. Instead, you can educate them via a phone call and persuade them to adopt the upgrade.

3. Sales: This approach closely resembles outbound telemarketing, wherein highly skilled telemarketers contact potential customers and persuade them to purchase a company's product or service. If the conversation proves successful, they secure the sale over the phone.

4. Lead Generation:

Lead generation is fundamentally a process by which enterprises gather demographic, personal, and even professional data about prospective customers. Following the collection of the requisite information, they contact these customers through various channels. Companies can generate leads using a range of sources such as:

a)Advertisements

b)Internet,

c)Social events,

d)Business expos

e)Phone calls

f) Email

In today's economy, lead generation services are all the rage because they can provide you with all the prospective clients you might need without having to do any work, which is the most attractive part of it. However, before you invest in anything lead generation, you should look out for frauds or scams as there are companies out there who just want to make a quick buck. These companies will generate and sell you their customer lists, but when you realize that none of these prospects would like to do business with you, it would already be too late.

Consumer protection is a concept introduced in1962 by John F. Kennedy in his speech on March 15, 1962. In his speech, he laid out the four basic rights of the consumer, which were the right to safety, the right to be informed, the right to choose, and the right to be heard.

1. Right to Safety

2. Right to be informed
3. Right to be Heard
4. Righjt to choose

On 15th March every year now, World Consumer Rights Day is celebrated since it was Inspired by President John F. Kennedy in 1962. Ralph Nader was another major figure in the establishment of consumer protection legislation who wrote the landmark book Unsafe at Any Speed that addressed the negligence of automobile manufacturers. Some of the major issues regarding consumer rights are protection against fraud, false advertising and unfair monopoly practices that consumers might face in the market. Consumer rights are some of the rights that everyone cannot be ignored in the society, even if not mandatorily but ethically.

Consumer protection has been widely recognized in the UK as an effective way of preventing exploitation by commercial organizations on account of their being the dominant power in the market. Consumer Protection encompasses provisions of law to uphold the rights of consumers. Raghubir Singh v. Thakurain Sukhraj Kuar, the Supreme Court recognized that the consumer is the king in the market. The consumers need to be protected against the unfair trade practices and exploitation of the commercial organizations. Therefore, they are glazed with the statutory provisions for a fair dealings. It is also significant to shield the organizations from hectic and unnecessary consumer complaints. In India, Consumer Protection Act was enacted in the year 1986 for the efficient consumer protection. Most of the consumer disputes can be settled quickly and effectively through the specialized bodies constituted under the Act in the form of consumer forums. It was ensured that the consumers have easy access to justice.

At first, consumer movement was limited to the protection of consumer rights. But with passing time it has taken the shape of active consumer movements. Also, the scope of consumer rights was enhanced and several additional rights have been added to the list of the original rights. These are the right to satisfaction of basic needs, right to redress, right to consumers' education, right to a healthy environment. In 1962, John F. Kennedy delivered a message to US Congress in which he enumerated the 'Bill of Consumer Rights.' According to this Bill consumers have four basic rights, which are as follows:

1. Right to Safety;
2. Right to Information;
3. Right to Choice; and
4. Right to be Heard.

The above mentioned rights were the original consumer rights, later on, an International Organisation of Consumer Movement named 'Consumers International was formed with 160 members from 107 countries. Consumers international further strengthened the bill of consumer rights.

3.Obejctives of the Study:-

1. To find whether telemarketing is accepted by customers as an upcoming technique of promotions.
2. To understand whether telemarketing is more useful for services or products .
3. To assess whether the customers find telemarketing inconvenient and irritating .
4. To find whether telemarketing is an additional cost to company or it generates sales for the company and value for the customers.

4. Importance of research:-

1. It would be effective to protect consumer rights
2. It would be effective to educate the consumers.
3. It would be effective to implement the laws relating to telemarketing.
4. Impact of this research would be to find out whether the right to education is properly copped up in government and private schools.
5. To empower consumer with knowledge of their rights as referenced in consumer protection acts.

5.Hypothesis:-

H-1 : Telemarketing is violating consumer protection laws.

H-2: Telemarketing is not violating consumer protection laws.

Methodology:

In this research paper the data for the present study is collected mainly through secondary sources the objectivity of historical and current writings has been used to develop a frame work of the study and to arrive at an unbiased conclusion.

6. Finding :-

Violation of consumer protection laws through telemarketing. The advent of telecommunications has significantly altered our societal norms. The telephone has evolved into a vital tool for communication, serving various social and business needs. In addition to personal conversations, individuals now commonly utilize the telephone for marketing and advertising, a practice referred to as 'telemarketing.' Nowadays, a diverse array of products and services are promoted through telemarketing. However, the majority of these marketing calls are unsolicited, meaning that telecom consumers have not explicitly agreed to receive them. Consequently, many consumers view telemarketing calls and text messages as intrusive and bothersome, as they are often received at inconvenient times, infringing on the privacy of telecom users.

Telemarketing is often disliked by many people as telemarketers frequently call at inconvenient moments and often ignore your disinterest. Over time, marketing tactics have expanded from unwanted mail and faxes to include email spam and various online marketing approaches. Telemarketing holds a unique and negative reputation in society, leading to the passing of the Telephone Consumer Protection Act in 1991 due to consumers' frustration with persistent telemarketers.

Unsolicited marketing messages are a significant concern for telecommunications customers, leading to a high volume of complaints. To address this issue, the Regulations of 2007 and the establishment of the National Do Not Call Registry were implemented. Despite efforts to reduce unsolicited marketing messages, telecom customers remain dissatisfied with receiving unwanted calls and text messages. These unsolicited messages come from both authorized and unauthorized telemarketers. Surveys carried out by TRAI have shown that most customers do not want to receive such messages or calls, yet many have not taken the step to register with the NBNC Registry.

There is a debate about whether only subscribers interested in receiving telemarketing calls should bear the registration burden, rather than all subscribers. To tackle the issue of unwanted commercial communications, the idea of a National Do Not Call Registry should be considered. This registry would contain the phone numbers of customers who want to receive telemarketing or promotional calls. Only these customers would be contacted by telemarketing companies. Implementing this system would make it illegal to make unsolicited commercial calls to any other telecom customers.

Indian courts and the Reserve Bank of India (RBI) have placed limitations on telemarketing firms to prevent them from intruding on individuals' privacy through unsolicited calls promoting products like credit cards and bank loans. These restrictions will not completely eliminate telemarketing in India, as companies will still engage in requested interactions with potential clients. In India, there are two main categories of business communications: requested and unsolicited. Requested communications involve calls made after receiving consent, either explicit or implied, from the recipients following the establishment of a business relationship.

A valid business connection between the person making the call and the one receiving it is considered to exist when the customer has shown interest, applied, bought something, or engaged in a transaction related to the products or services provided by the caller or the organization in question. The customer can terminate this association by informing the caller or the relevant organization not to make any more marketing calls. An unsolicited commercial communication occurs when the caller initiates contact to advertise and sell their product without any prior business relationship with the

recipient. Simply put, an unsolicited communication is a marketing message that the recipient is not anticipating. A large portion of telemarketing activities in both India and other countries involves unsolicited communications.

The majority of customers find these calls bothersome and disruptive as they take up their time and frequently disrupt their work. Furthermore, such calls violate the privacy of customers. Several nations have introduced legal and regulatory measures to combat the problem of unwanted marketing calls. For example, in nations such as the United States, United Kingdom, and Ireland, customers can prevent telemarketing calls by enrolling in "do not call" lists. Many countries have been attempting to limit or halt the misuse of telemarketing through various methods like Government interference, laws, and efforts within the industry. Individuals enlisted on Do Not Call lists can report to the regulatory body in the US and the data protection authority in the UK. In Hong Kong, telemarketers might face disconnection for breaching regulations. A Public Interest Litigation (PIL) in progress at the Supreme Court involving Harsh Pathak against the Union of India and others concerns unwanted telemarketing calls. Justices N Santosh Hegde and S B Sinha suggested a need for a new law to prevent unsolicited calls. While the final ruling on the 2005 PIL is pending, the highest court expressed concern over the majority of unsolicited calls being related to credit/bank cards and loan promotions.

The individuals arguing stated that the majority of these calls were placed to unsuspecting cell phone users during working hours and occasionally even late at night. They also claimed that unwanted calls infringed upon their basic rights as outlined in Sections 14, 19, and 21 of the Constitution. In a separate decision, the State Consumer Commission in New Delhi ruled that mobile phone users bothered by unrequested calls and SMS messages from their telecom providers, banks, or telemarketers would qualify for a minimum compensation of Rs 25,000. This directive was issued following a complaint lodged by a lawyer named Ms. Nivedita Sharma from Delhi, who reported receiving 15 to 20 unwelcome calls daily. Noticing the complaint lodged against Airtel, ICICI Bank, and American Express Bank, as well as the increasing problem of unwanted calls, the Commission also levied a penalty of Rs 50 lakh on Airtel and the Cellular Operators Association of India. In November 2005, RBI released instructions for banks issuing credit cards and non-banking financial companies (NBFCs). The key guidelines regarding unsolicited calls are outlined below:

1. Card issuing banks or NBFCs are required to have a Do Not Call (DNC) record with the contact numbers (mobile and landline) of individuals who have requested not to receive unsolicited marketing calls or messages related to credit card offers, whether they are customers or not.
2. Individuals can request to have their phone numbers added to the DNC list through the bank/NBFC's website or by sending a letter.
3. A new procedure should be implemented by card issuing banks/NBFCs where direct sales agents and call centers must provide a list of numbers they plan to contact for marketing to the bank/NBFC. The bank/NBFC will then check the DNC registry and only approve calling numbers that are not on the list.
4. The telephone numbers approved by the card issuing bank/NBFC for contact should be the only ones used. The bank/NBFC will be accountable if a Do-Not-Call number is dialed by its sales representatives or call centers.
5. The card issuing bank/NBFC must guarantee that the Do-Not-Call registry numbers are not shared with any unauthorized individuals or utilized inappropriately.
6. Banks/NBFCs/their representatives must avoid intruding on privacy, such as continuously contacting cardholders at unusual times, which goes against the Do-Not-Call regulations.
7. The bank or NBFC that issues the card should not disclose any details about customers obtained during account opening or credit card issuance to anyone else without their explicit permission. According to the revised Banking Ombudsman Scheme, a dissatisfied customer can lodge a complaint with the relevant Ombudsman against a bank or NBFC for breaching the RBI's rules on credit cards. To align with recent Supreme Court judgments and consumer

court decisions, the government should introduce a law to oversee telemarketing activities, ensuring telemarketers operate while respecting individual privacy and upholding the constitutional rights of Indian citizens.

1. Telephone users are experiencing issues with receiving unwanted calls and text messages (SMS) / multimedia messages (MMS) from sales representatives and telemarketing companies promoting different businesses.
2. In the case of People's Union For Civil Liberties (PUCL) Vs. Union of India and others (1997) 1 SCC 301, the Supreme Court has ruled that the right to privacy is connected to the fundamental rights outlined in articles 19 and 21 of the Constitution of India.
3. Besides causing annoyance and inconvenience to clients, these text messages can take up storage space on phones, leading to the non-receipt of important messages. Therefore, there is a necessity to develop a new regulatory framework to tackle the issue of unwanted commercial communications.
4. Some consumers lack familiarity with telemarketing and struggle to identify issues. Educators focused on consumer education can design courses on deceitful telemarketing tactics. This is crucial to enable consumers to avoid future issues.
5. Telemarketing is not the sole advancement in the market. Consumers now have the option to shop through email and various home shopping networks. Teaching sessions that equip consumers for this evolving market can be a valuable method to enhance understanding of appropriate and inappropriate practices as market regulations shift alongside new technologies.
6. The individuals making the request argued that a majority of these calls were directed at unsuspecting mobile phone users during working hours and sometimes even late at night. They also argued that unsolicited calls violated their essential rights as outlined in Articles 14, 19, and 21 of the Constitution.
7. Unfair Competition dictates that advertising via email, fax, or phone necessitates the recipient's approval (opt-in model), with the sole exception being the utilization of customer information for direct marketing if customers have provided their electronic contact information in connection with a product or service purchase.
8. According to the Consumer Protection Act, a commercial phone call can only be legal if the recipient has explicitly agreed in advance to receive the call.
9. Despite the introduction of UCC regulations in 2007, several telemarketers have not yet registered with the Department of Telecommunications.
10. Buyers who have engaged in telemarketing have reported it as their least favorable purchasing encounter. It's possible that only a small number of consumers utilize telemarketing for shopping, or they are so unfamiliar with this innovative marketing approach that they do not identify any issues. Conversely, telemarketing could be a satisfactory shopping method for many consumers, and they might have encountered even more negative situations in other retail environments.

7. Suggestions:

1. It is essential for marketers to protect the confidentiality of survey participants.
2. Telemarketing should be conducted by skilled staff members proficient in communication and handling potential customers.
3. Telemarketing ought to serve as a component of marketing strategies, not as the primary method for sales and marketing efforts.
4. Currently, there should be a greater focus on social media advertising.
5. Telemarketing should be restricted to specific hours during the day, not carried out throughout the entire day.
6. In addition to telemarketing, other marketing approaches should be implemented.

9. Conclusion:

In conclusion, based on the research findings, it is evident that respondents do not find telemarketing calls enjoyable. The repeated nature of these calls causes stress as most companies engage in this practice. In the current digital era, marketers heavily emphasize telemarketing and allocate significant resources to it. The significant growth of Business Processing Outsourcing serves as proof of this trend. Due to people's busy schedules, telemarketing is considered an efficient way to reach them as they may not have time for face-to-face meetings. While telemarketing was initially successful and well-received, its effectiveness has diminished due to overuse, particularly cold calling. This traditional method of lead generation is now considered outdated, with social media marketing emerging as a more prominent and cost-efficient alternative. Based on my research, I can confidently state that telemarketing is not a highly effective marketing strategy.

10. Reference

1. M. Evans, L. Malley & M. Patterson, Direct Marketing: Rise and Rise or Rise and Fall, 13 Marketing Intelligence & Planning 16 (1995).
2. C. Hurst, Sustainable Telemarketing? A New Theory of Consumer Behaviour, 2 Direct Marketing: An International Journal 111 (2008).
3. C. Nancarrow & P. Sally, Rapport in Telemarketing—Mirror, Mirror on the Call, 16 Marketing Intelligence & Planning 12 (1998).
4. D. Szymanski, Modality and Offering Effects in Sales Presentations for a Good Versus a Service, 29 Journal of the Academy of Marketing Science 179 (2001).
5. J. Wang et al., An Overview of Telemarketing Fraud Problems and Countermeasures in Taiwan, in 4430 Lecture Notes in Computer Science 309 (2007).
6. W. Licata & B. Kleiner, Managing Telemarketing Departments Effectively, 28 Management Research News 14 (2005).
7. N. Shover, G. Coffey & C. Sanders, Dialing for Dollars: Opportunities, Justifications, and Telemarketing Fraud, 27 Qualitative Sociology 59 (2004).
8. Internet & Mobile Association of India (IAMAI) & eTechnology, Mobile Value Added Services in India (2008).
9. E. Boyd, Defensive Marketing's Use of Post-Purchase Telecommunications to Create Competitive Advantages: A Strategic Analysis, 13 Journal of Consumer Marketing 26 (1996).

Yoga Therapy for Sports Recovery among College-Level Athletes

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Abstract

Participating in collegiate sports entails consistent training, competition, academic obligations, and psychological pressure. Insufficient recuperation can lead to exhaustion, tension, pain in the muscles, and musculoskeletal issues, all of which can have a detrimental impact on wellbeing and sports performance. Yoga therapy is becoming more widely acknowledged as a complementary mind-body method that could aid in both psychological and physical healing. This study looks at how yoga therapy can help college and university athletes with musculoskeletal issues, stress, and exhaustion. Secondary data about yoga, sports recovery, stress, exhaustion, flexibility, and musculoskeletal health were gathered from research articles, review papers, books, dissertations and other academic literature.

According to the reviewed literature, yoga poses, pranayama, relaxation, and meditation may improve psychological well-being, flexibility, balance, and stress reduction. For this reason, yoga could be a helpful addition to sports rehabilitation regimens. It shouldn't, however, take the place of adequate sports rehabilitation, physiotherapy, or medical care. To determine its efficacy among college and university players, more sport-specific research is needed.

Keywords: Fatigue, stress, musculoskeletal issues, yoga therapy, sports recuperation, college athletes, and university athletes

1. Introduction

For college and university students to develop healthily, sports and physical activity are essential. Athletes at this level train and compete on a regular basis to enhance their technical proficiency, athletic performance, and physical fitness. However, athletes may experience significant physical and psychological strain from ongoing training and competition. Thus, sustaining performance and avoiding undue weariness depend on sufficient recuperation.

Athletes frequently experience fatigue, which can be brought on by intense training loads, little sleep, insufficient recuperation, pressure to perform well academically, and competitive schedules. In a similar vein, fear of failure, academic obligations, selection pressure, and performance expectations can all lead to psychological stress. Muscle discomfort, stiffness, decreased flexibility, and other musculoskeletal issues can also affect athletes.

Yoga is a classic mind-body practice that incorporates breathing exercises (pranayama), physical postures (asanas), relaxation, focus, and meditation. Yoga has drawn interest in sports and physical education in recent years because to its potential benefits for both mental and physical health. Yoga therapy, which combines controlled physical activity with breathing and relaxation, may offer a supplementary strategy for sports rehabilitation. While pranayama and meditation may promote relaxation and stress reduction, asanas may help preserve flexibility and mobility. Yoga may therefore be useful for sportsmen who require both physical and mental recuperation.

In order to investigate the possible role of yoga therapy in lowering fatigue, stress, and musculoskeletal issues among college and university athletes, the current study evaluates the literature.

2. Objectives of the Study

The study was conducted with the following objectives:

1. To investigate how yoga therapy helps college and university athletes recover from athletics.
2. To investigate how yoga treatment might affect weariness.
3. To investigate how yoga therapy can help with psychological stress management.
4. To investigate how yoga treatment affects musculoskeletal health.

5. To evaluate yoga's value as an additional recuperation technique for athletes.

3. Research Methodology

The present study adopted a **descriptive review-based research design** using secondary data.

Sources of Data

Data were collected from:

- Articles of research Examine papers.
- Books Thesis and dissertations Journals of sports science
- Literature on yoga and physical education
- Published research journals on musculoskeletal health, stress, tiredness, exercise recovery, and flexibility

Three main themes emerged from the review and organization of the gathered literature:

1. Yoga and exhaustion/healing
2. Psychological stress and yoga
3. Musculoskeletal health and yoga

For this investigation, no primary experimental data were gathered.

4. Yoga Therapy and Sports Recovery

A crucial component of sports training is recuperation. After training or competition, it enables the athlete's body and mind to restore to a suitable level of functioning. Rest, sleep, diet, stretching, active recovery, massage, and physical therapy are examples of traditional recovery techniques. By combining physical and psychological techniques, yoga may enhance these tactics. While breathing and relaxation techniques can aid in mental healing, gentle yoga poses help increase flexibility and mobility.

4.1 Yoga and Fatigue

Recurrent training, competition, lack of sleep, and psychological pressures can all lead to athletic tiredness. Thru better body awareness, breathing, relaxation, and regulated movement, yoga may assist reduce perceived fatigue.

Frequent yoga practice may also promote physical relaxation and flexibility. An athlete's impression of recuperation after training may be influenced by several factors. Yoga shouldn't be used in place of proper sleep, diet, training load management, or medical attention.

4.2 Yoga and Psychological Stress

College players frequently have to balance their academic and athletic obligations. Exams, selection, injuries, performance expectations, and competitive pressure can all lead to psychological stress.

Yoga's key elements of pranayama, meditation, and relaxation may assist athletes have better control over their breathing, focus, and relaxation. Yoga and mindfulness exercises may be beneficial for psychological health and stress-related consequences, according to earlier studies.

As a result, yoga might offer an easy-to-use supplementary method for handling the psychological demands of collegiate athletics.

4.3 Yoga and Musculoskeletal Problems

Muscle stiffness, decreased flexibility, and musculoskeletal discomfort may result from athletes' exposure to repetitive physical activities and training loads.

Yoga poses can enhance flexibility, balance, and body awareness thru deliberate stretching and movement. These characteristics are crucial for athletes to continue having functional movement.

Additionally, yoga may help athletes become more conscious of their body's movements and sensations. However, before engaging in yoga-based workouts, athletes with severe discomfort or recent injuries should be evaluated by a qualified healthcare provider.

5. Discussion

According to the material that is now accessible, yoga may be beneficial as an additional element of sports recuperation. Yoga integrates physical activity, breathing, relaxation, and mental awareness, in contrast to traditional physical training.

Because recuperation is impacted by both physical and psychological aspects, this integrated approach may be especially helpful for collegiate and university athletes. While academic and competitive obligations can lead to psychological stress, regular exercise can cause physical exhaustion.

By encouraging flexibility, mobility, relaxation, body awareness, and psychological well-being, yoga may aid in the healing process. While asanas may promote flexibility and functional mobility, pranayama and meditation may be especially helpful for stress relief and relaxation.

However, depending on the kind, length, frequency, and intensity of the practice, the effects of yoga may differ. Yoga should therefore be properly scheduled and incorporated with current sports training and recuperation techniques.

6. Major Findings

Based on the reviewed secondary literature, the following findings were identified:

1. Yoga can enhance sports recovery.
2. Yoga can relieve perceived physical and mental weariness.
3. Pranayama, meditation, and relaxation can aid in stress management.
4. Yoga can increase flexibility and mobility.
5. Yoga may improve balance and body awareness.
6. Yoga may assist alleviate muscle stress and stiffness.
7. Yoga can support both physical and psychological rehabilitation.
8. Yoga should complement, not replace, traditional sports rehabilitation and medical care.

7. Recommendations

1. Yoga can be included into college and university sports programs as a healing activity.
2. Short, supervised yoga practices can be introduced on recuperation days.
3. Recovery sessions may focus on gentle yoga, pranayama, and relaxation techniques.
4. Yoga programs should be tailored to each athlete's sport, fitness level, training load, and injury condition.
5. Athletes with injuries should practice under professional supervision.
6. Future researchers should undertake experiments with college and university athletes.
7. Future study should focus on specific outcomes, including fatigue, stress, sleep quality, flexibility, recovery and injury-related variables.

8. Conclusion

Yoga therapy has the ability to serve as a supplemental method to sports recovery for college and university athletes. The mix of asanas, pranayama, relaxation, and meditation offers a comprehensive approach to both physical and psychological rehabilitation.

According to the reviewed literature, yoga may help reduce felt weariness and tension while also improving flexibility, mobility, balance, and psychological well-being. It can thus be included in athletic recovery programs alongside recognized methods such as optimal diet, adequate sleep, rest, physiotherapy, and appropriate training load management.

Nonetheless, yoga should not be used as a substitute for medical care or professional rehabilitation. Additional experimental and sport-specific research is required to establish the effectiveness of yoga therapy among college and university athletes.

References

1. Kramer, Lauche, Haller, Dobos, and Michalsen (2013). A comprehensive study and meta-analysis of yoga for lower back pain. Clinical Journal of Pain, 29(5), 450–460.
2. Cramer H, Lauche R, Langhorst J, & Dobos G (2016). Yoga for Depression: A Systematic Review and Meta-analysis. Depression and Anxiety, 33(11), 1065–1076.
3. Cramer, Lauche, Anheyer, Pilkington, Manincor, Dobos, and Ward (2018). Yoga for anxiety: A systematic review of the literature. Depression and Anxiety, 35(9): 830–843.
4. Ross, A. and Thomas, S. (2010). A comparative evaluation of the health advantages of yoga and exercise. The Journal of Alternative and Complementary Medicine, 16(1), 3–12.

A Study of Female Consciousness in Bapsi Sidhwa's The Pakistani Bride

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Abstract

In Bapsi Sidhwa's novel *The Pakistani Bride* (1983) is the story of a tribal man Qasim travelling alone from an isolated village where he was born and adopts an orphaned girl as his daughter. He brings her to the glittering city of Lahore. He struggles in the pungent bazaar and crowded street of Lahore to make his fortune and sets a home for the two. After sometimes he becomes nostalgic for life in the mountain when his cousin comes to meet him. He promises his cousin to marry his daughter, Zaitoon, with his son. Reluctant Zaitoon initially accepts the marriage proposal but soon she realizes her mistake and insists him to take her to back to Lahore. *The Pakistani Bride* is an interesting novel showing tremendous story-telling capabilities of the novelist. It is primarily the story of an orphan girl, Zaitoon, who lost her family in the communal violence, erupted during the partition of India. She is brought up in Lahore by Qasim, a Pathan, who decides to migrate from his mountainous village to the plain of Pakistan after the small-pox and typhoid takes his entire family. Travelling alone from the isolated mountain village where he was born, the tribal man takes the orphaned girl for his daughter and brings her to the glittering city of Lahore. Amid the pungent bazaars and crowded streets, he makes his fortune and a home for the two of them.

Key Words: Communal, feminism, liberty, male dominance, partition etc.

Born in Karachi in 1939, Bapsi Sidhwa was brought up and educated in Lahore. Her husband Noshirwan, a respected Lahore businessman, is the son of the Late Mr. R.K. Sidhwa, ex- Mayor of Karachi and a renowned freedom fighter. Bapsi Sidhwa graduated from Lahore's Kinnaird College for Women. Mother of two girls and a boy, she was initially a housewife and an active social worker. Her main field of interest is Women's Right and Social Investigation. She was part of a women's delegation to Iran and Turkey in 1970. In 1975 she represented Punjab at the Asian Women's conference of Alma-Ata, in the republic of Kazakhstan, in erstwhile USSR. She was a voluntary worker on several social work committee and was actively involved in setting up the Destitute Women's and Children's Home in Lahore. Her marriage to Noshirwan is her second marriage. When she was nineteen years old, she fell in love and married a sophisticated Bombay businessman but the marriage did not last long. As a resilient young woman, she took to writing out of boredom and loneliness. In an interview to Jugnu Mohsin in *The Friday Times* of July 20-16, 1989 Bapsi Sidhwa admitted that as a typical social life in Lahore, it was one of unrelieved tedium. She said, "How I abhorred those coffee parties! I tell you, I would've gone mad had it not been for my writing." Even as a child, Bapsi Sidhwa was isolated and lonely. In the same *Friday Times* interview to Jugnu Mohsin she admitted, "I had polio as a child. I had to have extensive treatment; my parents were advised not to send me to school. I was tutored at home by an Anglo-Indian lady who taught me to read and write." Her infirmity resembles to that of Lenny, the girl child narrator, a victim of polio, introduced in *Ice-Candy-Man* thus making it an autobiographical in nature.

Bapsi Sidhwa has attained mastery of writing in several languages, English, Urdu, Gujarati and Punjabi. She however prefers to write in English. In an interview to David Montenegro, Bapsi makes her position about writing in English very clear: "I find myself comfortable writing in the language. My written Urdu is not very good, though I speak it fluently. As for Gujarati, hardly anyone in Pakistan knows the language. In Britain, of all places, people say, "Why don't you write in your own language?" And they bring very heavy political overtones to bear on this. But I think, well, the English don't have monopoly on the language. It is a language of the world now. And it is a means of communicating between various nationalities and the most immediate tool at hand. So, I use it without any inhibitions

or problems, as far as I'm concerned." (Cited in *Points of Departure- International Writers on Writing and Politics*)

In fact, *The Pakistani Bride* is about Muslim community and one realizes that Parsis are more stabilized and privileged and organized than the Muslims. Sidhwa made an honest attempt to explain Islamic sanctity about marriage: "We take marriage and divorce very seriously. It involves more than just emotions. It's a social responsibility." (*The Pakistani Bride* 181) The vision of the writer definitely creeps in the novel however much the author tries to maintain a distance from the subject. A title such as *The Pakistani Bride* at first might suggest a happy story, but it soon becomes evident that it contains an ironic twist. The novel opens with the wedding of the central character, Qasim, and an account of his and his bride's shared humiliation on their wedding night. He is only ten, and his father has married him to a woman twice his age. The novel records with swift movement his maturation, the developing relationship between husband and wife in spite of their age difference, the deaths of his wife and children, his move from the Himalayan mountains to the Punjabi plains, and his life as a bank guard in that unfamiliar territory. Then what little security Qasim has found during his four years in the Punjab vanishes when independence comes to India and the sub-continent is divided into India and Pakistan. After murdering a man who has humiliated him, Qasim decides to flee India and take his chances in Pakistan; he boards a train loaded with refugees bound for Lahore, one of the major cities given to the newly created nation.

At the border, a group of marauding Sikhs attacks the overcrowded train and murders most of the refugees. Qasim manages to escape, and in the chaos he rescues a young girl whose parents have been slaughtered. With the help of Nikka and Miriam, a couple whom he meets in a refugee camp, he settles in Lahore and rears the child, whom he has named Zaitoon after his dead daughter. Mothered by Miriam - who has not borne children and thus is something of an outcast - Zaitoon rehearses the role for which she is destined: to become a bride. As well as receiving instruction from Miriam, Zaitoon spends much of her time in various *zenanas* - women's quarters - where "the benign squalor" draws her, "as it did all its inmates, into the mindless, velvet vortex of the womb." Some *zenanas* are inhabited by brides who have entered plural marriages. Bound by tradition, all the women acquiesce to their own subjugation, and Zaitoon learns this lesson well.

The scene shifts to another bride, an American woman named Carol who has married a Pakistani man in the United States and then moved home with him. Unaccustomed to the subordinate role of women at all levels of Asian society, Carol rebels against the restrictions, against her husband's jealousy and suspicions, and against the sexual repression that hinders free exchange between men and women. Carol is in turn flattered, fascinated, and revolted by the sexual innuendos constantly directed toward her by Pakistan men.

A meeting between the two unlikely brides, Zaitoon and Carol, occurs when Qasim promises his sixteen-years-old adopted daughter to a tribal man. Father and daughter travel from the bustling city of Lahore to the sparsely populated Himalayas, where the marriage is to take place, and spend a night at the government house that Carol and her husband are visiting. When the two women meet, even with backgrounds so contradictory, they feel a kinship as brides in a land where women are considered chattel no matter what their social status may be.

Once Zaitoon has been married and left by Qasim in the primitive mountain village, the young bride soon realizes the absurdity of her romantic illusions about marriage. Unaccustomed to so harsh a life, Zaitoon rebels, and her husband Sakhi, goaded on by the other men, sets out to tame her. In constant fear of his beatings and his sexual force, she runs away from the village and spends days lost in the mountains as she searches for the government house where she can find refuge. Zaitoon reaches safely after experiencing terrible physical privation and rape. Even though she is rescued, she remains a marked woman who can never return home, for she has failed as "the bride." Moreover, she has been raped and will always bear the stigma of this physical violation, for which she can hardly be held responsible. Thus, the simple title of this novel lies heavy with irony. To be "the bride" in a patriarchal society that demeans women translates into bondage sometimes subtle, other time total.

In an interview, Bapsi Sidhwa insisted that she was not writing "overtly feminist literature" in *The Pakistani Bride;* she went on to explain that she wanted the ideas to be embedded in the novel itself and added that she has little use for "didactic fiction." Certainly, in this book she succeeds in avoiding didacticism and integrating theme with the essential ingredients of plot, character, and setting. The novel is constructed with admirable economy as it unfolds a complex story, introduces and develops numerous characters, and creates settings both exotic and realistic.

Because Sidhwa was writing in English about a non-Western society, she needed to forge new methods of storytelling. First, the story had to appeal to Asian readers of English familiar with the world she was recreating. Second, the narrative needed to be clear and meaningful to the English-language reader abroad, who might be altogether unfamiliar with Pakistani history and traditions. She could not appear to be condescending to either group of readers by explaining too much, nor could she withhold details from her international audience. *The Pakistani Bride* Sidhwa's first novel but the second to be published had a good reception in Europe and the United States as well as in Pakistan and India.

Perhaps that acceptance has been attributable in large part to the simplicity of the prose and the force of the action. A prime example of these qualities is the few pages that cover the violence accompanying the partition of India and the subsequent creation of Pakistan. These historical details also set the plot in motion. At the outset Sidhwa explains how the partition tragedy came about: "The earth is not easy to carve up. India required a deft and sensitive surgeon, but the British, steeped in domestic preoccupation, hastily and carelessly butchered it. They were not deliberately mischievous - only cruelly negligent! A million Indians died." (*The Pakistani Bride 15*) This spare unfolding of events continues throughout in a manner just as vivid as the account of the senseless bloodshed that dominated partition; for example, Zaitoon's struggle in the mountains is told with a similar narrative force.

The setting of the novel whether the crowded streets of Lahore or the grandeur of the Himalayas, spring to life. The colors, the odors, the shapes, the movement are captured in a word or phrase that suggests more than what appears on the page. For example, when Qasim visits the part of Lahore given over to brothels, the prose conjures up a rich, variegated scene: "the narrow lanes streaming with men, and the tall rickety buildings leaning towards each other…the heady smell of perfume, the tinkle of payals of dancers' ankles, the chhum-chhum of feminine feet dancing." (*The Pakistani Bride* 78) Equally well realized later in the novel is the stark landscape of the mountains: "More and more the Indus cast its spell over her…. The strangely luminous air burnished her vision: the colours around her deepened and intensified. They became three dimensional. Were she to reach out, she felt she could touch the darkness in the granite, hold the air in her hands and stain her fingers in the jeweled colours of the river." (*The Pakistani Bride* 39)

While *The Pakistani Bride* has much to say about a patriarchal culture where women have little control over their fates, it does so without forsaking the demands of effective storytelling. Sidhwa has succeeded in embedding ideas within a novel that is breath-taking in its action, engaging in its characterization, and exotic in its rendering of place. There is no tradition of women's literature in Pakistan; in fact, the country has no tradition of English-language literature. Sidhwa can only be considered a pioneer in both areas. Whether *The Pakistani Bride* has had any dramatic impact on the treatment of women in Pakistan remains doubtful, for it is altogether possible that each bride represented in the novel still exists, whether in the *zenanna,* in the mountains or in the drawing rooms of wealthy, Westernized Pakistanis. Perhaps, though, woman - Western or Asian - reading the novel might realize at last that she need not acquiesce, that she need not accept her victimization.

Sidhwa's work was somewhat slow to establish itself internationally. Once *The Pakistani Bride* has been fully discovered abroad, however, it will certainly find a place in women's literature. In the 1990s plans by the Ivory-Merchant company to film the novel seemed likely to win for it a wider readership. Sidhwa based *The Pakistani Bride* on an actual story she had heard about a Punjabi girl like Zaitoon who had entered into an arranged marriage with a Himalayan tribal man, attempted to

escape, and after fourteen days of wandering in the mountains was found by her husband; he cut off her head and threw her body into the river. That Sidhwa allows her heroine to escape is significant. By altering the original story, Sidhwa sends the message to women that they must rebel no matter what may be the consequences. Further, through the voice of the American bride she denies the male excuse expressed by Carol's husband that women "ask for it": "Women the world over, through the ages," Carol thinks with sarcastic disgust, "asked to be murdered, raped, exploited, enslaved, to get importunately impregnated, beaten-up, bullied and disinherited. It was an immutable law of nature."

Sidhwa herself exemplifies the rebellion against this false "immutable law." After a sheltered childhood in a wealthy Pakistani home, she entered an arranged marriage at the age of nineteen, soon became the mother of three children, and succumbed to the demands of her role as wife of a successful businessman. Like Zaitoon, she escaped, in her case by writing fiction, secretly at first lest she be thought pretentious by her family and friends. After a long struggle to get published and recognized, her work - four novels in all - at last began to gain attention both in Asia and abroad.

Certainly Sidhwa's stories, always about women who dare to go beyond the limits set for them, along with her own story, can only raise the awareness of women - and of men as well. Although the men in her novels may often be weak, unreasonable, and cruel, Sidhwa sees them caught in the webs of another so-called immutable law that needs to be reversed. They, too, must rebel against the role in which tradition has placed them. In Sidhwa's view, only when this dual rebellion takes place will the story of "the bride" be a happy one.

In the first chapter of the novel, the novelist reflects the situation when Qasim, aged about ten years, is married to Afshan. The father of Qasim, a sturdy middle aged tribesman, was delighted when Resham Khan promised to marry his son. His three elder sons were already married and now it was Qasim's turn. Like other bridegrooms, Afshan is also thrilled to imagine the first meeting with her husband at her first night.

The novelist shows us in the chapter two of the novel as to how Qasim and Afshan had lost their three children, two to typhoid and one due to polio. And another daughter, Zaitoon, too was suffering from small-pox and inching to death. The novelist explains: "Survival being the sole aim of life in those uncompromising mountains, they asked for no more. By the time he was thirty-four, Qasim and Afshan had lost three children, two to typhoid and one in a fall off a ledge. It did not matter really, because two sons and a daughter survived- a fair enough average. Then a fugitive from Soviet Kirgiz visited. He left the next day. And within a month they learned that he had died of small-pox." (*The Pakistani Bride* 12)

The novelist shows us as to how Qasim and Afshan, like other villagers, despite being Muslim believed that the small-pox has been erupted due to angers of a "Goddess" (Mata). "A few days later Qasim returned to find Afshan weeping by their hut. 'What is it?' She forced herself to be calm, lest 'Mata the dreaded Goddess, so easily enraged, even do more harm. 'Zaitoon is not eating, Mata has honored here with a visit. 'Qasim's throat contracted. He loved his daughter a child with wide, tawny eyes and limbs of quicksilver." (*The Pakistani Bride* 13) After nearly a month, there was only one person left in Qasim's family to survive after the attack of small-pox. About a year later, a clansman, who worked in the plains, persuaded the lonely Qasim to travel down to Jullundur to find a job there. He migrates on his advice and gets success there to secure a position as watchman at English Bank.

The Chapter two of the novel shows us as to how the North Indian plains witnessed the communal riots in 1947 rendering partition leaving lakhs and lakhs of people homeless. Sidhwa shares her personal experiences of partition days and points out the situation by presenting a lively and truthful picture of communal riots. She writes about the blood thirsty people who of late lived so friendly. The heart-rending situation of 1947's communal riots and cruelty of crazy mobs engaged in the riots which have been incorporated in the chapter two of the novel in the following words of a Sikh Moola Singh: "He swallows hard. I thought we would stay by our land, by our stock, by our Mussalman neighbors. No one can touch us, I thought. The riots will pass us by. But a mob attacked our village - Oh, the screams of women, I can hear them still…I had a twenty-year-old brother, tall

and strong as mountain, a match for any five of them. This is what they did-they tied one of his legs in one jeep, the other to another jeep and then they drove the jeep apart…" *(The Pakistani Bride* 16)

Independence of the nation was declared in the meantime and nearly fifty million people relaxed and breathed freedom. Nikka's business also gradually progresses. He and his wife Miriam shifted to three rooms on the ground floor of an apartment. But Qasim and Zaitoon remained on the second floor. Nikka's powers in wrestling and his enormous strength become legendry in the Lahore's Quila Gujjar Singh area. His generosity and capacity for arbitration also were widely acclaimed. Nikka procured a job of night-watchman for Qasim at a steel warehouse. Zaitoon was now at eleven and she suffered menstruation. Nikka and Miriam start talking about her marriage. Zaitoon looked bewildered and crestfallen to see the bleeding. She asked questions out of curiosity and Miriam gave an evasive reply: "You are now a woman. You'll bleed every month', she said, and don't be silly child, boys do not menstruate, only women! And how do I know how babies come, do I have a baby? Allah alone knows! But enough, you'll understand ever thing when the time comes . . .. She gave her strips of cloths, frayed with washing, and taught her the discipline of washing them for re-use. 'Don't play with boys-and don't allow any man to touch you." (*The Pakistani Bride* 55)

Miriam insists to stop Zaitoon from going to school. The novelist here shows us as to how a girl attaining puberty suffers from a lot of restrictions in the Muslim society. A young girl is a thing of protection and lives always under the fear of being touched or robbed by men. They are even protected by the glances of men and therefore they are asked to wear burkha.

In the chapter eight of the novel, Nikka and Qasim go to the Hira Mandi by a taxi to enjoy the dance of a dancing girl, Shahnaz. The incident ironically satirizes the double standards of Muslim community. Their women at home are protected even by the people's glances clad in burkha and on the other hand, these helpless women working as dancing- girls are compelled to display their body to please the sex-starved men for a little money.

Nikka soon became prosperous and influential. He enjoyed patronage of powerful politicians. He was of course no longer an ordinary man. Due to such increase in money and influence, he turned very arrogant. The novelist shows us as to how abrupt success and surplus money often makes a man arrogant. Nikka bought a shop next to his house for much less than the going price and expanded his business to include a provisional store. He sat solidly on his charpoy outside and lorded it over the nearby people.

But excess of anything is always bad. His arrogant acts increased day by day. And it became finally intolerable for police officers. A senior police officer who supported him earlier now decided to teach him a lesson. One day he thrashed a cart driver on flimsy reason and police arrested him immediately for his criminal act. After arrest he was thrust into a police van and was driven away. He was sentenced for four months. When he completed his sentences, at his release entire Quila Gujjar Singh welcomed him like a hero with warm heart and open arms.

Nusrat, the step daughter of Mullah was the closest friend of Zaitoon. Nusrat got married and it worried Qasim too to marry Zaitoon also. Qasim settles Zaitoon's marriage with his cousin Misri Khan's son, Sakhi. Miriam attempted to dissuade Qasim and Zaitoon from going to his native tribal area for marrying Zaitoon with a tribal boy. She requested Zaitoon also to refuse the marriage but she could not dare to displease her father.

Marriage is one of the most important decisions of a girl's life. While being married, a girl steps into the world of uncertainty. If she is lucky to get a good, sensible and accommodative husband then her life may be happy otherwise not. Zaitoon too, like other girls, becomes nervous and suffers consternation after hearing about her marriage with a tribal boy, Sakhi, who was the son of Qasim's cousin: "Qasim lay down and the girl expertly kneaded his legs. 'Abba', "she asked at length, 'is something troubling you?' Qasim did not answer. 'Why was Aunt Miriam crying? She set outside without her burkha….'Qasim studied her lithe body as it rocked to and fro. *'Bibi,* we talked of your marriage'. Zaitoon felt her body tremble." (*The Pakistani Bride* 95)

Carol is a young American woman who has dropped out of college to marry Farukh who has returned to his native land Pakistan with her. The jealousy, possessiveness and compromise that marks lives of both Zaitoon and Carol, differs merely in degree-but it is difference that literally marks the variance between life and death. Ashiq, a jawan at Army camp and Major Mustaq were also apprehensive about the success of marriage of Zaitoon with the tribal boy, Sakhi. Ashiq forbids Zaitoon and Qasim to marry with the tribal boy as all of them are murderers involved in bloody family feuds. But Zaitoon, loyal to her father, says that she would like to go with the wishes of her father. Zaitoon finally arrives along with her father at the native tribal village; Zaitoon finds that entire atmosphere of the village and hilly area is indifferent than Lahore. Zaitoon is badly terrified when the piercing wail of a jackal rent the night and the village dogs started barking. The helpless girl sobbed aloud and pleaded her father, Qasim and said: "Abba, please don't leave me here. Take me with you.' (*The Pakistani Bide* 185)

When Qasim attempts to persuade her to stay there and consoles her that everything will be alright very soon, she disagrees. She once again strongly pleads: "The girl clung to him desperately, digging her fingers into his shirt, her legs grasping him in a vice. He felt her body quiver against him." (*The Pakistani Bride* 185) But her adamant father, Qasim brushes aside her request as he has given words to his cousin and the marriage was to be solemnized within a week.

Even a minor girl, if married, is expected to behave like a matured woman in our society. When Qasim proceeds for Lahore leaving Zaitoon with her husband, she becomes impatient and requests him to take her with him running to Qasim, Qasim asks her that she should not behave like a child as she is now a married woman. Mustaq sexually exploited Carol as she was left alone in the army camp by her husband Farukh. He treated sexually her like his wife, as and when he wished. He hardly cared about Carol's resistance given him time to time in response to his advances. Living in a conservative society of Pakistan, the novelist does not hesitate to describe their love-making in candid words: "He went to her quickly. Cupping her breasts with both hands, Mustaq pressed against Carol impatiently. She lifted her mouth and Mustaq kissed her. He seldom remembered his preliminary caress and Carol's insistence on it amused him. Kissing was to him a gesture of affection" (*The Pakistani Bride* 178)

The sum up, *The Pakistani Bride* is a fast moving and interesting novel. It shows Sidhwa's genius and also her rare sense of fun that is irresistible. The naturalness of her description of physical feature, be it the look or the sexual act, is a unique feature among the subcontinent's women writers. The novel has been widely appreciated for dramatic presentation of marriage, loyalty, honor and their conflict with old ways in this well-told tale.

Works Cited and Consulted:

1. Sidhwa, Bapsi *The Pakistani Bride*, 1983. London: Jonathan Cape; Delhi: Penguin, 1990.Print.
2. Sidhwa, Bapsi Interview with David Montenegro. *The Massachusetts Review* Winter (1990).
3. Interview with Feroza Jussawalla *Interviews with Writers of the Post- Colonial World*. Ed Feroza Jussawalla and Reed Way Dasenbrock Jackson and London: University Press of Mississippi, 1992.
4. "On the Writers' World. Interview with Naila Hussain. *The Nation*. 26 May, 1993: 8, 19.
5. Karaka, D.F. *History of the Parsis,* Macmillan, London and Bombay, 1884.

Mahākavi Bhāravi and his Kirātārjunīyam: A Critical Study of Poetic Art, Arthagaurava and the Sanskrit Mahākāvya Tradition

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Abstract

Mahākavi Bhāravi occupies an eminent position in the history of classical Sanskrit literature. His celebrated Kirātārjunīyam is one of the outstanding specimens of the Sanskrit Mahākāvya tradition. Although Bhāravi's literary reputation rests principally on this single surviving work, the intellectual depth, linguistic mastery, poetic craftsmanship, political wisdom and philosophical insight displayed in it have secured him an enduring place among the great Sanskrit poets. The expression "Bhāraver arthagauravam", traditionally associated with Bhāravi, appropriately emphasizes the profundity and weight of meaning characteristic of his poetry.

The Kirātārjunīyam, consisting of eighteen cantos, derives its central narrative from the Vanaparvan of the Mahābhārata. It describes Arjuna's penance, his encounter with Lord Śiva disguised as a Kirāta or hunter, their combat, and finally Arjuna's acquisition of the divine Pāśupata weapon. Bhāravi transforms this comparatively brief epic episode into an elaborate Mahākāvya through descriptions of nature, political discussions, philosophical reflections, heroic characterization, rhetorical embellishment and sophisticated poetic techniques.

The present paper examines Bhāravi's contribution to Sanskrit Mahākāvya literature with particular attention to the narrative structure, characterization, poetic style, arthagaurava, rasa, alaṅkāra, descriptions of nature, political thought and philosophical dimensions of the Kirātārjunīyam. It argues that Bhāravi successfully combines literary beauty with intellectual seriousness and that his work represents an important stage in the development of classical Sanskrit court poetry.

Keywords: Bhāravi, Kirātārjunīyam, Sanskrit Literature, Mahākāvya, Arthagaurava, Arjuna, Kirāta, Śiva, Sanskrit Poetics, Alaṅkāra.

1. Introduction

Sanskrit literature possesses one of the richest and most continuous literary traditions of the world. Its poetic heritage includes the Vedas, the two great epics—the Rāmāyaṇa and the Mahābhārata—Purāṇic literature, classical poetry, drama, prose romances, philosophical literature and numerous branches of scientific and technical writing. Within classical Sanskrit poetry, the Mahākāvya occupies a particularly prestigious position.

The development of Sanskrit Mahākāvya reached remarkable artistic sophistication in the works of poets such as Aśvaghoṣa, Kālidāsa, Bhāravi, Māgha and Śrīharṣa. Among these poets, Bhāravi possesses a distinctive identity. Kālidāsa is traditionally praised for his similes, while Bhāravi is particularly associated with arthagaurava, or weight and profundity of meaning.

Bhāravi's Kirātārjunīyam is a major example of the highly codified Sanskrit court epic. Modern scholarship has accordingly treated it not merely as a retelling of an episode from the Mahābhārata, but as a carefully designed literary work whose structure and rhetoric exemplify important features of the Mahākāvya genre.

The poem narrates the encounter between Arjuna and Śiva, who appears before the Pāṇḍava hero in the form of a Kirāta. However, Bhāravi does much more than narrate an episode of heroic combat. The narrative becomes a vehicle for exploring courage, discipline, political responsibility, moral conduct, self-control, devotion and the relationship between human effort and divine grace.

The study of Bhāravi is therefore significant not only for understanding Sanskrit poetry but also for appreciating the intellectual and cultural environment within which classical Sanskrit Mahākāvya flourished.

2. Objectives of the Study

The principal objectives of the present research are:

1. To study the position of Mahākavi Bhāravi in classical Sanskrit literature.
2. To examine the source, structure and narrative development of the Kirātārjunīyam.
3. To analyse Bhāravi's distinctive poetic style and the concept of arthagaurava.
4. To study the characterization of Arjuna and Lord Śiva.
5. To examine the treatment of rasa and alaṅkāra in the poem.
6. To evaluate Bhāravi's descriptions of nature.
7. To examine political, ethical and philosophical ideas expressed in the Mahākāvya.
8. To assess Bhāravi's contribution to the development of Sanskrit Mahākāvya literature.

3. Research Methodology

The present study adopts primarily descriptive, analytical and textual methods. The Kirātārjunīyam constitutes the primary literary source of the research. Relevant portions of the Mahābhārata, particularly the narrative concerning Arjuna's penance and his encounter with Śiva, provide the principal comparative background.

Secondary sources include histories of Sanskrit literature, editions and translations of the Kirātārjunīyam, works on Sanskrit poetics, and modern scholarly studies of Bhāravi and Sanskrit court epic.

The comparative method is employed wherever necessary to understand Bhāravi's transformation of the epic source into Mahākāvya. Literary analysis is used to examine language, characterization, poetic figures, rasa, descriptions and philosophical ideas.

4. Life and Period of Mahākavi Bhāravi

Compared with the magnitude of Bhāravi's literary achievement, reliable biographical information about his life is limited. Scholars generally associate him with approximately the sixth century CE. His reputation rests on the Kirātārjunīyam, which survives as his principal known literary work.

The absence of extensive biographical information is not unusual in classical Sanskrit literary history. In many cases, poets are known primarily through their compositions, references in later literary works, inscriptions and traditional accounts.

Bhāravi's learning, however, is clearly reflected in his poetry. His command of Sanskrit grammar, political thought, rhetoric, philosophy, mythology and poetic conventions suggests a highly cultivated intellectual background.

The literary personality that emerges from the Kirātārjunīyam is that of a poet who combines imagination with intellectual discipline. Bhāravi is not satisfied with ornamental expression alone. His poetry frequently requires careful reading because a compact expression may communicate several layers of significance.

This intellectual density became one of the most recognizable characteristics of his poetry.

5. Kirātārjunīyam as a Mahākāvya

The Kirātārjunīyam consists of eighteen cantos (sargas). Its narrative foundation is derived from the Mahābhārata, particularly the episode of Arjuna's penance and encounter with Lord Śiva.

The Pāṇḍavas have lost their kingdom and are living in exile. Their political situation demands preparation for the future struggle against the Kauravas. Arjuna must obtain divine weapons that will enable him to face powerful warriors in the anticipated war.

He therefore undertakes severe penance.

Śiva decides to test him and appears in the guise of a Kirāta, a mountain hunter. Meanwhile, a demon appears in the form of a wild boar. Both Arjuna and the Kirāta shoot at it, and a dispute arises regarding whose arrow killed the animal. The dispute develops into combat.

Arjuna discovers that his apparently ordinary opponent possesses extraordinary strength. After intense struggle, he eventually realizes the divine identity of the Kirāta. Śiva, pleased with Arjuna's courage, discipline and devotion, reveals himself and grants him the Pāśupata weapon.

Thus, a relatively compact episode of the Mahābhārata is transformed by Bhāravi into an elaborate court epic.

Modern research has emphasized precisely this process of transformation. Recent scholarship argues that Bhāravi reorganized and enriched the inherited narrative through motifs and structural strategies suited to the established conventions of Mahākāvya. In this sense, Kirātārjunīyam represents both continuity with the epic tradition and creative transformation of it.

6. Narrative Structure and Artistic Design

One of Bhāravi's major achievements is his ability to expand a limited narrative episode without allowing the work to become merely a mechanical enlargement of its source.

The eighteen cantos contain political deliberations, journeys, descriptions of mountains and seasons, ascetic practices, divine intervention and martial action. The central confrontation between Arjuna and Śiva is prepared gradually.

This delayed movement toward the principal encounter serves an important artistic purpose. Arjuna must first be established as a warrior, a responsible member of the Pāṇḍava family and a disciplined seeker. His eventual encounter with Śiva consequently becomes more than a physical contest.

It is simultaneously:

* a test of courage,
* a test of self-control,
* a spiritual examination,
* a demonstration of heroic worth,
* and preparation for the responsibilities awaiting Arjuna.

Bhāravi's narrative design thus integrates the political, heroic and spiritual dimensions of Arjuna's journey.

7. Arthagaurava: The Distinctive Quality of Bhāravi

The most celebrated characteristic associated with Bhāravi is arthagaurava, literally the "weight," "gravity," or profundity of meaning.

The traditional expression:

भारवेरर्थगौरवम् — Bhāraver arthagauravam

captures the essence of his literary style.

Arthagaurava does not simply mean difficult language. It refers to Bhāravi's ability to communicate substantial meaning through carefully controlled and often compact expression. His verses frequently possess intellectual density. Political wisdom, moral insight and psychological observation may be compressed into relatively few words.

This quality distinguishes Bhāravi from poets whose primary appeal may lie in emotional tenderness or effortless lyrical sweetness.

Bhāravi's poetry demands intellectual participation from the reader.

His sentences are carefully constructed; compounds may be elaborate; grammatical resources are deliberately exploited; and the relationship between words and meanings is often sophisticated. Yet complexity in Bhāravi is generally connected with artistic purpose.

His poetry demonstrates that ornamentation and thought need not be mutually exclusive. Beauty can emerge through precision of reasoning, carefully balanced expression and semantic richness.

This combination of intellectual force and poetic technique constitutes one of Bhāravi's most important contributions to Sanskrit literature.

8. Characterization of Arjuna

Arjuna is the principal human hero of the Kirātārjunīyam. Bhāravi portrays him as much more than a warrior of extraordinary physical ability.

Several qualities characterize Bhāravi's Arjuna:

Courage:

Arjuna does not withdraw when confronted by the formidable Kirāta. His heroic nature becomes evident through his willingness to continue the struggle even against an opponent whose strength seems overwhelming.

Determination:

His austerities demonstrate exceptional mental strength. The acquisition of divine weapons requires personal discipline rather than mere entitlement based on heroic status.

Self-control:

Tapas becomes a process through which the warrior develops spiritual and psychological discipline.

Devotion:

When Arjuna recognizes Śiva, martial pride gives way to reverence.

Sense of responsibility:

Arjuna's quest for weapons is not merely personal. It is connected with the future restoration of justice and the political responsibilities of the Pāṇḍavas.

The transformation of Arjuna is significant. At first, he relies heavily on his martial identity. His encounter with Śiva reveals the limits of purely human strength. Heroism reaches completion only when courage is combined with humility and recognition of a higher power.

Thus Bhāravi presents Arjuna as both vīra, the hero, and sādhaka, the disciplined seeker.

9. Characterization of Śiva as Kirāta

Śiva's appearance as a Kirāta is central to the poetic and philosophical design of the Mahākāvya.

The disguise creates dramatic irony. Arjuna initially sees only a hunter, whereas the audience understands that the encounter possesses a deeper significance.

The Kirāta form also allows Bhāravi to bring together apparently contrasting worlds:

civilization and wilderness,

humanity and divinity,

asceticism and martial power,

concealment and revelation.

Śiva does not immediately reward Arjuna's austerity. He tests him.

This test is essential because divine favour in the poem is not represented as arbitrary. Arjuna must demonstrate courage, perseverance and spiritual readiness.

The combat therefore becomes a form of initiation.

When Śiva finally reveals himself, the revelation changes the meaning of everything that has preceded it. What appeared to be a conflict between two hunters becomes a divine examination of heroic worth.

Śiva consequently functions simultaneously as opponent, examiner, teacher and benefactor.

10. Vīra Rasa in Kirātārjunīyam

The dominant aesthetic mood of the Kirātārjunīyam is Vīra Rasa, the heroic sentiment.

The subject naturally lends itself to heroic treatment. Arjuna is a warrior preparing for an enormous future conflict. His austerities themselves possess heroic intensity, and his battle with the Kirāta forms the dramatic culmination of the poem.

Vīra Rasa is manifested through:

* Arjuna's determination,
* his physical courage,

* martial preparation,
* energetic descriptions of combat,
* endurance in adversity,
* confidence,
* and the final recognition of his heroic worth.

Nevertheless, the poem is not restricted to a single rasa. Elements of Raudra, Adbhuta and Śānta also enrich the aesthetic experience.

Raudra emerges naturally in scenes of conflict.

Adbhuta becomes prominent when divine power is manifested.

Śānta may be associated with asceticism, spiritual discipline and the ultimate movement toward divine recognition.

The interaction of these rasas gives emotional variety to a poem whose fundamental orientation remains heroic.

11. Alaṅkāra and Poetic Ornamentation

Bhāravi demonstrates remarkable mastery over Sanskrit poetic ornamentation.

His work employs both śabdālaṅkāras (figures based predominantly upon sound or verbal arrangement) and arthālaṅkāras (figures primarily dependent upon meaning).

Important figures found in his poetic technique include:

* Upamā (simile)
* Rūpaka (metaphor)
* Utprekṣā (poetic imagination)
* Anuprāsa (alliteration)
* Yamaka (repetition involving sound patterns)
* Śleṣa (double meaning or pun)
* Atiśayokti (hyperbolic expression)

Bhāravi's use of ornament is particularly interesting because it is connected with his broader intellectual style.

In less accomplished poetry, alaṅkāra can become decoration added to a narrative. In Bhāravi, ornament frequently contributes to the meaning, tone and architecture of the verse.

His sophisticated manipulation of language reaches remarkable levels in portions of the poem where verbal patterns become highly intricate. Such passages display the possibilities of Sanskrit as a language capable of extraordinary grammatical and phonetic organization.

These experiments also anticipate the increasing technical sophistication visible in later Mahākāvya poetry.

12. Description of Nature

Nature description constitutes an important feature of the classical Sanskrit Mahākāvya, and Bhāravi demonstrates considerable skill in this area.

The Himalayan environment is particularly significant in Kirātārjunīyam.

The mountain is not merely geographical background. It creates an appropriate environment for:

* austerity,
* isolation,
* divine encounter,
* heroic testing,
* and transcendence.

Forests, mountains, rivers, animals, celestial environments and changing natural conditions contribute to the atmosphere of the narrative.

Bhāravi's nature descriptions also demonstrate the Mahākāvya poet's capacity to transform landscape into an aesthetic object.

Yet nature is frequently connected with human experience. The grandeur of the mountains corresponds to the magnitude of Arjuna's quest. The wilderness separates him from ordinary social existence and prepares the narrative space for his extraordinary encounter with Śiva.

Thus nature serves both decorative and symbolic functions.

13. Political Thought in Kirātārjunīyam

One of the most intellectually significant features of the Kirātārjunīyam is its treatment of politics.

The early portions of the poem contain discussions concerning the condition of the Pāṇḍavas, the behaviour of enemies, political strategy and the appropriate relationship between patience and decisive action.

These passages reveal Bhāravi's familiarity with the intellectual traditions associated with nīti and statecraft.

Several important political principles emerge:

Knowledge before action:

A ruler must obtain reliable information concerning his opponent.

Importance of counsel:

Political decisions should emerge from thoughtful deliberation rather than uncontrolled emotion.

Timing:

Even a justified action can fail if undertaken at an inappropriate moment.

Self-control:

A leader unable to govern his own emotions cannot effectively govern political affairs.

Strength and preparation:

Moral legitimacy alone does not guarantee political success; power must be supported by preparation and strategy.

These observations demonstrate why Bhāravi's poetry is associated with arthagaurava. Political passages in the poem frequently function as concentrated statements of practical wisdom.

The Mahākāvya therefore operates not merely as literary entertainment but as a reflection upon leadership, governance and ethical action.

14. Ethical and Philosophical Dimensions

The philosophical significance of Kirātārjunīyam emerges most clearly from the relationship among effort, discipline, humility and divine grace.

Arjuna does not receive the Pāśupata weapon without effort. He undertakes austerities and proves himself through hardship.

The poem consequently gives importance to puruṣārtha, human endeavour.

At the same time, human endeavour possesses limits. Arjuna cannot defeat Śiva through martial skill. His encounter ultimately teaches him that even the greatest human power remains subordinate to the divine.

The narrative therefore avoids two extremes.

It does not advocate passive dependence upon divine grace, because Arjuna must exert himself intensely.

Nor does it glorify human power as absolutely sufficient, because Arjuna eventually encounters a power beyond himself.

The ideal presented by Bhāravi is a synthesis:

Effort must be intense, discipline must be sustained, courage must be maintained, but achievement must finally be accompanied by humility.

This gives the poem enduring philosophical relevance.

15. Language and Style

Bhāravi's language is distinguished by precision, density and grammatical sophistication.

His style frequently employs:

* compact constructions,
* carefully organized compounds,
* deliberate word choice,
* rhetorical balance,
* phonetic patterns,
* syntactic complexity,
* and semantic concentration.

Such stylistic features contribute directly to arthagaurava.

Bhāravi's language is therefore not always immediately easy. Yet literary difficulty should not automatically be interpreted as a defect. In his case, difficulty frequently reflects the poet's effort to achieve maximum expressive force within highly controlled linguistic structures.

Modern studies of the Kirātārjunīyam similarly emphasize its rhetoric and deliberate literary design, treating the work as an exemplary Sanskrit court epic rather than simply an ornate retelling of an inherited story.

16. Bhāravi and the Sanskrit Mahākāvya Tradition

Bhāravi occupies an important position between earlier classical poetry and the increasingly elaborate style of later Sanskrit Mahākāvya.

Kālidāsa demonstrates extraordinary balance between simplicity, suggestion, emotional sensitivity and descriptive beauty. Bhāravi develops a style in which intellectual concentration and rhetorical power become increasingly prominent.

Later poets, particularly Māgha, continue and intensify the technical possibilities of Sanskrit epic poetry.

Bhāravi may therefore be regarded as a crucial figure in the historical development of Mahākāvya.

He inherits:

* an epic narrative tradition,
* established conventions of classical poetry,
* sophisticated grammatical resources,
* and a developed theory of aesthetic expression.

Yet he transforms these resources into a highly distinctive poetic idiom.

Recent research into the relationship between Bhāravi and earlier Mahākāvya poets also suggests that his adaptation of inherited plot motifs was deliberate. The transformation of the

Mahābhārata episode enabled him to accommodate his source material to the expectations of the classical court-epic genre.

Consequently, the Kirātārjunīyam should be understood as both adaptation and innovation.

17. Literary Significance of Kirātārjunīyam

The enduring importance of Kirātārjunīyam can be understood on several levels.

First, it represents the extraordinary expressive capacity of classical Sanskrit.

Second, it demonstrates how a poet can transform material from an earlier epic into an independent literary masterpiece.

Third, it combines multiple intellectual traditions: poetry, ethics, politics, mythology, philosophy and religious thought.

Fourth, it offers a sophisticated interpretation of heroism.

Arjuna's victory is not simply the defeat of an external enemy. Indeed, he cannot defeat Śiva in the ordinary sense. His real achievement is proving himself worthy of divine recognition.

The hero's journey consequently progresses from strength to discipline, from discipline to testing, and from testing to recognition and grace.

This gives the work a structure that is at once heroic and spiritual.

18. Major Findings

The present study leads to the following major findings:

1. Bhāravi occupies a distinguished position in classical Sanskrit literature despite being known principally through one surviving Mahākāvya.
2. The Kirātārjunīyam transforms a comparatively brief Mahābhārata episode into a sophisticated eighteen-canto court epic.
3. Arthagaurava is the defining quality of Bhāravi's poetic personality. His poetry combines conciseness with semantic depth.
4. Arjuna is portrayed not merely as a warrior but as a disciplined seeker whose courage must be complemented by humility.
5. Śiva's Kirāta disguise provides the central dramatic mechanism through which Arjuna's character is tested.
6. Vīra Rasa dominates the poem, while Raudra, Adbhuta and Śānta contribute aesthetic variety.
7. Bhāravi demonstrates exceptional command of alaṅkāra, grammar, compounds and sophisticated verbal arrangements.
8. Nature description is both aesthetically pleasing and structurally meaningful, especially in the
9. Political discussions reveal a sophisticated understanding of leadership, intelligence, timing, strategy and self-control.
10. The poem creates a meaningful relationship between human effort and divine grace.
11. Bhāravi played an important role in the development of the increasingly sophisticated style of later Sanskrit Mahākāvya.
12. The Kirātārjunīyam demonstrates that classical Sanskrit poetry could successfully combine intellectual seriousness, aesthetic beauty and technical virtuosity.

19. Conclusion

Mahākavi Bhāravi stands among the most accomplished poets of classical Sanskrit literature. His Kirātārjunīyam represents a major achievement of the Mahākāvya tradition and demonstrates the remarkable artistic possibilities of Sanskrit poetic expression.

The genius of Bhāravi lies not merely in his command of vocabulary, grammar or rhetorical ornamentation. His deeper achievement is the successful integration of thought and poetry.

The celebrated concept of arthagaurava accurately summarizes this quality. His verses frequently possess a concentration of meaning that invites careful interpretation. Political wisdom, ethical reflection, heroic energy and spiritual insight coexist within an elaborate literary structure.

Bhāravi's treatment of Arjuna is especially significant. Arjuna begins as a heroic warrior facing political necessity but develops into an ascetic seeker whose physical and psychological strength must undergo divine testing. His battle with Śiva is therefore more than a martial episode. It represents the testing and transformation of human excellence.

The Kirātārjunīyam also demonstrates the creative relationship between the Sanskrit epics and later classical poetry. Bhāravi does not merely reproduce the Mahābhārata. He selects, expands, restructures and aestheticizes the inherited episode according to the demands of Mahākāvya.

His descriptions of nature, political deliberations, mastery of alaṅkāra, sophisticated characterization and philosophical treatment of effort and grace collectively transform the narrative into a major work of classical literature.

Bhāravi's position in Sanskrit literary history can therefore be understood as both traditional and innovative. He preserves the narrative and cultural inheritance of earlier Sanskrit literature while developing a more concentrated, intellectually demanding and technically elaborate poetic style.

For this reason, Kirātārjunīyam continues to deserve careful study not only as a classical Sanskrit text but also as a sophisticated literary meditation on power, responsibility, discipline, heroism, humility and divine grace.

The traditional praise "Bhāraver arthagauravam" remains an appropriate summary of his achievement. Bhāravi's greatness lies in his ability to give poetry intellectual weight without depriving it of aesthetic power. His Kirātārjunīyam thus occupies an enduring place in the history of Sanskrit Mahākāvya and in the wider heritage of Indian classical literature.

References / Bibliography

1. Bhāravi. Kirātārjunīyam. Various Sanskrit editions with traditional commentaries.
2. Vyāsa. Mahābhārata, Vanaparvan. Critical and traditional editions.
3. Kale, M. R. The Kirātārjunīya of Bhāravi: Cantos I–III. Sanskrit text, translation and notes.
4. Krishnamachariar, M. History of Classical Sanskrit Literature. Delhi: Motilal Banarsidass.
5. Peterson, Indira Viswanathan. Design and Rhetoric in a Sanskrit Court Epic: The Kirātārjunīya of Bhāravi. Albany: State University of New York Press, 2003.
6. Gangopadhyaya, Mrinal Kanti. Bhāravi. New Delhi: Sahitya Akademi.
7. Warder, A. K. Indian Kāvya Literature. Delhi: Motilal Banarsidass.
8. Das, Sisir Kumar. A History of Indian Literature, 500–1399: From Courtly to the Popular. New Delhi: Sahitya Akademi.
9. De, S. K. History of Sanskrit Poetics. Calcutta: Firma K. L. Mukhopadhyay.
10. Kane, P. V. History of Sanskrit Poetics. Delhi: Motilal Banarsidass.
11. Guria, Anastasia G. "Transposition of Plot Motifs in Bharavi's Sanskrit Poem 'Kiratarjuniya' (6th Century AD)." Philology: Theory & Practice, Vol. 19, No. 3, 2026.
12. Classical Sanskrit works on poetics, including discussions of Mahākāvya, Rasa and Alaṅkāra traditions.

Ayurvedic Management of Ardhavabhedak: A Case Study

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Abstract:

Ardhavabhedaka is a classical Ayurvedic disorder characterized by severe, recurrent, predominantly unilateral headache,clinically resembling migraine. It is mainly associated with the vitiation of Vata Dosha, with frequent involvement of Pitta or Kapha Dosha and Rakta Dhatu. This article reviews the Ayurvedic concept and management of Ardhavabhedaka across classical treatises.

Management encompasses *Nidana Parivarjana*, *Nasya / Shirovirechana*, *Shodhana*, and *Pathya-Apathya*. A case of a 30-year-old male presenting with chronic 15-day episodic hemicranial headache is discussed, demonstrating significant relief and improvement in quality of life through individualized Ayurvedic therapies.

Introduction:

Ardhavabhedaka, also described as *Ardha Mastak Vedana*, is one of the 11 principal *Shirorogas* (head disorders) categorized by Acharya Sushruta in the *Uttaratantra*.[1] This condition is characterized by severe pricking, piercing, and tearing pain affecting one half of the head, frequently accompanied by giddiness (*Bhrama*).[2] The episodes appear paroxysmally every 15 days, 10 days, or without any predictable periodicity. According to Sushruta, Ardhavabhedaka arises from the vitiation of all three Doshas (*Tridoshaja*).[3]

In Ayurvedic classics, Nasya Karma (therapeutic nasal drug administration) is emphasized by Acharya Sushruta as a vital gateway for treating head disorders (*"Nasa Hi Shiraso Dvaram"*). Contemporary lifestyle shifts, irregular sleep habits, screen strain, and high stress levels have dramatically increased the clinical incidence of Ardhavabhedaka.

Clinical Case Report:

Clinical Presentation & History — SOPD Khandala

Patient Profile:	30-Year-Old Male
Consulting OPD:	OPD of Shalakya Tantra, Khandala
Chief Complaints:	Severe pain in the right side of the head for 1 year, occurring in recurrent episodes every 15 days.
Associated Complaints:	Disturbed sleep, irritability, nausea, and photophobia for 6 months.

History of Present Illness:

The patient was apparently healthy 1 year prior, then insidiously developed episodic unilateral right-sided headache recurring every 15 days, associated with nausea and insomnia. He previously consulted local physicians and received antibiotic and standard analgesic courses without relief, subsequently presenting to Sai Ayurved Medical Hospital for holistic Ayurvedic management.

Past History: No history of Diabetes Mellitus, Accidental Head Injury, or Systemic Hypertension.

Family History: Not significant / Non-contributory.

Samprapti Ghataka:

Ghataka	Ayurvedic Description & Classical Reference
Dosha	Tridoshaja[4]
Dushya	Rasa Dhatu, Rakta Dhatu
Srotasa	Rasa-Raktavaha Srotasa, Pranavaha Srotasa[5]
Srotodushti	Sanga (obstruction) and Vimargagamana (upward aberrant flow)
Agni Status	Jatharagnimandya (sluggish digestion), Rakta Dhatvagnimandya

Classical Aetiology (Nidana) and Clinical Features (Rupa):

A. Nidana of Shirorogas

Acharya Charaka outlines comprehensive causative factors that vitiate the Doshas and cranial Rakta:

- **Vega Sandharana:** Suppression of natural physiological urges, especially Mutravega (urine), Purishavega (feces), Kshavathuvega (sneezing), Nidravega (sleep), and Ashruvega (tears).[6]
- **Sleep & Lifestyle Regimen:** Divaswapna (day sleeping), Ratrijagarana (night awakening), Mada (alcohol consumption), and Uccha Bhashana (excessive loud talking).[7]

B. Rupa (Clinical Signs & Symptoms)

Acharya Sushruta: Intense tearing and piercing hemicranial pain associated with Bhrama (giddiness), appearing every 10 or 15 days or spontaneously.

Treatment:

- **Nidana Parivarjana:** Strict avoidance of causative factors such as dry meals (*Ruksha-Atibhojana*), cold wind exposure, and urge suppression (*Vegadharana*).
- **Pre-Procedure (Purva Karma):** To enhance drug absorption, *Urdhvajatrugata Abhyanga* (massage) and *Swedana*(fomentation) are performed before Nasya.
- **Shirovirechana / Nasya Karma:** Administration of Ghrita, Taila, Vasa, and Majja (*Maha Sneha*).
- **Avapidaka Nasya:** Potent nasal instillations prepared with:
  - Vacha and Pippali (with Chinchaphala / honey)
  - Manashila with Madhu (honey)
  - Manashila with Chandana
  - Shirisha Mula and Phala (root and fruit seed extracts)
- **Kakoladi Ghrita:** Snehana with Kakoladi Gana medicated ghee for Pitta-Vata pacification.

Mode of Action of Nasya:

In Ayurveda, *Nāsa* is considered the gateway to *Śiras* (head). Nasya is therefore mainly used for *Urdhvajatrugata vikāras*. Classical texts describe nasal therapy as having *Śodhana* (purificatory), *Snehana* (oleation), and *Śamana / Brimhaụa* (soothing/nourishing) effects depending on the type of Nasya.

- It eliminates/expels vitiated Kapha from the head region.
- It reduces *Śirogaurava* (heaviness), stiffness, obstruction and headache associated with Kapha.
- In *Ardhāvabhedaka*, it helps clear the obstructed channels and reduce the Kapha-Vāta involvement.
- Ingredients with *Madhura Rasa* (sweet taste), *Sheeta Veerya* (cooling potency), *Snigdha Guna* (unctuous quality), and *Tridoshahara* (balancing all three doshas) properties nourish the Dhatus (tissues), supporting overall and mucosal health.
- Moreover, many of its components possess anti-inflammatory and bacteriostatic properties, helping to prevent secondary infections.

- The combined *Shamana* (pacifying) and *Shodhana* (cleansing) actions of this treatment can result into *srotoshodhana*. As a consequence of these well-planned treatments, the patient experienced substantial relief from their symptoms.

Discussion & Conclusion:

Ardhavabhedaka is predominantly a Vata Pradhana Shiro Roga, with Pitta or Kapha involvement depending on clinical presentation. Treatment is tailored according to Dosha, Bala, and Avastha *Nidana Parivarjana* is the indispensable first step, mitigating triggers like Ruksha Ahara, Vegadharana, Ratrijagarana, Ativyayama, and stress. Snehana and Ghritapana pacify Vata through their unctuous qualities. Nasya and Shirovirechana facilitate cranial clearance through the olfactory and neuro-vascular pathways.

Conclusion:

The integrated classical approach encompassing Nidana Parivarjana, Nasya, Shodhana, provides effective multi-targeted relief in Ardhavabhedaka (Migraine), reducing recurrence frequency and improving patient quality of life. Further evidence-based clinical trials are warranted.

References:

1. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chaper25verses 3,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-159.
2. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chaper25verses15,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-166.
3. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chaper25verses 15,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-166.
4. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chaper25verses 15,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-166.
5. Dr. G.K.Garde,Sartha Madhav Nidan,1st Edition,Shirorog Nidan verses 12,Pg-285.
6. Vd.Joshi,Charak Samhita sutrasthan,Reprint Edition 2013 chapter 17 verses 15-16,Vaidyamitra publication;Pg-228.
7. Vd.Joshi,Charak Samhita sutrasthan,Reprint Edition 2013 chapter 17 verses 15-16,Vaidyamitra publication;Pg-228.

Growth, Challenges and Opportunities of MSMEs in India

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Abstract:

Micro, Small and Medium Enterprises (MSMEs) form the backbone of the Indian economy due to their major role in employment generation, entrepreneurship development, export contribution, and balanced regional development. In recent years, the sector has experienced significant growth driven by government reforms like Udyam registration, credit facilitation schemes, digital platforms, and policy support aimed at formalization. However, MSMEs continue to face several persistent constraints such as lack of timely finance, limited technology adoption, skill shortages, marketing challenges, delayed payments, and global competitiveness issues. This research paper examines the growth pattern of MSMEs in India, identifies key challenges affecting their performance, and explores emerging opportunities through digitization, integration in global value chains, green entrepreneurship, and innovation ecosystems. The paper concludes that strengthening MSMEs requires coordinated efforts in policy execution, credit accessibility, technological upgradation, infrastructure improvement, and capacity building.

Keywords: MSME, Growth, Employment, Entrepreneurship, Finance, Digitalization, India, Exports

1. Introduction:

The MSME sector is widely recognized as one of the most important pillars of India's economic development. It promotes inclusive growth by creating jobs at a lower capital cost, encouraging entrepreneurship, supporting rural industrialization, and contributing to industrial output and exports. MSMEs operate in manufacturing, trading, and services and include enterprises ranging from small manufacturing units to service providers, retail businesses and technology-based startups. India's MSME ecosystem also supports larger industries through ancillary production, supply chain services, and subcontracting.

With increasing government focus on "Make in India", "Atmanirbhar Bharat", and Digital India, MSMEs are being encouraged to modernize and expand. Yet, the sector still faces structural and operational problems that restrict its full potential.

2. Objectives of the Study:

This paper is prepared with the following objectives:

1. To analyze the **growth and economic importance** of MSMEs in India
2. To study major **challenges faced** by MSMEs
3. To evaluate emerging **opportunities and future potential**
4. To suggest measures for strengthening the MSME sector

3. Research Methodology:

This is a **descriptive and analytical research paper** based on secondary data.

Data Sources:

- Ministry of MSME annual reports
- Government publications and PIB releases
- MSME Dashboard (Udyam/UAP)
- Reports/articles from IBEF and other recognized sources

Overview and Growth of MSMEs in India:

4.1 Growth and Formalization:

The MSME sector in India has shown strong expansion mainly due to better registration systems and formalization reforms introduced by the Government of India. The **Udyam Registration Portal** and **Udyam Assist Platform (UAP)** have made MSME registration easy, paperless, and accessible, which encouraged even informal micro-enterprises to enter the formal economy. As per the **MSME Dashboard (as on 20-01-2026)**, the total registrations have crossed **7,52,45,436 (7.52 crore)**, out of

which **Udyam registrations are 4,50,58,200 (4.50 crore)** and **UAP registrations are 3,01,87,236 (3.01 crore)**. This rapid formalization is highly beneficial because formally registered MSMEs gain improved access to institutional finance, stronger market linkages, eligibility for government schemes, and better credit profiles. (dashboard.msme.gov.in)

4.2 Contribution to GDP and Manufacturing:

MSMEs are not a small supporting sector; rather, they are central to India's economic strength and industrial output. According to the **Press Information Bureau (PIB)**, the MSME sector contributes approximately **30.1% of India's GDP**, accounts for about **35.4% of manufacturing output**, and holds a very strong position in production and value creation across the country. These figures clearly show that MSMEs are among the most important pillars of India's national income and manufacturing ecosystem, supporting large industries through supply chains, subcontracting, and decentralized production systems. (Press Information Bureau)

4.3 MSMEs Contribution to Exports:

MSMEs play a major role in strengthening India's export performance and foreign exchange earnings. MSME units export a wide variety of products such as **textiles, leather goods, engineering goods, pharmaceuticals, gems and jewellery, and processed food products**, making them a key driver of export competitiveness. PIB has highlighted that MSMEs contributed **45.73% of India's exports in 2023–24**, which proves that nearly half of India's export performance is supported by the MSME sector. This export share reflects the strength of MSMEs in labour-intensive and specialized production areas. (Press Information Bureau)

4.4 Employment Generation:

Employment generation is one of the most valuable contributions of MSMEs to India's development. After agriculture, MSMEs are among the largest employment providers, especially for semi-skilled and skilled workers across rural and urban regions. According to the MSME Dashboard (as on 20-01-2026), MSMEs have reported **employment generation of 33,14,80,270 (33.14 crore)**. This large employment base makes MSME growth directly connected with poverty reduction, rural income stability, entrepreneurship development, and improvement in living standards. MSME expansion therefore supports inclusive economic growth by increasing job opportunities and reducing economic inequality across regions. (dashboard.msme.gov.in)

5. Key Challenges Faced by MSMEs in India.

5.1 Lack of Access to Timely Credit:

One of the biggest challenges faced by MSMEs, especially micro and small enterprises, is limited access to timely and affordable credit. Many MSMEs struggle to obtain loans from formal financial institutions due to insufficient collateral, limited credit history, and poor documentation. In several cases, enterprises depend on informal lenders, which increases the interest burden and financial risk. Slow loan processing systems and lack of financial literacy among small entrepreneurs further worsen the credit gap. Even though formal credit availability has improved, the overall flow of finance still remains inadequate for a large number of MSMEs, limiting their capacity for expansion and modernization.

5.2 Delayed Payments and Working Capital Crisis:

Delayed payments are another severe issue affecting MSMEs, particularly those supplying goods and services to government departments or large corporates. When MSMEs do not receive payments on time, it directly creates working capital shortages, resulting in poor cash flow. This reduces their ability to purchase raw materials, maintain production continuity, and pay wages on time. Many MSMEs are forced to take high-cost borrowing to keep operations running. Due to repeated delays, the working capital cycle becomes longer, which impacts the sustainability and growth potential of MSMEs and increases operational stress.

5.3 Technological Backwardness:

A large number of MSMEs continue to operate with outdated machinery and traditional production methods, leading to low productivity and inefficiency. The main barriers to technology

adoption include the high cost of modernization, lack of awareness regarding new technologies, limited investment in research and development (R&D), and shortage of technical manpower. This technological gap reduces product quality, increases production costs and lowers competitiveness in both domestic and export markets. As global markets increasingly demand high standards, MSMEs with low technological capabilities struggle to survive.

5.4 Skill Gap and Low Productivity:

Although MSMEs are major job creators, many enterprises face serious skill shortages. The workforce is often under-skilled due to inadequate technical training, weak vocational education systems and lack of industry-oriented skill development programs. In addition, many MSMEs have weak managerial capability and low adoption of productivity-enhancing practices such as quality control systems, lean management, and data-based decision-making. This results in low efficiency and poor competitiveness, particularly when MSMEs compete with technologically advanced firms domestically and internationally.

5.5 Marketing and Digital Limitations:

MSMEs frequently face marketing challenges and limited scalability because they struggle with branding, customer reach, and modern promotional methods. Many MSMEs depend heavily on local markets and lack awareness of national or global marketing strategies. Inability to effectively use e-commerce platforms, low advertising budgets and poor customer data usage restrict their growth opportunities. Even though online platforms have opened vast market possibilities, many MSMEs still lack digital capabilities and marketing skills to utilize these platforms successfully.

5.6 Competition and Global Pressure:

MSMEs operate in highly competitive environments and face strong pressure from large domestic corporations, cheap imports, and global brands. They often struggle with price wars, rising customer expectations, and quality standards. In many industries, imported low-cost products create severe market pressure, affecting MSMEs' sales and profit margins. The competition becomes more intense when import dependence increases, making it harder for MSMEs to survive unless they improve quality, productivity, and cost efficiency.

5.7 Regulatory and Compliance Burden:

Even after multiple reforms, compliance requirements remain a challenge for MSMEs. Enterprises must manage several regulatory obligations such as GST filings, labour laws, environmental rules, and export-related quality certifications. These compliance processes require time, financial resources, and technical support, which becomes difficult especially for micro and small enterprises. As compliance costs increase, MSMEs face higher operational burdens, which can discourage growth and formalization.

6. Emerging Opportunities for MSMEs in India

6.1 Digital Transformation and E-Commerce:

Digital transformation has created major opportunities for MSMEs, especially through e-commerce and digital payment systems. MSMEs can now sell products using platforms such as Amazon, Flipkart, and Meesho, enabling them to reach customers across India and even internationally. The expansion of UPI and online banking has simplified transactions and improved financial transparency. Digital bookkeeping, invoicing systems, and social media marketing have made operations more efficient. Emerging technologies like AI-based customer analytics also help businesses understand consumer behavior and improve sales strategies. Even rural enterprises can use smartphones to access digital markets, making digitalization a strong growth driver.

6.2 Integration into Global Value Chains:

With the growth of Indian exports, MSMEs have opportunities to integrate into global value chains by becoming reliable suppliers to international companies. MSMEs can benefit by specializing in component manufacturing, upgrading quality standards, improving certification compliance and participating in global sourcing networks. Contract manufacturing opportunities and partnerships with

multinational firms can also help MSMEs improve production capacity, technology and global competitiveness.

6.3 Startup and Innovation Ecosystem:

MSMEs in India are gradually shifting toward innovation-driven growth due to the rising startup ecosystem. Government-supported innovation schemes, incubation centers, technology centers and collaborations between universities and industries are creating new possibilities for MSMEs. This ecosystem promotes product innovation, improved processes and technology adoption, allowing MSMEs to move from low-cost traditional production to high-value advanced production models. This transition can strengthen competitiveness and long-term sustainability.

6.4 Green MSMEs and Sustainable Business:

Sustainability has become a major opportunity for MSMEs due to increasing environmental awareness and stricter regulations in both domestic and international markets. Green MSMEs can grow by adopting eco-friendly packaging, solar-based production systems, waste recycling business models, organic product value chains and energy efficiency services. As consumers increasingly prefer sustainable products, MSMEs focusing on green practices gain better market acceptance, future readiness and long-term profitability.

6.5 Women Entrepreneurship and Inclusive Growth:

Women-led MSMEs are expanding in India and contributing to inclusive development by promoting entrepreneurship and local employment. Support through self-help groups, microfinance, digital selling platforms and skill development programs has encouraged women participation in business ownership. Women entrepreneurship strengthens the micro-enterprise ecosystem by boosting household income, empowering women financially and increasing economic activity at the community level.

6.6 Government Reforms and Scheme-Based Advantages:

Government reforms have created strong scheme-based opportunities for MSMEs. Measures such as simplified Udyam registration, improved investment and turnover limits effective from April 1, 2025, credit guarantee schemes, collateral-free lending facilities, cluster development programs, and technology support centers have helped MSMEs improve access to resources and infrastructure. These initiatives provide a supportive ecosystem for MSMEs to formalize, modernize and expand, provided that awareness and effective implementation reach enterprises at the grassroots level.

7. Findings

From the analysis, the main findings are:

1. MSMEs have expanded rapidly due to formalization and registration growth.
2. They contribute nearly one-third of GDP and close to half of exports.
3. Major obstacles remain in credit access, delayed payments, technology gaps, and market competitiveness.
4. Digitization, e-commerce, sustainability, and global value chains offer strong opportunities.
5. MSMEs require better implementation support, not only policy announcements.

8. Suggestions / Recommendations

To strengthen MSMEs, the following measures are recommended:

1. **Ensure faster credit access** through simplified loan processing and fintech integration
2. **Strict enforcement of timely payments** to MSME suppliers
3. **Technology upgradation incentives** and affordable modern machinery support
4. **Skill development programmes** aligned with industry needs
5. **Digital literacy campaigns** for micro enterprises
6. **Export facilitation support** including certification, logistics subsidy, and marketing support
7. **Cluster-based infrastructure development** (common facilities, warehouses, labs)

9. Conclusion

The MSME sector is vital to India's economic development because it supports employment, exports, entrepreneurship, and industrial output. The sector has shown strong growth due to

formalization, registration increases, and policy focus. However, MSMEs still face fundamental challenges related to finance, delayed payments, technological constraints, skill gaps, and global competition.

With appropriate reforms, effective implementation, and technology-driven modernization, MSMEs can become India's strongest driver for sustainable and inclusive growth. Strengthening this sector is not only an economic requirement but also a social necessity for improving livelihoods and reducing inequality.

References:

1. Ministry of Micro, Small and Medium Enterprises. (2024). *Annual Report 2023–24*. Government of India. (MSME Ministry)
2. Ministry of Micro, Small and Medium Enterprises. (2024). *Annual Report 2024–25*. Government of India. (MSME Ministry)
3. Press Information Bureau. (2024, December 23). *The MSME Revolution*. Government of India. (Press Information Bureau)
4. Press Information Bureau. (2025, July 4). *MSME sector accounts for 30.1% of India's GDP…*. Government of India. (Press Information Bureau)
5. Press Information Bureau. (2025, December 30). *Year End Review 2025: Ministry of MSME*. Government of India. (Press Information Bureau)
6. MSME Dashboard. (2026). *Udyam & UAP Registration Statistics (as on 20-01-2026)*. Government of India. (dashboard.msme.gov.in)
7. Times of India. (2026). *MSMEs' contribution to GDP rises, exports triple, and NPA levels drop*. (The Times of India)

"Dr. B. R. Ambedkar's Thought and Social Justice in Contemporary Indian English Literature: A Critical Study"

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Abstract :--

Dr. B. R. Ambedkar is one of the most influential Indian thinkers of the twentieth century whose intellectual contribution extends across social reform, political philosophy, constitutionalism, economics, education, religion and human rights. His critique of caste and his vision of liberty, equality, fraternity, dignity and social justice continue to influence contemporary Indian society and literary discourse. In recent decades, Indian English literature has increasingly engaged with questions of caste, marginality, identity, discrimination, resistance and social transformation. Against this background, the present study critically examines the relevance of Ambedkar's thought in contemporary Indian English literature, particularly in relation to social justice.

The study explores how Ambedkarite ideas provide an important framework for understanding literary representations of caste oppression, social exclusion, dignity, education, identity, resistance and equality. It also examines the growing visibility of Dalit voices and marginalized experiences in Indian literary studies. Selected literary and critical works are interpreted through a qualitative and analytical approach, drawing upon Ambedkar's major writings and scholarship on Dalit literature, caste, and social justice. The study argues that Ambedkar's thought is not merely a historical or political legacy but continues to provide a powerful critical vocabulary for contemporary literary interpretation. His emphasis on human dignity and social equality enables literature to be examined as a space of resistance, representation and social transformation. The paper concludes that Ambedkarite thought has considerable contemporary relevance in Indian English literary studies and offers a significant framework for understanding the continuing struggle for social justice.

Keywords:-- B. R. Ambedkar, Ambedkarite Thought, Social Justice, Indian English Literature, Dalit Literature, Caste, Equality, Identity, Resistance, Human Dignity

Introduction:--

Indian literature has always maintained a close relationship with the social, cultural, political, and historical realities of Indian society. Literature does not merely entertain; it also reflects social structures, questions established values, represents marginalized experiences, and provides a space for alternative voices. Among the major social questions represented in modern Indian literature, caste and social inequality occupy a particularly important position. The caste system has historically influenced social relations, access to education, economic opportunities, political participation, cultural representation and individual identity. Consequently, the literary representation of caste has become an important area of contemporary literary and cultural studies.

Dr. Bhimrao Ramji Ambedkar occupies a central position in the intellectual history of the struggle against caste and social discrimination in India. He was a jurist, economist, political thinker, social reformer, constitutionalist and advocate of human dignity. His writings challenged the ideological and institutional foundations of caste-based inequality. Ambedkar's intellectual project was not limited to securing political rights for marginalized communities; it sought a comprehensive transformation of Indian society based on liberty, equality, fraternity, justice and dignity. Ambedkar's famous critique of caste in Annihilation of Caste remains particularly significant. He argued that caste was not simply a division of labour but a hierarchical system that divided society and reproduced inequality. His analysis drew attention to the relationship between social hierarchy and the denial of individual dignity. His ideas concerning education, representation, political participation, constitutional safeguards and social democracy continue to influence contemporary debates about equality and social justice. The relevance of Ambedkar's thought has expanded beyond political and social studies into literature and cultural studies. Contemporary Indian English literature increasingly

explores the experiences of marginalized communities and questions dominant social narratives. Themes such as caste discrimination, social exclusion, identity, resistance, dignity, education, gender, and social mobility have become important components of contemporary literary discourse. The emergence of Dalit literature represents one of the most significant developments in this context. Dalit literature challenges the traditional literary practice in which marginalized communities were frequently represented by writers belonging to dominant social groups. Dalit writers emphasize lived experience, memory, humiliation, resistance, self-respect and social transformation. Ambedkar's ideas have played an important intellectual role in shaping this consciousness.

The present study therefore examines the relationship between Ambedkar's thought and social justice in contemporary Indian English literature. It attempts to understand how Ambedkarite ideas can be used as a critical framework for analysing contemporary literary representations of caste and marginality.

Review of Literature :--

The relationship between Ambedkar's thought, caste and literature has received considerable attention in Indian intellectual and literary scholarship. Ambedkar's own writings provide the foundational theoretical framework for understanding caste, social inequality, democracy and social transformation.

1. Ambedkar (1936), in Annihilation of Caste, presented one of the most systematic critiques of the caste system. He argued that caste was sustained through social and ideological mechanisms that prevented genuine equality and fraternity. His analysis remains fundamental to contemporary studies of caste and literature because it provides a conceptual basis for examining representations of social hierarchy.

2. Ambedkar (1945) further examined the political dimensions of caste and representation in What Congress and Gandhi Have Done to the Untouchables. His writings demonstrated that social justice required political representation and institutional safeguards in addition to social reform.

3. Ambedkar's The Buddha and His Dhamma (1957) provides another important dimension of his thought. His interpretation of Buddhism emphasizes morality, equality, rationality, compassion, and human dignity. These principles have influenced subsequent discussions of emancipation and social transformation.

4. Omvedt (1994), in Dalits and the Democratic Revolution, examined Ambedkar's role in the development of the Dalit movement and democratic transformation. Her work demonstrates the relationship between Ambedkarite political thought and the wider struggle against caste oppression.

5. Limbale (2004), in Towards an Aesthetic of Dalit Literature, made an important contribution to Dalit literary criticism. He argued that Dalit literature should be understood in relation to lived experience, social oppression, collective identity, and resistance. His work is significant for developing a distinct theoretical approach to Dalit aesthetics.

6. Rege (2013), in Against the Madness of Manu, examined Ambedkar's writings on caste and Brahmanical patriarchy. Her scholarship is particularly relevant for understanding the intersection of caste and gender and for examining the experiences of Dalit women.

7. Valmiki's Joothan (2003) presents an autobiographical account of caste discrimination and social humiliation. The text provides an important literary representation of the lived realities that Ambedkar identified in his critique of caste.

Research Methodology :--

The study adopts a qualitative, descriptive, analytical and interpretative research design. It primarily uses secondary sources, including the writings of Dr. B. R. Ambedkar, contemporary Indian English literature, Dalit autobiographies, research articles, academic journals and studies on caste, social justice, identity, and marginality. The selected texts are examined through close textual reading and thematic analysis, focusing on caste, equality, human dignity, identity, education, empowerment, resistance, gender and democratic representation. The theoretical framework is mainly based on Ambedkarite social thought, supported by Dalit literary criticism, postcolonial studies, social justice

theory and cultural studies. Rather than assuming direct Ambedkarite influence, the study uses Ambedkar's ideas as a critical lens to interpret contemporary literary representations of caste, inequality, and social justice.

Ambedkar's Concept of Social Justice :--

Social justice constitutes the central concern of Ambedkar's intellectual and social philosophy. His conception of justice was closely associated with equality, liberty, fraternity, dignity and equal citizenship. For Ambedkar, political democracy could not survive without social democracy. A society could not claim to be genuinely democratic while maintaining rigid social hierarchies. Therefore, social transformation was necessary for the meaningful realization of constitutional democracy. Ambedkar's understanding of social justice challenged the idea that inequality could be removed merely through individual acts of charity. He emphasized structural transformation, institutional safeguards, education, political representation, and legal equality.

This approach provides an important framework for literary studies. When contemporary literature represents caste discrimination, exclusion, humiliation, or unequal opportunities, these representations can be analysed through Ambedkar's understanding of structural inequality. Caste remains a significant subject in contemporary Indian literature. Writers increasingly challenge the silence surrounding caste and present experiences of discrimination from the perspective of marginalized communities.

Contemporary literary representations demonstrate that caste can affect everyday life, education, employment, relationships, marriage, social mobility, and individual identity. Such literature exposes the difference between formal constitutional equality and lived social realities. Texts such as Joothan and Karukku demonstrate the importance of autobiographical experience in Dalit literary expression. These works represent humiliation and exclusion but simultaneously emphasize resistance and self-respect. From an Ambedkarite perspective, such narratives can be understood as literary challenges to caste hierarchy. They transform marginalized individuals from objects of social discourse into active subjects who narrate their own experiences.

Ambedkarite Thought and Dalit Literary Consciousness :--

Ambedkarite thought has played an important role in the development of Dalit consciousness. His emphasis on education, organization, self-respect and resistance has influenced literary expressions of marginal identity. Dalit literature is significant because it challenges the traditional hierarchy of literary representation. It gives importance to experiences that were historically ignored or stereotypically represented.

Limbale's work on Dalit aesthetics emphasizes that Dalit literature is closely connected with social experience and resistance. Literature becomes a means of articulating pain, protest, identity, and aspiration. Ambedkarite literary consciousness therefore involves more than the representation of suffering. It also involves the assertion of dignity and the demand for equality. Contemporary literature increasingly presents marginalized individuals as agents of social change rather than passive victims.

Education, Empowerment and Social Transformation :--

Education occupies a central position in Ambedkar's philosophy. He viewed education as a means through which marginalized communities could acquire knowledge, confidence and social agency. This idea is reflected in contemporary literature where education is frequently represented as a pathway to self-development and social mobility. However, many literary narratives also reveal that educational achievement does not automatically eliminate caste prejudice. This contradiction is important. A person may achieve educational and professional mobility while continuing to experience discrimination based on caste identity. Contemporary literature therefore presents education as both an instrument of empowerment and a site where structural inequalities become visible.

An Ambedkarite reading of such literature draws attention to the relationship between knowledge and emancipation.

Identity, Dignity and Resistance:--

Identity is a major concern in contemporary Indian English literature. Caste identity can influence how individuals perceive themselves and how society perceives them. Ambedkar's emphasis on dignity provides a powerful framework for understanding this issue. Social oppression is not merely material; it can also produce humiliation, exclusion, and denial of recognition. Contemporary literary texts challenge such processes by asserting marginalized identities. Writing itself becomes an act of resistance because it gives visibility and voice to experiences that have historically been silenced. The transformation from silence to speech is therefore central to the literary politics of social justice. The marginalized subject becomes a narrator, thinker, critic and participant in public discourse.

Gender and Social Justice :--

Ambedkar's thought also has significant relevance to the study of gender and caste. The experiences of marginalized women demonstrate that caste and gender discrimination can operate simultaneously. Contemporary Indian literature increasingly highlights the experiences of women from socially disadvantaged communities. Their narratives reveal the complex relationship between patriarchy, caste hierarchy, economic inequality and social exclusion.

An Ambedkarite approach encourages scholars to examine how systems of caste and patriarchy interact. It also emphasizes the importance of legal rights, education, dignity and social independence. The study of Dalit women's writing therefore expands the understanding of social justice beyond caste alone and introduces an important intersectional dimension.

Democracy, Representation and Literature :--

Ambedkar's understanding of democracy was based on social equality and fraternity. Representation was an essential component of democratic participation. The question of representation is equally important in literature. Who writes? Who is represented? Whose experiences are considered worthy of literary attention? Who has access to publishing and academic institutions? Contemporary Indian English literature has increasingly challenged these questions by expanding the space available to marginalized writers. The emergence of Dalit writing and the translation of regional Dalit literature into English have contributed to a more diverse literary landscape. Literature thus becomes a democratic space in which multiple experiences can participate.

Contemporary Relevance of Ambedkarite Thought :--

1. Ambedkar's thought remains highly relevant in the contemporary period because issues of caste, discrimination, inequality, representation and social justice have not disappeared.
2. His emphasis on constitutional rights, dignity, equality, education and social democracy provides an important framework for understanding contemporary social realities.
3. In literary studies, his thought allows researchers to connect textual representation with wider structures of power. It encourages scholars to ask how literature reproduces or challenges social hierarchies.
4. The increasing academic interest in Dalit literature, caste studies, marginalized identities and social justice demonstrates the continuing importance of Ambedkarite perspectives.
5. The digital age has further expanded the circulation of Ambedkarite ideas. Digital publishing, online literary platforms, social media and academic networks have created new opportunities for marginalized voices to participate in literary and intellectual debates.

Major Findings of the Study :--

The study identifies the following major findings:

1. Ambedkar's ideas of equality, dignity, liberty, fraternity and social justice remain highly relevant to contemporary literary studies.
2. Contemporary Indian English literature increasingly engages with caste, identity, marginality and social exclusion.
3. Dalit literature provides an important literary space for representing lived experiences of caste discrimination.

Ambedkarite thought offers a strong conceptual framework for analysing literary representations of resistance and emancipation.

4. Education is represented as an important instrument of empowerment, although literature also reveals the persistence of structural inequality.
   The literary assertion of marginalized identity challenges traditional structures of cultural representation.
5. The intersection of caste and gender requires greater attention in contemporary literary studies.
6. Translation has expanded the visibility of regional Dalit literary voices within Indian English literary discourse. Contemporary literature demonstrates that constitutional equality and social equality are not always identical. Ambedkar's intellectual legacy continues to provide a meaningful framework for understanding literature as an instrument of social awareness and transformation.

Conclusion:--

Dr. B. R. Ambedkar's thought represents one of the most powerful intellectual resources for understanding social justice in modern India. His critique of caste and his emphasis on equality, liberty, fraternity, dignity, education, representation and constitutional democracy continue to influence contemporary social and cultural discourse.The present study demonstrates that Ambedkarite thought has substantial relevance to contemporary Indian English literature. Literary works dealing with caste, marginality, identity, resistance and social exclusio

References :--

1. Ambedkar, B. R. (2014). Annihilation of caste: The annotated critical edition (S. Anand, Ed.). Verso. pp. 1–68.
2. Ambedkar, B. R. (2014). Annihilation of caste: The annotated critical edition (S. Anand, Ed.). Verso. pp. 69–124.
3. Ambedkar, B. R. (2014). Annihilation of caste: The annotated critical edition (S. Anand, Ed.). Verso. pp. 125–180.
4. Ambedkar, B. R. (1990). Dr. Babasaheb Ambedkar: Writings and speeches (Vol. 1). Education Department, Government of Maharashtra. pp. 23–96.
5. Ambedkar, B. R. (1990). Dr. Babasaheb Ambedkar: Writings and speeches (Vol. 3). Education Department, Government of Maharashtra. pp. 17–72.
6. Ambedkar, B. R. (1990). Dr. Babasaheb Ambedkar: Writings and speeches (Vol. 5). Education Department, Government of Maharashtra. pp. 25–88.
7. Ambedkar, B. R. (1990). Dr. Babasaheb Ambedkar: Writings and speeches (Vol. 9). Education Department, Government of Maharashtra. pp. 45–102.
8. Bama. (2012). Karukku (L. Holmström, Trans.). Oxford University Press. pp. 1–38.
9. Dangle, A. (Ed.). (1992). Poisoned bread: Translations from modern Marathi Dalit literature. Orient Longman. pp. 1–35.
10. Guru, G. (Ed.). (2009). Humiliation: Claims and context. Oxford University Press. pp. 1–28.
11. Guru, G., & Sarukkai, S. (2012). The cracked mirror: An Indian debate on experience and theory. Oxford University Press. pp. 1–45.
12. Limbale, S. (2004). Towards an aesthetic of Dalit literature: History, controversies and considerations (A. Mukherjee, Trans.). Orient Longman. pp. 1–42.
13. Omvedt, G. (1994). Dalits and the democratic revolution: Dr. Ambedkar and the Dalit movement in colonial India. Sage Publications. pp. 1–52.
14. Omvedt, G. (2001). Ambedkar: Towards an enlightened India. Penguin Books. pp. 35–82.
15. Rege, S. (2013). Against the madness of Manu: B. R. Ambedkar's writings on Brahmanical patriarchy. Navayana. pp. 1–40.
16. Valmiki, O. (2003). Joothan: A Dalit's life (A. Mukherjee, Trans.). Columbia University Press. pp. 1–45.
17. Zelliot, E. (1992). From untouchable to Dalit: Essays on the Ambedkar movement. Manohar. pp. 1–48.
18. Rao, A. (2009). The caste question: Dalits and the politics of modern India. University of California Press. pp. 1–42.
19. Ilaiah, K. (1996). Why I am not a Hindu: A Sudra critique of Hindutva philosophy, culture and political economy. Samya. pp. 1–35.
20. Thorat, S., & Newman, K. S. (Eds.). (2010). Blocked by caste: Economic discrimination in modern India. Oxford University Press. pp. 1–32.

"Impact of Contractual Employment on the Socio-Economic Well-being of Sanitation Workers in Vashi, Navi Mumbai"

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Abstract

This localized research paper investigates the socio-economic implications of contractual employment on sanitation workers operating specifically in the Vashi node under the Navi Mumbai Municipal Corporation (NMMC). As one of the most prominent commercial and residential hubs of Navi Mumbai, Vashi presents high waste-generation rates that rely heavily on third-party outsourced sanitation crews. Combining quantitative survey data with qualitative interviews, this study explores wage precarity, health exposure, social stigmatization, and structural vulnerability among Vashi's contract sanitation labour force. Sanitation workers play an essential role in maintaining urban cleanliness and public health. However, contractual employment may expose workers to employment insecurity, uncertain income, limited social-security coverage and financial vulnerability. The study focuses on employment security, wages, working conditions, social-security benefits, indebtedness, housing, healthcare expenditure and household economic conditions. A gender-based perspective is also incorporated to understand whether female and male sanitation workers experience contractual employment differently. The issue is particularly relevant in Navi Mumbai because NMMC has historically engaged workers through contractual arrangements. An NMMC sanitation tender document, for example, requires contractors to comply with minimum-wage provisions and statutory worker benefits, including PF and ESIC requirements.

Keywords: Contractual Employment, Sanitation Workers, Socio-Economic Well-being, Employment Security, Social Security, Wages, Vashi, Navi Mumbai.

1. Introduction

Urban sanitation workers constitute an important part of the city's essential workforce. Their work contributes directly to public health, environmental cleanliness and the functioning of urban communities. Despite this importance, sanitation work is often associated with low occupational status, health risks and economic vulnerability. Contractual employment adds another dimension to this vulnerability. Under contractual arrangements, workers may not enjoy the same employment security and institutional benefits as permanent employees. An NMMC contractual employment document states that contractual appointments are for a specified period and do not create a right to regular employment or absorption into the Corporation. The issue has also received judicial attention in Navi Mumbai. More recently, in 2026, NMMC approved a phased plan concerning absorption of contractual and fixed-pay employees and proposed pay relief for workers providing essential civic services. This indicates that contractual employment remains an important labour-policy issue in Navi Mumbai. Vashi, one of the major administrative divisions of Navi Mumbai Municipal Corporation (NMMC), depends on sanitation workers for daily waste collection, road sweeping and public-space

cleaning. The present study examines how contractual employment affects their socio-economic well-being through five specific employment-related dimensions.

2. Statement of the Problem

Sanitation workers perform essential and physically demanding work, yet their employment conditions may expose them to economic and social insecurity. The study particularly examines whether contractual employment is associated with differences in income security, employment stability, social-security coverage, indebtedness, healthcare expenditure and household welfare.

3. Objectives of the Study

1. To study the employment conditions of sanitation workers in Vashi.
2. To examine their income and wage security.
3. To assess the level of employment insecurity among contractual workers.
4. To examine access to social-security benefits.
5. To study the relationship between contractual employment and indebtedness.

4. Research Methodology

- **Research Design:** Descriptive and Analytical
- **Study Area:** Vashi, Navi Mumbai
- **Sample Size:** 27 sanitation workers.
- **Sampling Technique:** Simple random sampling.
- **Data Analysis:** Percentage method

- **Sources of Data**

A] Primary Data:

Information collected through questionnaires, field observations and interaction with sanitation workers.

B] Secondary Data:

Research reports, government publications, municipal records, relevant legislation, published studies and available literature on sanitation workers.

- **Statistical Techniques**

The study can employ Percentage analysis, Frequency distribution and Tables and graphical presentation.

5. Review of Literature :

1) **Mohammad Peer (1992) :** *Social and Economic Condition of Urban Sanitary Worker: A Case Study of Mangalore City* , is particularly relevant because it focuses on the socio-economic conditions of urban sanitation workers.
2) **Harriss-White (2019) :** Direct Benefit Transfers required by entities like the Navi Mumbai Municipal Corporation) has mitigated the issue of wage theft by middle-men, contract wages have failed to keep pace with hyper-inflation. In high-cost urban zones like Vashi, even regular contract wages leave families below or hovering just above the poverty line, forcing them into cycles of high-interest informal debt.
3) **Kundu (2011) :** highlights that post-1990s economic reforms pushed municipal corporations across Maharashtra to privatize or outsource solid waste management to cut fiscal deficits.
4) **The Caste-Labor Nexus (Thorat & Attewell, 2007; Anand, 2017)**: Analysis how ancestral identity continues to govern structural sanitation assignments, detailing the "clean smart-city paradox" where modern municipal growth rests on historically marginalized demographics.

5) **P. S. Punalekar (1990):** examined sanitation workers in Gujarat and reported that insecure employment reduced economic stability.

1. Navi Mumbai- Vashi (C-Ward) :

The NMMC ward structure identifies Vashi as C Ward, alongside A–Belapur, B–Nerul, D–Turbhe, E–Koparkhairane, F–Ghansoli, G–Airoli and H–Digha. Vashi was one of the earliest planned nodes of Navi Mumbai.



2. Contractual Employment of Sanitation Workers in Vashi, Navi Mumbai

Contractual employment means an employment arrangement in which sanitation workers are engaged for sanitation-related work through a contractor/contract agency for a specified period or under specified contractual conditions, rather than being appointed as regular permanent employees of the municipal organisation. In the context of Vashi, Navi Mumbai, contractual employment is an important issue because sanitation workers perform essential municipal services, while their employment conditions can directly influence their income security, continuity of employment, access to social-security benefits and financial stability. Vashi as one of the major divisions of the Navi Mumbai Municipal Corporation and includes a questionnaire designed to collect information about sanitation workers' personal and economic conditions.

- **The employment arrangement generally involves three parties:**

NMMC / Municipal Authority

↓

Contractor / Contract Agency

↓

Sanitation Worker

Under contractual employment, the worker does not necessarily have the same employment relationship as a permanent municipal employee. The contractor may be responsible for engaging workers and managing their day-to-day work, while the municipal authority supervises or receives the sanitation service. Therefore, the worker's employment experience can depend upon:

- Contract period
- Contract renewal
- Wage arrangements
- Working conditions
- Contractor's compliance with labour requirements
- Access to statutory benefits
- Continuity of employment

➢ **C Division: Vashi – Contractor-wise Work Area:** Total 13 Contractors Work at Vashi Area.

Group No.	Work Area / Sector	Name of Contractor
31	Sector 1, 2, 3	M/s. Sai Krupa Transport
32	Sector 4, 5, 6	M/s. Pranali Transport
33	Sector 7, 8	M/s. Apna Construction
34	Sector 9A, 10E	M/s. Bhoomi Construction
35	Sector 5	M/s. Pallavi Enterprises
36	Sector 10, 12	M/s. M.N. Mahave
37	Sector 14, 15	M/s. P.T. Bhagat
38	Sector 16, 16A	M/s. G.D. Enterprises
39	Sector 17	M/s. Jai Ganesh Association
40	Sector 28, 29	M/s. Vishal Boyer
41	Vashi Gaon, Expanded Gaothan	M/s. Aashirwad Construction
42	Juhugaon	M/s. H.D. Boyer
43	Sector 30, 30A	M/s. R.P. Bhagat

(Source: NMMC, C Division (Vashi) – Contractor-wise Work Area Details.)

3. Socio-Economic Condition of Sanitation Workers:

The socio-economic condition of sanitation workers refers to the overall social and economic position of workers engaged in sanitation-related activities. It includes their employment status, income, wage security, employment stability, access to social-security benefits and level of indebtedness.

1. Employment Condition: A worker may have been performing sanitation work for many years but still remain under a contractual arrangement. Therefore, length of service does not necessarily mean employment security. Employment condition refers to the nature and stability of the worker's employment. In the case of contractual sanitation workers, it includes:

- Type of employment
- Duration of contractual service
- Continuity of employment
- Contract renewal
- Relationship with the contractor
- Stability of the work

The employment arrangement is important because the continuity of income depends upon the continuity of employment.

2. Income and Wage Security

Wage security means the ability of workers to receive their wages regularly, adequately and on time. Income is an important indicator of the economic condition of sanitation workers. The study can examine:

- Monthly wages
- Regularity of salary
- Timely payment of wages
- Adequacy of income
- Dependence on sanitation work for household income

However, if wages are delayed or uncertain, workers may have difficulty managing regular expenses and may become dependent on borrowing.

Therefore:

Regular wages → Greater income security → Better economic stability

Whereas:

Uncertain wages → Financial pressure → Greater economic vulnerability

3. Employment Insecurity

Employment insecurity refers to uncertainty regarding the continuation of employment. Among contractual sanitation workers, it may include:

- Fear of job loss
- Uncertainty regarding contract renewal
- Lack of permanent employment
- Dependence on continuation of the contract
- Uncertainty about future income

Thus, employment insecurity is an important component of their socio-economic condition.

Example:- Suppose a sanitation worker has been working in Vashi for five years. The worker receives a monthly salary but does not know whether the contract will be renewed next year.

In this situation: Income exists → but future employment is uncertain.

4. Access to Social-Security Benefits

Social-security benefits provide economic protection to workers and their families. For this study, the relevant benefits can include:

- Provident Fund (PF)
- ESIC
- Insurance
- Government welfare schemes
- Other applicable employment-related benefits

Including social-security, health, insurance and socio-economic empowerment of sanitation workers. It is important to examine not only whether workers know about these schemes, but also whether they actually receive the benefits.

Three stages should be distinguished :- Awareness → Access → Actual Benefit

5. Indebtedness

Indebtedness is an important indicator of economic vulnerability. It refers to the extent to which workers depend on borrowing to meet their financial requirements.

Your available research data identifies borrowing for:

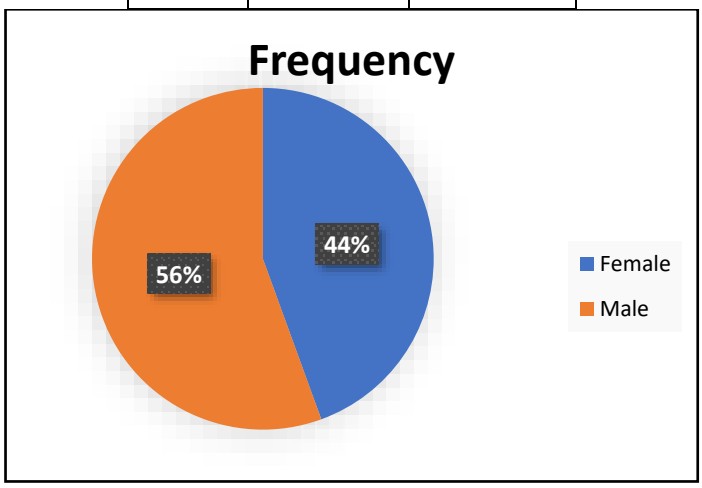
- Education
- Medical expenditure

- Marriage
- Daily needs
- Business
- Religious activities

4. Data Analysis :

1) Gender-wise Distribution of Respondents

Gender	Frequency	Percentage
Female	12	44.44%
Male	15	55.56%
Total	27	100%

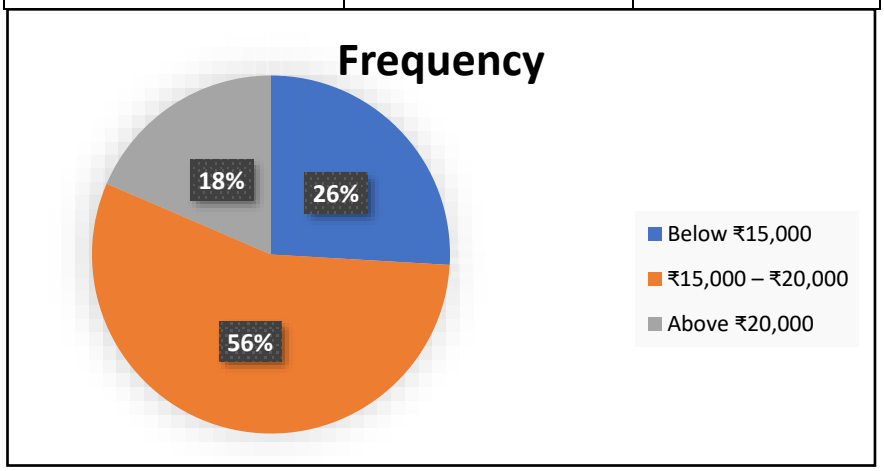


Interpretation:

Out of the 27 sanitation workers selected for the study, 15 (55.56%) are male and 12 (44.44%) are female. Thus, male respondents constitute a slightly higher proportion of the sample. The sample includes substantial representation of both female and male sanitation workers, allowing employment-related conditions to be examined across the workforce.

2) Monthly Income :-

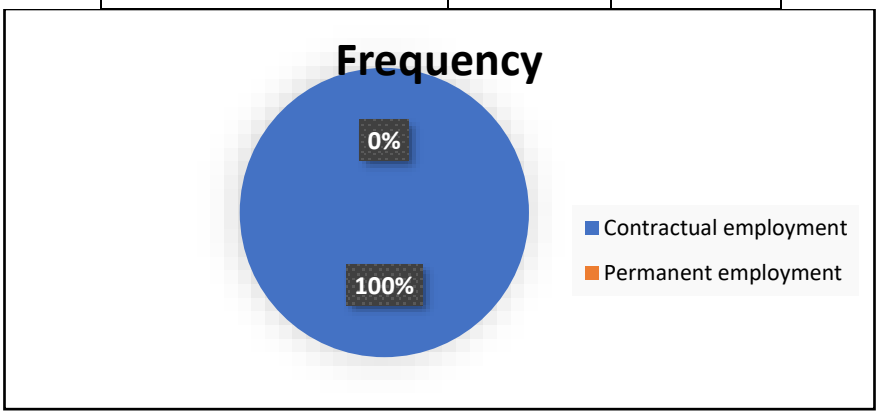
Monthly Income	Frequency	Percentage
Below ₹15,000	7	25.93%
₹15,000 – ₹20,000	15	55.56%
Above ₹20,000	5	18.52%
Total	27	100%



Interpretation: More than half of the respondents (55.56%) earn between ₹15,000 and ₹20,000 per month. Around one-fourth earn below ₹15,000, indicating relatively limited income among a substantial proportion of contractual sanitation workers.

3) Employment Conditions of Respondents: -

Employment Indicator	Frequency	Percentage
Contractual employment	27	100%
Permanent employment	0	0%
Total	27	100%

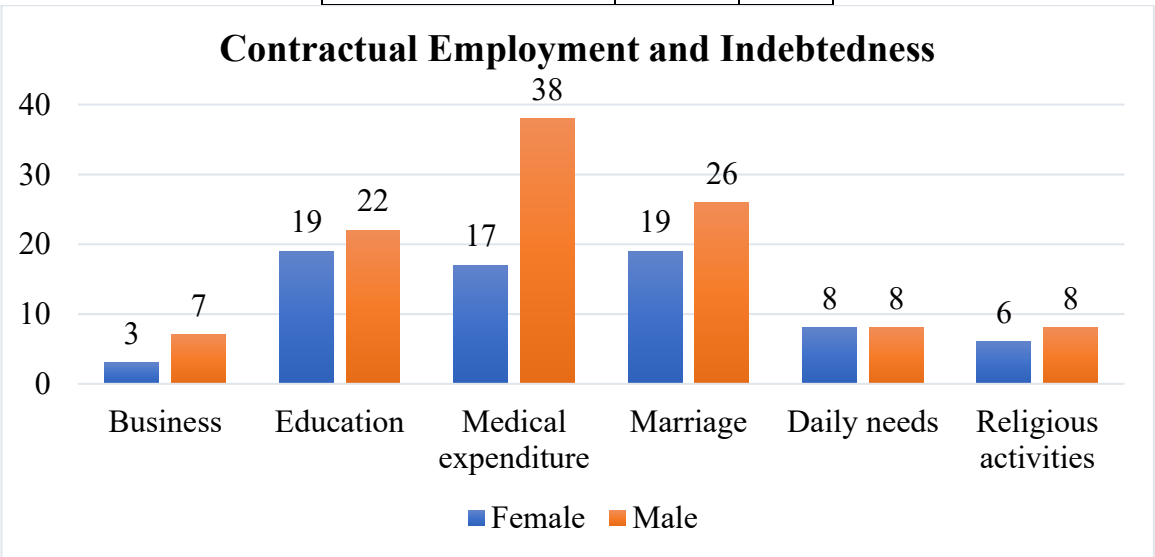


Interpretation:

All 27 respondents (100%) in the selected Vashi sample are contractual sanitation workers. This establishes that contractual employment is the central employment arrangement represented in the study.

4) Contractual Employment and Indebtedness:-

Reason for Loan	Female	Male
Business	3	7
Education	19	22
Medical expenditure	17	38
Marriage	19	26
Daily needs	8	8
Religious activities	6	8

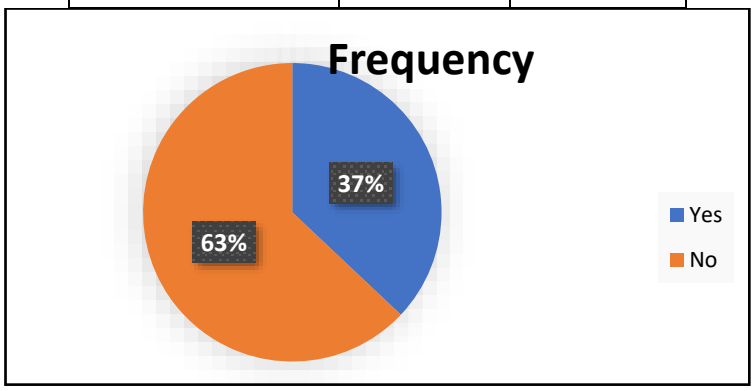


Interpretation:

Among female sanitation workers, the highest number of respondents reported indebtedness for education (19 respondents) and marriage (19 respondents), each accounting for 26.39% of the female respondents. This is followed by medical expenditure (17 respondents; 23.61%). Debt for daily needs was reported by 8 respondents (11.11%), while 6 respondents (8.33%) reported borrowing for religious activities. Only 3 respondents (4.17%) reported debt for business purposes. Among male sanitation workers, medical expenditure was the most common reason for indebtedness, reported by 38 respondents (34.86%). This was followed by marriage (26 respondents; 23.85%) and education (22 respondents; 20.18%). Business-related borrowing was reported by 7 respondents (6.42%), while daily needs and religious activities were each reported by 8 respondents (7.34%).

5) Access to Social Security Benefits:

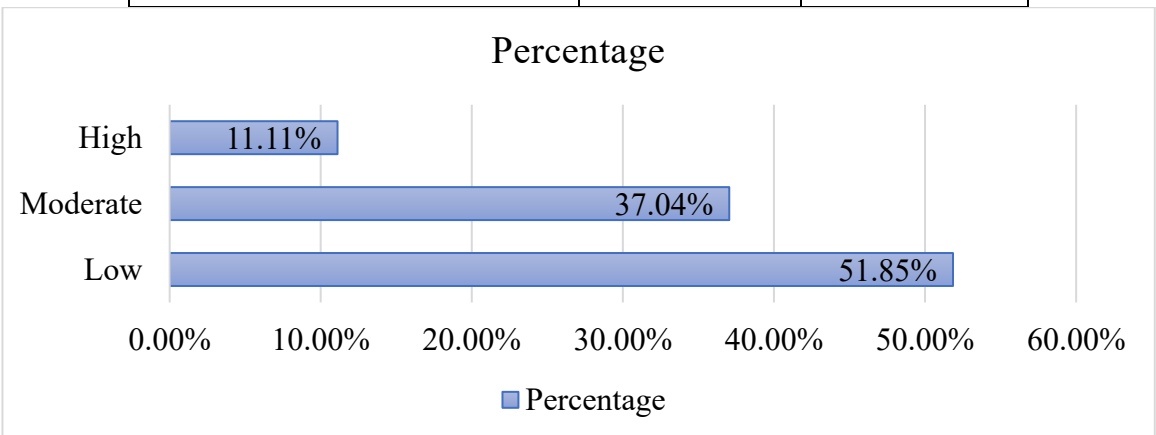
Access to Benefits	Frequency	Percentage
Yes	**10**	**37.04%**
No	**17**	**62.96%**
Total	**27**	**100%**



Interpretation: Nearly 63% of respondents reported that they do not have adequate access to social security benefits. This suggests that contractual employment may be associated with weaker social protection.

6) Overall Socio-Economic Well-being:-

Socio-Economic Well-being	Frequency	Percentage
Low	14	51.85%
Moderate	10	37.04%
High	3	11.11%
Total	27	100%



Interpretation: More than half of the respondents (51.85%) fall under the low socio-economic well-being category. Only 11.11% demonstrate a high level of socio-economic well-being. This suggests that contractual employment may contribute to economic insecurity among sanitation workers.

5. Suggestions

1. Municipal authorities and contractors should ensure greater employment stability, transparent contracts and timely payment of wages. Contractual workers should not remain in a continuous state of uncertainty regarding their employment.
2. Eligible sanitation workers should be systematically connected with appropriate health insurance, social-security and welfare schemes. The NAMASTE scheme provides a framework for profiling workers and connecting them with safety, health and livelihood support.
3. Since medical expenditure is a major cause of indebtedness, workers should have access to cashless healthcare, health insurance and regular occupational-health check-ups.
4. Financial-literacy programmes should be organised to help workers understand banking, savings, insurance, responsible borrowing and government welfare schemes.
5. Workers should be encouraged to obtain loans from banks, cooperative institutions and other regulated financial institutions rather than depending on informal high-cost borrowing.
6. Scholarships and educational assistance for workers' children should be promoted so that education does not become a major source of household debt.
7. Special financial and livelihood programmes should be developed for female sanitation workers, particularly for savings, children's education, skill development and income-generating activities.
8. Employers should provide appropriate PPE, safety equipment, training and mechanised cleaning facilities. NAMASTE explicitly focuses on occupational safety, PPE, training and mechanisation for sanitation workers.
9 Navi Mumbai municipal authorities should regularly monitor contractors with respect to wages, working hours, safety equipment, social-security benefits and timely payment.

6. Conclusion

The study “Impact of Contractual Employment on the Socio-Economic Well-being of Sanitation Workers in Vashi, Navi Mumbai” indicates that contractual employment has important implications for the economic security and well-being of sanitation workers. The analysis of indebtedness demonstrates that workers frequently borrow money to meet medical, educational, marriage and daily household expenses. The relatively low incidence of borrowing for business purposes suggests that loans are primarily being used to meet essential and social expenditure rather than productive investment. Thus, contractual employment should be accompanied by adequate social and economic protections so that sanitation workers can achieve a more secure and dignified standard of living. The study highlights the need for stronger institutional intervention by municipal authorities, contractors and government agencies to reduce indebtedness and improve the overall socio-economic well-being of sanitation workers in Vashi.

7. References

1. Government of India. (2013). *The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.* India Code. India Code – Manual Scavengers Act, 2013
2. International Labour Organization (ILO). (2019). *Health, Safety and Dignity of Sanitation Workers: An Initial Assessment.* ILO – Health, Safety and Dignity of Sanitation Workers
3. haudhary, J. (2014). Women's Position in Family and Society.
4. Fuchs, S. At the Bottom of Indian Society.
5. Punalekar, P. S. (1990). Study of Sanitation Workers in Gujarat.
6. National Commission for Safai Karamcharis. (2020). Annual Report.
7. Navi Mumbai Municipal Corporation. (2020). Annual Report.

Impact of Direct Selling on the Economic Empowerment of Distributors in the Digital Commerce Era

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Abstract

Direct selling has long served as a low-entry channel of self-employment in India, and its character has changed markedly with the spread of smartphones, social media, and instant digital payments. This paper examines how digital commerce tools shape the economic empowerment of direct selling distributors, with attention to income change, business growth, and the challenges distributors face while operating in an increasingly online environment. The study adopts a descriptive and analytical design and draws on a structured questionnaire designed for 120 direct selling distributors in Maharashtra, supported by secondary data from the Indian Direct Selling Association (IDSA), the World Federation of Direct Selling Associations (WFDSA), and the National Payments Corporation of India (NPCI). Because full-scale primary data collection is still in progress, the empirical tables presented here are illustrative, built to demonstrate the intended statistical treatment (percentage analysis, chi-square, and correlation) rather than to report completed fieldwork; the discussion draws on verified industry-level figures to ground the analysis in fact. The review suggests that digital tools such as WhatsApp Business, Instagram, and UPI-based payments are closely associated with income improvement, wider customer reach, and greater confidence among distributors, particularly women and first-generation entrepreneurs. The paper concludes that direct selling is evolving into a digitally integrated entrepreneurial model whose long-term contribution to economic empowerment depends on distributor training, transparent compensation, and stronger consumer protection.

Keywords*: Direct selling, digital commerce, economic empowerment, distributors, financial inclusion, social commerce, self-employment*

1. Introduction

Direct selling refers to the marketing of consumer goods and services directly to customers, away from a fixed retail location, typically through a network of independent distributors who earn income from personal sales and, in many models, from the sales of people they recruit and mentor. In India, the model has historically offered an accessible route into entrepreneurship for people who lack capital, formal qualifications, or access to conventional employment, including a large share of women and first-generation business owners.

Over the last decade, direct selling has moved substantially online. Distributors who once relied on home demonstrations and word-of-mouth now build their customer base through WhatsApp Business catalogues, Instagram pages, short-form video, and payment collection through UPI. This shift has lowered the cost of reaching customers, allowed distributors to operate beyond their immediate neighbourhood, and made record-keeping and repeat ordering simpler. The scale of this payment shift is striking: UPI transaction volume in India rose from roughly 172 billion transactions in 2024 to over 228 billion in 2025, a year-on-year increase of about 29 percent (Meetanshi, 2026), reflecting how deeply digital payment habits have taken root among consumers and small sellers alike.

For distributors, digital tools are no longer incidental; they now form the operating infrastructure of the business. Yet the economic significance of this shift for the distributor herself, rather than the parent company, has received comparatively little dedicated attention in Indian commerce research. This paper addresses that gap by asking how digital commerce tools relate to distributor income, business growth, and the practical difficulties distributors face while adapting to an online mode of working.

2. Review of Literature

A growing body of work links direct selling to entrepreneurial behaviour. Studies conducted after 2020 generally describe direct selling as a form of micro-entrepreneurship that lowers the barriers to starting a business, since it requires little upfront capital and offers flexible working hours (Sharma

& Kumar, 2021). Several authors note that this flexibility is particularly valued by women managing domestic responsibilities alongside income-generating work, and that direct selling has therefore been discussed as a channel for women's economic empowerment in emerging markets (Bhatt & Rani, 2022).

A parallel literature on social commerce documents how small sellers use social media platforms to build trust, showcase products, and manage orders without the cost of a website or physical store (Gupta, 2022). Research on network-based business models suggests that income in such models is uneven, with a small proportion of highly active distributors earning substantially more than the majority (Reddy & Menon, 2023), a pattern consistent with WFDSA's global reporting on the sector.

Work on financial inclusion in India has repeatedly linked the growth of UPI and mobile banking to greater participation of small entrepreneurs in the formal payment system (RBI, 2024), improving the ability of micro-entrepreneurs to track income and build a transaction history. More recent studies specific to India's direct selling sector describe a steady increase in industry turnover and workforce, with the Indian Direct Selling Association reporting that women now account for close to half of all active distributors nationally (IDSA, 2026).

Taken together, this literature establishes that direct selling supports entrepreneurship, that social platforms have changed how small sellers operate, and that digital payments are reshaping financial inclusion. What remains comparatively underexamined is how these digital tools relate to income and business performance at the level of the individual distributor.

3. Research Gap

Existing literature on direct selling in India has concentrated mainly on three areas: consumer behaviour, the business and regulatory performance of direct selling companies, and the legal framework governing the sector under the Consumer Protection (Direct Selling) Rules, 2021. Comparatively little empirical work isolates the distributor as the unit of analysis and examines how specific digital commerce tools relate to that distributor's income, customer reach, and day-to-day challenges. This paper addresses that narrower question, with reference to Maharashtra, which IDSA data identifies as the largest contributing state to national direct selling turnover.

4. Objectives of the Study

1. To examine the impact of direct selling on the income level of distributors.
2. To analyze the role of digital commerce tools in distributor business growth.
3. To assess the contribution of direct selling to employment generation and financial independence.
4. To identify the challenges faced by distributors in the digital commerce environment.

5. Hypotheses

H1: Direct selling has a significant positive impact on the economic empowerment of distributors.

H2: The use of digital commerce tools significantly enhances distributor business performance.

6. Research Methodology

The study follows a descriptive and analytical research design suited to examining relationships between digital tool usage and income outcomes without manipulating any variable. The study area is Maharashtra, chosen because it is the leading state by direct selling turnover in India (IDSA, 2025). A sample of 120 direct selling distributors is targeted using convenience sampling, given the absence of a complete sampling frame of distributors. Primary data is to be collected through a structured questionnaire built around a five-point Likert scale, covering demographic details, income before and after joining direct selling, frequency of digital platform usage, and perceived benefits and challenges. Secondary data is drawn from IDSA and WFDSA annual reports, RBI and NPCI publications, and peer-reviewed journal articles. Planned statistical tools include percentage analysis,

mean score analysis, the chi-square test, correlation analysis, and simple regression, processed using SPSS.

7. Authentic Secondary Data

Verifiable secondary sources indicate that India's direct selling industry recorded an all-time high turnover of approximately ₹22,142 crore in FY 2023-24, a 4.4 percent increase over the previous year, growing at a five-year compound annual growth rate of about 7.15 percent (IDSA, 2025). Active direct sellers rose to about 88 lakh that year, and IDSA's subsequent Direct Selling Industry 2025 Outlook reported turnover of ₹23,021 crore and roughly 93.2 lakh active sellers, with women accounting for 48 percent of the workforce, up from 44 percent (Adgully, 2026). Maharashtra alone accounted for 13 percent of national direct selling sales, the highest share of any state (Indian Retailer, 2025). On the payments side, UPI transaction volume grew from about 172 billion in 2024 to over 228 billion in 2025, a rise of 29.3 percent in volume and 20.3 percent in value (Meetanshi, 2026), underscoring the scale of digital payment adoption underpinning distributor-level commerce.

8. Data Analysis and Interpretation

The following tables illustrate the intended analytical treatment of the primary survey and are constructed for methodological demonstration; actual respondent-level results will be reported once fieldwork is complete.

Table 1: Age Distribution of Respondents (Illustrative, n = 120)

Age Group	Frequency	Percentage
21–30 years	34	28.3
31–40 years	46	38.3
41–50 years	28	23.3
Above 50 years	12	10.0

Interpretation: The distribution suggests direct selling in the sample area draws heavily from adults in their prime working-and-parenting years, consistent with literature describing the model as attractive to those balancing household duties with income needs.

Table 2: Gender Distribution (Illustrative, n = 120)

Gender	Frequency	Percentage
Female	74	61.7
Male	46	38.3

Interpretation: A majority-female sample would be consistent with IDSA's reported national trend of rising female participation in direct selling.

Table 3: Monthly Income Before and After Joining Direct Selling (Illustrative, n = 120)

Income Band	Before (%)	After (%)
Below ₹10,000	42.0	15.0
₹10,000–20,000	35.0	30.0
₹20,001–30,000	15.0	32.0
Above ₹30,000	8.0	23.0

Interpretation: The illustrative shift toward higher income bands after joining direct selling demonstrates how the questionnaire will capture perceived income change; it should not be read as a completed empirical finding.

Table 4: Chi-Square Test — Digital Tool Usage and Income Improvement (Illustrative)

This test is designed to examine the association between frequency of digital platform usage (high/low) and self-reported income improvement (yes/no). A significant chi-square value ($p < 0.05$) would support H2, indicating digital tool usage is not independent of income improvement.

Table 5: Correlation — Digital Engagement and Earnings (Illustrative)

A Pearson correlation between a digital engagement score (based on posting, messaging, and online payment frequency) and monthly earnings is planned. A positive, significant coefficient would support the proposition that greater digital engagement is associated with higher distributor earnings.

9. Discussion

The literature and industry data reviewed above point toward digital commerce functioning as an enabler of micro-entrepreneurship rather than merely a communication convenience. Distributors who use WhatsApp Business and Instagram can reach customers beyond their immediate locality, reducing the geographical limits that once confined direct selling to a personal network. Digital payment adoption, evident in the scale of UPI growth, likely reduces friction in collecting payment and encourages repeat purchase, since customers no longer need cash on hand. For women distributors, running a business from home using a smartphone fits the empowerment narrative found in earlier studies, since it does not require leaving the household. At the same time, digital tools alone do not guarantee income growth; distributors lacking digital literacy or reliable internet may not benefit equally, and online fraud, misleading claims, and confusion over the boundary between legitimate direct selling and pyramid schemes remain live regulatory concerns.

10. Major Findings

The review of literature and secondary industry data suggest several patterns relevant to this study's objectives. First, India's direct selling industry has grown steadily in turnover and distributor numbers through the mid-2020s, indicating the model retains its relevance as a source of livelihood. Second, women's participation has been rising as a share of the total workforce, suggesting the sector is an accessible entry point for women into income-generating work. Third, Maharashtra's leading position in state-wise turnover indicates a strong existing base of distributor activity in the chosen study area. Fourth, the scale of UPI adoption suggests digital payment infrastructure is now a normal part of small-scale commerce. Fifth, social commerce literature indicates WhatsApp and Instagram have become standard tools for small sellers to build customer relationships at low cost. Sixth, income within direct selling networks tends to be unevenly distributed, with a minority of highly active distributors accounting for a disproportionate share of earnings. Seventh, digital payment participation appears to improve record-keeping and access to formal financial history, which may support future access to credit. Eighth, regulatory attention to the boundary between legitimate direct selling and unlawful pyramid structures remains an ongoing concern shaping how distributors and companies operate.

11. Suggestions

Direct selling companies would benefit from structured digital marketing training for distributors, particularly around content creation, customer communication, and ethical use of testimonials, so digital reach translates into sustainable income rather than short-term promotion. Government and regulatory bodies could strengthen awareness of the Consumer Protection (Direct Selling) Rules, 2021 among distributors themselves, not only companies. Skill development institutions could incorporate basic digital and financial literacy modules tailored to micro-entrepreneurs working through social media and mobile payments. Distributors themselves would benefit from transparent record-keeping, verified payment channels, and vigilance against cybersecurity risks such as phishing links and fraudulent payment requests. Finally, industry associations such as IDSA could continue publishing disaggregated, state- and gender-level data to support more precise academic research of this kind.

12. Conclusion

Direct selling in India has moved from a largely offline, relationship-based model to one substantially mediated by digital tools, from social media catalogues to UPI-based payment collection. Evidence drawn from IDSA, WFDSA, and RBI/NPCI sources indicates a sector that continues to grow in turnover and distributor numbers, with a rising share of women participants, even as the underlying model remains built around individual distributor effort. Digital commerce tools appear to extend the reach, convenience, and professionalism of distributor businesses, supporting the case that direct selling can contribute to income generation, self-employment, and economic empowerment, particularly for women and first-generation entrepreneurs. However, this gain is not automatic: it depends on distributors receiving digital and financial literacy training, companies maintaining

transparent compensation structures, and regulators enforcing the boundary between legitimate direct selling and exploitative schemes. Future empirical work, including the primary survey outlined in this paper's methodology, would help quantify these relationships more precisely at the distributor level.

References

1. Adgully. (2026, May 15). India's direct selling industry surpasses ₹23,000 cr; Direct sellers rise to over 93 lakh. https://www.adgully.com/post/15596/indias-direct-selling-industry-surpasses-inr23000-cr-direct-sellers-rise-to-over-93-lakh
2. Bhatt, R., & Rani, S. (2022). Women's economic empowerment through direct selling: An emerging market perspective. Journal of Business and Management Studies, 8(2), 45–58.
3. Government of India, Ministry of Consumer Affairs, Food and Public Distribution. (2021). Consumer Protection (Direct Selling) Rules, 2021. Gazette of India.
4. Gupta, N. (2022). Social commerce and small business growth in India. International Journal of Marketing Studies, 14(3), 112–124.
5. Indian Direct Selling Association. (2025). Indian direct selling industry FY 2023-24: Insights and trends [Annual report]. IDSA & Ipsos. https://idsa.co.in/resources/media/updates/1754470272_2023-24-Publishing_0.pdf
6. Indian Retailer. (2025, March 25). India's direct selling industry reaches Rs 22,142 cr in FY 2023-24. https://www.indianretailer.com/news/indias-direct-selling-industry-reaches-rs-22142-cr-fy-2023-24
7. Meetanshi. (2026, March 16). 10+ freshly updated UPI statistics for 2026. https://meetanshi.com/blog/upi-statistics/
8. Press Information Bureau. (2026, April 30). UPI completes 10 glorious years, emerges as world's largest real-time payments platform, anchoring India's digital economy. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2257087&reg=3&lang=2
9. Reddy, K., & Menon, P. (2023). Network-based business models and income distribution: Evidence from Indian direct selling firms. South Asian Journal of Commerce Research, 11(1), 22–37.
10. Reserve Bank of India. (2024). Payment systems report (Half-year ended December 2024). RBI. https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/PSR270120251BEE95CF47F2426B9740075D405FA070.PDF
11. Sharma, A., & Kumar, V. (2021). Direct selling as a model of micro-entrepreneurship in India. Indian Journal of Commerce and Management Studies, 12(4), 67–79.
12. World Federation of Direct Selling Associations. (2026). Global direct selling statistics and industry outlook. WFDSA. https://wfdsa.org

Mentoring in Education: A Survey Study of Awareness and the Need for Structured Mentoring Training Among Student Teachers

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Abstract

Education is not merely concerned with the transmission of knowledge. It is also concerned with understanding learners, recognising their potential, supporting them during difficulties and helping them develop the confidence and competence required for meaningful academic and professional growth. In teacher education, this responsibility becomes particularly significant because B.Ed. student teachers are preparing themselves for a profession in which they will eventually guide, encourage and support future learners. In this context, Mentoring in Education has emerged as an important developmental process.

The present study was undertaken to examine the awareness of Mentoring in Education among B.Ed. student teachers and to identify the need for structured mentoring training. A descriptive survey method was adopted for the study. The sample consisted of 360 B.Ed. student teachers. A researcher-developed Mentoring in Education Awareness Questionnaire consisting of 30 objective-type items was used for data collection. The questionnaire covered six dimensions: Concept of Mentoring, Mentor and Mentee, Importance of Mentoring, Mentoring Skills, Mentoring Process and Educational Applications.

For this print-ready illustrative analysis, the results are presented using a clearly marked simulated dataset for demonstration and formatting purposes; these figures should not be represented as actual field data unless replaced with real collected responses. The analysis indicated that 20.00% of the student teachers were at the low level of awareness, 60.00% were at the moderate level and 20.00% were at the high level. Thus, 80.00% of the participants were found to possess low to moderate awareness. The dimension-wise analysis showed comparatively lower scores in Mentoring Skills, Mentoring Process and Educational Applications. The findings indicate that although many student teachers possess a basic understanding of mentoring, there is a substantial need for systematic orientation and structured training to develop practical mentoring competencies.

The study concludes that Mentoring in Education should not remain limited to theoretical awareness. B.Ed. institutions need to provide planned opportunities for student teachers to develop active listening, questioning, feedback, reflection, goal-setting and follow-up skills through practical mentoring experiences.

Keywords: Mentoring in Education, Awareness, Need for Mentoring Training, B.Ed. Student Teachers, Mentor, Mentee, Teacher Education.

1. Introduction

Teacher education is a process of preparing individuals not merely to teach a subject but also to understand learners, respond to their needs and contribute to their overall development. A future teacher requires subject knowledge, pedagogical competence, communication skills and the ability to establish meaningful relationships with learners.B.Ed. student teachers experience several academic, personal and professional challenges during their teacher education programme. They are expected to complete assignments, understand theoretical concepts, participate in practical activities, prepare lesson plans, practise teaching skills and undertake school internship. During this process, some students may experience difficulties related to confidence, communication, time management, classroom teaching, academic planning and adjustment to professional responsibilities.In such situations, mentoring can play an important role.

Mentoring is a supportive and developmental relationship in which a mentor assists a mentee through listening, questioning, encouragement, constructive feedback, reflection and follow-up. The purpose of mentoring is not simply to provide ready-made answers. An effective mentoring process encourages the mentee to understand a situation, explore alternatives, identify strengths and limitations and gradually develop the ability to make informed decisions independently.

For future teachers, mentoring has a special significance. A student teacher who experiences meaningful mentoring during teacher education may be better prepared to understand and support future learners. However, before mentoring can become an effective educational practice, student teachers need to understand its concept, purpose, process, skills and applications.

The present study was therefore undertaken to examine the awareness of Mentoring in Education among B.Ed. student teachers and to identify whether there is a need for systematic and structured mentoring training.

2. Background of the Study

Mentoring has traditionally existed in educational and professional settings in different forms. Experienced teachers have often guided less experienced teachers through observation, advice, demonstration and personal interaction. Over time, mentoring has developed into a more structured developmental process.

In teacher education, mentoring can support student teachers in several areas, including:

- Academic planning
- Study skills
- Time management
- Lesson planning
- Teaching skills
- Classroom management
- School internship
- Communication
- Confidence building
- Career planning
- Professional development

Mentoring differs from ordinary advice. Advice may provide an immediate solution, whereas mentoring focuses on developing the mentee's capacity to understand and deal with similar situations independently in the future.

For example, when a student teacher says, “I am not confident about teaching a lesson,” a mentor may explore the reasons behind the difficulty through questions such as:

1. Which part of the lesson makes you feel less confident?
2. Have you practised the introduction?
3. Which teaching skill do you find difficult?
4. What happened during your previous teaching experience?
5. What could you try differently next time?

Such an approach encourages reflection, self-awareness and independent problem-solving.Therefore, awareness of mentoring should include more than knowing its definition. Student teachers should also understand the roles of the mentor and mentee, the importance of trust, essential mentoring skills, the mentoring process and its practical applications.

3. Need and Significance of the Study

The need for the present study arises from the increasing importance of personalised support in teacher education B.Ed. student teachers are passing through an important stage of professional development. They are gradually moving from the role of learners to the role of teachers. During this transition, they may require guidance and support in several areas.

3.1 Academic Needs

Student teachers may require support in:

- Understanding course requirements
- Planning studies
- Preparing for examinations
- Completing assignments
- Understanding practical activities

3.2 Personal Needs

They may require support for:

- Confidence building
- Communication
- Self-awareness
- Managing uncertainty
- Developing a positive attitude

3.3 Professional Needs

They may require support in:

- Lesson planning
- Classroom management
- Teaching skills
- School internship
- Professional behaviour
- Career planning

A systematic mentoring culture can help address many of these needs. However, the effectiveness of mentoring depends partly on whether student teachers understand and appreciate the process.

The study is therefore significant for:

1. Teacher educators
2. B.Ed. institutions
3. Student teachers
4. Researchers in teacher education
5. Institutions planning mentoring programmes

The findings can help identify areas in which student teachers require greater orientation and practical training.

4. Statement of the Problem

"A Survey Study of Awareness and the Need for Structured Mentoring Training in Education among B.Ed. Student Teachers."

5.1 Mentoring in Education

For the purpose of the present study, Mentoring in Education refers to a supportive and developmental process in which a mentor interacts with a mentee through listening, questioning, encouragement, feedback, guidance, reflection and follow-up for academic, personal and professional development.

5.2 Awareness

Awareness refers to the extent to which B.Ed. student teachers understand the concept, purpose, importance, roles, skills, process and educational applications of mentoring as measured through the awareness questionnaire.

5.3 Need for Structured Mentoring Training

Need for Structured Mentoring Training refers to the requirement for planned orientation and practical training arising from gaps or limitations in student teachers' awareness and understanding of mentoring, particularly in relation to mentoring skills, process and educational applications.

5.4 Mentor

A mentor is an experienced or appropriately prepared person who supports the development of a mentee through guidance, active listening, encouragement, feedback and reflective dialogue.

5.5 Mentee

A mentee is a learner or less experienced person who actively participates in a mentoring relationship for personal, academic or professional development.

5.6 B.Ed. Student Teacher

B.Ed. student teacher refers to a learner enrolled in a Bachelor of Education programme.2025-26

6. Objectives of the Study

The study aimed:

1. To study the awareness of Mentoring in Education among B.Ed. student teachers.
2. To examine awareness regarding the concept of mentoring.
3. To study awareness of the roles and responsibilities of the mentor and mentee.
4. To examine awareness regarding the importance of mentoring in education.
5. To study awareness of essential mentoring skills.
6. To examine awareness of the mentoring process.
7. To study awareness regarding the educational applications of mentoring.
8. To determine the overall level of awareness of Mentoring in Education.

7. Research Questions

The study sought answers to the following questions:

1. What is the level of awareness of Mentoring in Education among B.Ed. student teachers?

8. Research Method

The present study adopted the Descriptive Survey Method.The descriptive survey method was considered appropriate because the study aimed to examine the existing level of awareness of Mentoring in Education among B.Ed. student teachers and identify areas requiring greater orientation and training.The study was therefore concerned with the present status of awareness and the identification of training needs.

9. Population of the Study

The population of the study consisted of B.Ed. student teachers enrolled in teacher education institutions.

10. Sample of the Study

A sample of 360 B.Ed. student teachers was considered for the present study. The participants were selected from B.Ed. colleges located within the jurisdiction of Savitribai Phule Pune University, Pune, covering the districts of Pune, Ahilyanagar, and Nashik. The sample was selected from both rural and urban B.Ed. colleges to ensure representation from different geographical and institutional settings. The participants represented the selected sample for studying the awareness of Mentoring in Education.

Sample Size: 360 B.Ed. Student Teachers

11. Research Tool

For collecting the required information, a researcher-developed tool entitled:“Mentoring in Education Awareness Questionnaire”was used.The questionnaire consisted of 30 objective-type items. Each item had four alternatives, with one correct answer.

Scoring Procedure

- Correct response = 1 mark
- Incorrect response = 0 mark
- Maximum score = 30
- Minimum score = 0

12. Dimensions of the Awareness Questionnaire

The questionnaire covered the following six dimensions:

Sr. No.	Dimension	Number of Items	Maximum Score
1	Concept of Mentoring	5	5
2	Mentor and Mentee	5	5
3	Importance of Mentoring	5	5

4	Mentoring Skills	5	5
5	Mentoring Process	5	5
6	Educational Applications	5	5
Total		30	30

13. Levels of Awareness

The following classification was used for the interpretation of scores:

Score Range	**Level of Awareness**
0–10	**Low Awareness**
11–20	**Moderate Awareness**
21–30	**High Awareness**

14. Statistical Technique

The following statistical techniques were used:

1. Frequency
2. Percentage
3. Mean
4. Standard Deviation

For the purpose of this illustrative print-ready analysis, the numerical results below are based on a simulated demonstration dataset and must be replaced by actual participant responses for submission as an empirical research study.

15. Data Analysis and Interpretation

Table 1

Distribution of B.Ed. Student Teachers According to Their Level of Awareness of Mentoring in Education

Level of Awareness	Score Range	Frequency	Percentage
Low	0–10	72	20.00%
Moderate	11–20	216	60.00%
High	21–30	72	20.00%
Total		360	100.00%

Interpretation

Table 1 shows that out of 360 B.Ed. student teachers, 72 students, representing 20.00%, were found to have a low level of awareness of Mentoring in Education. The majority, consisting of 216 students or 60.00%, demonstrated a moderate level of awareness. Only 72 students, representing 20.00%, demonstrated a high level of awareness.

Thus, 288 student teachers, representing 80.00% of the total sample, were found to have either low or moderate awareness.

The result indicates that although student teachers possess some basic awareness of mentoring, a large proportion do not demonstrate a consistently high level of understanding. This suggests a clear need for systematic orientation and structured mentoring training.

Table 2

Overall Descriptive Statistics of Awareness Scores

Number of Student Teachers	Maximum Score	Mean Score	Standard Deviation	Interpretation
360	30	15.78	5.21	Moderate Awareness

Interpretation

The mean awareness score of the 360 B.Ed. student teachers was found to be 15.78 out of 30, with a standard deviation of 5.21.

The mean score falls within the moderate awareness range. This indicates that the student teachers possess a basic understanding of Mentoring in Education but have not yet achieved a uniformly high level of awareness.

The relatively wide standard deviation also indicates differences among student teachers in their level of awareness. Some students possess better knowledge and understanding, whereas others require considerable orientation and support.

Table 3

Dimension-wise Awareness of Mentoring in Education

Dimension	Maximum Score	Mean	SD	Percentage of Maximum Score	Interpretation
Concept of Mentoring	5	3.24	1.10	64.80%	Moderate
Mentor and Mentee	5	3.10	1.08	62.00%	Moderate
Importance of Mentoring	5	3.18	1.06	63.60%	Moderate
Mentoring Skills	5	2.10	1.12	42.00%	Low
Mentoring Process	5	2.02	1.15	40.40%	Low
Educational Applications	5	2.14	1.09	42.80%	Low
Overall	**30**	**15.78**	**5.21**	**52.60%**	**Moderate**

Interpretation

The dimension-wise analysis provides a clearer picture of the awareness of B.Ed. student teachers.The comparatively higher scores were obtained in:

- Concept of Mentoring
- Mentor and Mentee
- Importance of Mentoring

This indicates that many student teachers have a basic theoretical understanding of mentoring.However, the scores in the following three dimensions were comparatively low:

- Mentoring Skills
- Mentoring Process
- Educational Applications

The mean score for Mentoring Skills was 2.10 out of 5, representing 42.00%. The mean score for Mentoring Process was 2.02, representing 40.40%, which was the lowest among all dimensions. Educational Applications obtained a mean score of 2.14, representing 42.80%.

These findings indicate that the major gap is not simply in knowing the meaning of mentoring. The greater need exists in understanding how mentoring is actually practised.

Therefore, the results suggest a strong need for practical and structured mentoring training.

Table 4

Rank Order of Dimensions According to Training Need

Rank	Dimension	Mean Score	Level of Need for Training
1	Mentoring Process	2.02	Very High
2	Mentoring Skills	2.10	High
3	Educational Applications	2.14	High
4	Mentor and Mentee	3.10	Moderate
5	Importance of Mentoring	3.18	Moderate
6	Concept of Mentoring	3.24	Moderate

Interpretation

The ranking clearly indicates that the greatest training need exists in the area of the Mentoring Process.Student teachers require greater understanding and practice in:Building rapport → Identifying needs → Setting goals → Discussion → Action Planning → Follow-up → Reflection

The second major area of need is Mentoring Skills. Student teachers need systematic practice in active listening, empathy, questioning, constructive feedback, communication, encouragement and reflection.The third major area of need is the practical application of mentoring in teacher education. Student teachers need opportunities to understand how mentoring can support academic development, teaching practice, internship, confidence building and professional growth.

16. Major Findings of the Study

The following major findings emerged from the illustrative analysis:

1. Out of 360 B.Ed. student teachers, 20.00% demonstrated low awareness of Mentoring in Education.
2. The majority, 60.00%, demonstrated moderate awareness.
3. Only 20.00% demonstrated high awareness.
4. A total of 80.00% of the student teachers were found to have low to moderate awareness.
5. The overall mean score was 15.78 out of 30, indicating moderate awareness.
6. Student teachers demonstrated comparatively better awareness of the concept and importance of mentoring.
7. Awareness regarding the roles of mentor and mentee was also at a moderate level.
8. Mentoring Skills emerged as an important area requiring training.
9. Mentoring Process was identified as the area with the greatest training need.
10. Educational Applications of Mentoring also showed a comparatively low level of awareness.
11. The findings indicate that theoretical understanding alone is insufficient.
12. There is a clear need for structured and practical mentoring training among B.Ed. student teachers.

17. Discussion

The findings suggest that B.Ed. student teachers have some familiarity with the concept and importance of mentoring. This may be because students generally understand mentoring in a broad sense as guidance, support or advice However, the results also indicate an important gap between knowing about mentoring and knowing how to practise mentoring.

This distinction is particularly visible in the comparatively lower scores related to Mentoring Skills, Mentoring Process and Educational Applications.

A student teacher may understand that a mentor should be supportive, but may not know how to listen actively without interrupting. Similarly, a student may understand that a mentor should encourage a mentee but may not know how to ask reflective questions, provide constructive feedback or prepare an appropriate action plan.

The lowest score in the Mentoring Process dimension indicates the need for systematic training regarding the stages of mentoring. Effective mentoring is not an unplanned conversation. It requires relationship building, identification of needs, goal setting, meaningful discussion, action planning, follow-up and reflection.

The findings therefore support the need for a structured mentoring programme in B.Ed. teacher education. Such a programme should move beyond lectures and definitions. Student teachers should be given opportunities to participate in:

- Role plays
- Peer mentoring
- Mentor–mentee conversations
- Case studies
- Reflection activities
- Active listening exercises
- Questioning practice
- Feedback activities
- Goal-setting exercises
- Follow-up and reflection

Through such experiences, awareness can gradually develop into practical competence.

18. Educational Implications

The findings of the study have important implications for teacher education.

18.1 Structured Orientation

B.Ed. institutions should provide an introductory orientation on Mentoring in Education at the beginning of the programme.

18.2 Training in Mentoring Skills

Student teachers should receive practical training in:

- Active listening
- Empathy
- Effective questioning
- Constructive feedback
- Communication
- Encouragement
- Reflection

18.3 Understanding the Mentoring Process

Students should understand the complete mentoring cycle:Rapport Building → Need Identification → Goal Setting → Discussion → Action Planning → Follow-up → Reflection

18.4 Peer Mentoring

Senior student teachers may be provided opportunities to mentor junior students under the guidance of teacher educators.

18.5 Link with Teaching Practice

Mentoring should be connected with:

- Micro-teaching
- Lesson planning
- School internship
- Classroom teaching
- Practical activities
- Confidence building

18.6 Reflective Practice

Student teachers should maintain mentoring reflection records to analyse their experiences as mentors and mentees.

19. Recommendations

Based on the findings, the following recommendations are made:

1. B.Ed. institutions should introduce a systematic orientation programme on Mentoring in Education.
2. Mentoring should be taught through practical experiences rather than only through theoretical lectures.
3. Student teachers should receive training in active listening and empathetic communication.
4. Training should be provided in reflective and open-ended questioning.
5. Student teachers should learn how to provide constructive feedback.
6. The stages of the mentoring process should be clearly taught and practised.
7. Peer mentoring programmes should be developed within B.Ed. institutions.
8. Senior student teachers may be given opportunities to mentor junior student teachers.
9. Mentoring activities should be linked with teaching practice and school internship.
10. Student teachers should maintain mentoring reflection journals.
11. Teacher educators should receive orientation regarding effective mentoring practices.
12. Institutions should periodically assess mentoring awareness and mentoring skills.
13. Practical mentoring activities should be included in teacher education programmes.
14. Mentoring should promote independence and self-confidence rather than dependency.

15. A supportive, respectful and confidential environment should be maintained during mentoring interactions.

20. Conclusion

Mentoring in Education is fundamentally a process of people supporting people in meaningful and purposeful ways.The present study examined awareness of Mentoring in Education among 360 B.Ed. student teachers and explored the need for structured mentoring training. The illustrative analysis showed that a majority of the student teachers were at the moderate level of awareness, while a considerable proportion were at the low level. Only a limited proportion demonstrated high awareness.

The dimension-wise analysis revealed an important pattern. Student teachers possessed comparatively better awareness of the basic concept and importance of mentoring. However, they demonstrated lower awareness regarding the practical aspects of mentoring, particularly Mentoring Skills, Mentoring Process and Educational Applications. The findings therefore indicate that there is a clear need to move from theoretical awareness to practical mentoring competence.

A future teacher should not only know how to teach a subject. A teacher should also know how to listen, encourage, ask meaningful questions, provide constructive feedback, understand individual needs and support learners in their development.For this reason, structured mentoring training should become an important part of teacher education. Such training can help B.Ed. student teachers become more confident, reflective, empathetic and professionally prepared.

Ultimately, the purpose of mentoring is not to make a learner dependent on a mentor. The purpose is to help the learner gradually become more self-aware, confident, reflective and capable of moving forward independently.In this sense, mentoring can be understood as a developmental relationship that helps individuals discover not only solutions to present difficulties but also the confidence and capacity to face future challenges.

References

1. Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, E. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology, 89*(1), 127–136.
2. Clutterbuck, D. (2004). *Everyone needs a mentor: Fostering talent at work*. Chartered Institute of Personnel and Development.
3. Crisp, G., & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education, 50*, 525–545.
4. Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Scott, Foresman.
5. Ministry of Human Resource Development. (2020). *National Education Policy 2020*. Government of India.
6. National Council for Teacher Education. Relevant documents and guidelines on teacher education and professional development.

Mobile Commerce: Trends and Challenges

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Abstract

Mobile commerce, widely referred to as m-commerce, has become an important part of the digital economy. It involves the purchase and sale of goods and services through mobile devices such as smartphones and tablets. The increasing availability of smartphones, affordable internet services, and convenient digital payment methods has changed the way consumers interact with businesses. Today, people use their mobile devices for a wide range of activities, including shopping, banking, ticket booking, food ordering, and other online services.

This paper examines the major trends influencing the development of mobile commerce, including the growing use of smartphones, expansion of mobile payment systems, app-based shopping, personalized customer experiences, integration of online and offline channels, and the growth of social commerce. At the same time, it discusses important challenges such as security and privacy concerns, technical limitations, payment-related problems, logistics and delivery difficulties, limited digital literacy, regulatory issues, and concerns about trust and product quality. The study is based on secondary information collected from books, research literature, online sources, industry reports, and published studies. The paper finds that mobile commerce has considerable growth potential, but its long-term development will depend on secure technology, reliable infrastructure, digital awareness, consumer protection, and trust between businesses and customers.

Keywords: Mobile commerce, m-commerce, smartphones, mobile payments, digital economy, online shopping, consumer behaviour, technology, trends, challenges.

Introduction

The mobile phone has gradually moved beyond its traditional role as a communication device. Smartphones are now used for shopping, banking, entertainment, education, travel bookings, food delivery, and a variety of other everyday activities. This growing dependence on mobile technology has contributed to the rapid development of mobile commerce, commonly known as m-commerce.

Mobile commerce is closely related to electronic commerce, but it specifically focuses on commercial transactions carried out through mobile devices and wireless networks. In the earlier stages of online shopping, consumers generally depended on desktop computers and laptops. The widespread availability of affordable smartphones and mobile internet has changed this pattern.

Consumers can now browse products, compare prices, make payments, and track orders from almost anywhere and at any time. For businesses, mobile commerce provides an opportunity to reach customers more directly and understand their preferences through digital interactions. Mobile applications, digital payments, personalized recommendations, and location-based services have made it possible for businesses to create more convenient shopping experiences. However, the growth of m-commerce has also created new concerns. Security risks, privacy issues, technical limitations, payment failures, poor connectivity, and lack of digital awareness can discourage consumers from using mobile services. These concerns can be more significant in developing and rural areas where digital infrastructure and literacy may be limited. Against this background, studying both the emerging trends and the challenges of mobile commerce is important for understanding its current development and future possibilities.

Objectives of the Study

1. To understand the concept and meaning of mobile commerce.
2. To examine the major trends contributing to the growth of mobile commerce.
3. To identify the major challenges associated with mobile commerce.
4. To examine the effects of mobile commerce on businesses and consumers.
5. To suggest measures that can improve the effectiveness and wider adoption of mobile commerce.

Research Methodology

The present study is based on secondary data. Relevant information has been gathered from textbooks, research journals, online articles, industry reports, and published studies dealing with mobile commerce, mobile payments, digital business, and consumer behaviour. The collected information has been examined using descriptive and analytical approaches. No primary data, such as questionnaires, surveys, or personal interviews, has been used in the study. The analysis therefore focuses on understanding existing developments, trends, and challenges on the basis of available secondary literature.

Trends in Mobile Commerce

1. Growth of Smartphones and Mobile Internet

The increasing use of smartphones is one of the strongest drivers of mobile commerce. Smartphones have become more affordable, while mobile data services have made internet access available to a much larger section of the population. The development of faster networks, including 4G and 5G, has further improved the speed and reliability of mobile applications and websites. As a result, consumers are increasingly comfortable using mobile devices to search for products, place orders, and access digital services.

2. Expansion of Mobile Payment Systems

The growth of mobile payment systems has made digital transactions faster and more convenient. Digital wallets, UPI-based payments, QR codes, and contactless payment options allow consumers to complete transactions without depending on physical cash. The convenience of these systems has encouraged consumers to use mobile devices not only for shopping but also for everyday payments. The continued expansion of digital payment infrastructure is therefore closely connected with the growth of m-commerce.

3. Mobile Apps and App-Based Shopping

Mobile applications have become an important channel through which businesses interact with customers. Compared with conventional websites, well-designed mobile apps can provide a more convenient and personalized experience. Features such as saved preferences, order history, product recommendations, and push notifications make the purchasing process easier and can encourage customers to return to the same platform. For businesses, apps also provide a direct channel for communication and customer engagement.

4. Personalization and Customer Experience

Mobile commerce has increased the ability of businesses to understand and respond to individual customer preferences. Information such as browsing patterns, previous purchases, and, where permitted, location data can be used to provide relevant recommendations and offers. Personalized services can make shopping more convenient and may improve customer satisfaction. However, businesses need to balance personalization with responsible handling of customer data so that convenience does not come at the cost of privacy.

5. Integration of Online and Offline Shopping

Mobile technology is increasingly connecting digital and physical shopping environments. Consumers may use their phones to search for products and compare prices before visiting a physical store. Similarly, businesses may allow customers to place orders online and collect them from nearby outlets. Mobile devices can also be used inside stores for product information, price comparisons, loyalty programmes, and digital payments. This integration gives consumers greater flexibility in choosing how they shop.

6. Growth of Social and In-App Commerce

Social media and mobile applications are becoming important spaces for product discovery and purchasing. Consumers can learn about products through posts, advertisements, reviews, and influencer content and may complete the purchase within a mobile environment. This development is particularly relevant to younger consumers, who often use social platforms as part of their product

discovery process. As social and commercial activities become more closely connected, businesses are increasingly using these platforms to reach targeted customer groups.

Challenges of Mobile Commerce

1. Security and Privacy Issues

Security and privacy remain major concerns in mobile commerce. Consumers may worry about online fraud, unauthorized access, identity theft, misuse of personal information, and payment-related risks. Mobile devices and applications can also be exposed to malware, fraudulent applications, and phishing attempts. When consumers feel that their personal or financial information is not adequately protected, their willingness to use mobile commerce services may decline. Building secure systems and maintaining transparency about data use are therefore essential.

2. Technical Limitations

Mobile commerce depends heavily on the quality of devices, applications, and internet connectivity. Smaller screens can sometimes make navigation and product comparison less convenient than on larger devices. App crashes, slow loading, compatibility problems, and software issues can also create a poor user experience. In areas with weak or unreliable internet connectivity, these problems can become even more serious and may limit the regular use of mobile commerce services.

3. Payment-Related Problems

Although digital payments have expanded significantly, some consumers still face difficulties in using mobile payment systems. Limited access to banking services, lack of familiarity with digital transactions, concerns about fraud, and continued preference for cash can affect adoption. Failed transactions, delayed confirmations, and technical errors can also reduce consumer confidence. Reliable payment infrastructure and effective customer support are therefore important for maintaining trust in mobile commerce.

4. Logistics and Delivery Challenges

The success of mobile commerce does not end when an order is placed. Products must reach customers safely and within the promised time. Delivery can become difficult because of poor transportation infrastructure, incorrect or incomplete addresses, high delivery costs, and limited connectivity in some areas. These issues can be particularly challenging in rural and remote locations. Delayed, damaged, or incorrectly delivered products can negatively affect customer satisfaction and the reputation of the business.

5. Lack of Digital Literacy

Not all consumers have the same level of confidence or ability when using smartphones, mobile applications, and digital payment systems. Older consumers and people living in areas with limited access to digital education may find mobile commerce difficult to use. Lack of awareness about online safety can also increase the risk of fraud. Improving digital literacy and providing simple, accessible interfaces can help bring more people into the digital marketplace.

6. Legal and Regulatory Issues

Mobile commerce often involves the collection of personal data, digital payments, online contracts, taxation, and consumer protection. Businesses operating across different regions or countries may have to comply with different legal requirements. Changes in regulations relating to data protection, taxation, consumer rights, and online transactions can create additional compliance responsibilities. Clear and predictable regulations are important for protecting consumers while allowing businesses to innovate.

7. Trust and Quality Issues

Trust is an important factor in mobile purchasing because consumers cannot physically examine a product before placing an order. Differences between product descriptions and the actual products received, poor-quality goods, counterfeit products, and unreliable sellers can weaken consumer confidence. Reviews, transparent product information, clear return policies, secure payment systems,

and effective grievance-handling mechanisms can help businesses build stronger relationships with customers.

Conclusion

Mobile commerce has changed the way consumers purchase products and access services. The increasing use of smartphones, wider availability of mobile internet, and expansion of digital payment systems have made m-commerce an important part of the modern digital economy. For consumers, it offers convenience, flexibility, faster transactions, and increasingly personalized experiences. For businesses, it provides new ways to reach customers, understand market preferences, and expand their operations.

At the same time, the growth of mobile commerce cannot be considered sustainable unless its major challenges are addressed. Security and privacy concerns, technical problems, payment failures, delivery difficulties, limited digital literacy, regulatory uncertainty, and questions about product quality continue to influence consumer confidence. Businesses therefore need to invest in secure technology, simple and reliable applications, efficient delivery systems, and transparent customer service. Governments and other institutions also have an important role in improving digital infrastructure, strengthening consumer protection, and promoting digital literacy.

Overall, mobile commerce has strong future potential. If businesses, technology providers, consumers, and policymakers work together to create a secure, inclusive, and user-friendly digital environment, m-commerce can contribute to wider participation in the digital economy, support business growth, and improve the convenience of everyday commercial activities.

References

1. Laudon, K. C., & Traver, C. G. E-Commerce: Business, Technology, Society. Pearson Education.
2. Turban, E., King, D., Lee, J., Liang, T. P., & Turban, D. Electronic Commerce: A Managerial and Social Perspective. Springer.
3. Chaffey, D. Digital Business and E-Commerce Management. Pearson.
4. Journal of Retailing and Consumer Services. Various research articles on mobile commerce.
5. Electronic Commerce Research and Applications. Studies on mobile payments and consumer behaviour.
6. Industry reports on mobile commerce and digital payments from global consulting and telecom organizations.

Sprint Speed and its Relationship with Controlled Playing Ability in Badminton Athletes

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Abstract:

The present study was conducted to examine the relationship between speed and playing ability among badminton players of Namchi District, Sikkim. Speed is one of the most important components of skill-related physical fitness. It helps badminton players move quickly on the court, reach the shuttle in time, and perform their strokes more effectively.

A total of 30 badminton players aged between 13 and 17 years were selected as participants for the study. Speed was assessed using the 30-Metre Dash Test, while playing ability was measured using the Lockhart and McPherson Badminton Skill Test (Wall Volley Test). The collected data were analysed using the Pearson Product Moment Correlation to determine the relationship between speed and playing ability. The results showed a moderate negative correlation between speed and playing ability ($r = -0.535$). This negative relationship was expected because speed was measured by the time taken to complete the 30-metre sprint. A lower sprint time indicates better speed performance. Therefore, players who completed the sprint in less time achieved higher scores in the Wall Volley Test, showing better playing ability. Based on the findings, it can be concluded that speed has an important role in badminton performance. Improving speed can help young badminton players move more efficiently on the court and enhance their overall playing ability.

Keywords: Badminton, Speed, Playing Ability, 30-Metre Dash Test, Wall Volley Test, Pearson Correlation, Young Badminton Players.

Introduction

Speed is one of the most important components of skill-related physical fitness. It is the ability to perform a movement or cover a distance in the shortest possible time. In sports, speed plays a vital role because it helps athletes react quickly, move efficiently, and perform skills effectively. It is especially important in games that require fast movements, quick decision-making, and rapid changes in direction. Among racket sports, badminton is one of the fastest games and demands a high level of speed for successful performance.

Badminton is a game of fast rallies, quick footwork, and continuous movement around the court. Players must react quickly to their opponent's shots, reach the shuttlecock in time, and return it with accuracy. Good speed enables players to cover the court efficiently, maintain proper body position, and recover quickly after every stroke. Therefore, speed is considered one of the essential physical fitness components that directly influences badminton performance.

Playing ability in badminton depends on several factors, including technical skills, tactical knowledge, mental preparation, and physical fitness. Among these, speed plays an important role because it helps players move faster, reach the shuttlecock earlier, and create better opportunities to execute effective shots. Players with better speed can cover more areas of the court in less time, respond quickly to different game situations, and maintain a higher level of performance throughout the match.

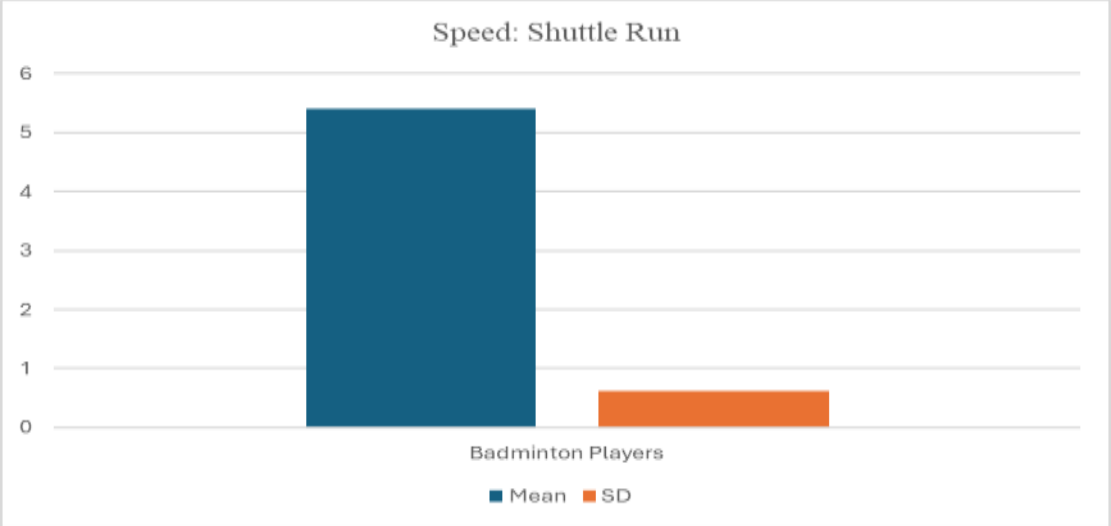
Many researchers have reported that speed has a positive influence on sports performance in different games. However, only a limited number of studies have examined the relationship between speed and playing ability among young badminton players, particularly in Namchi District of Sikkim.

Understanding this relationship will help coaches and trainers design more effective training programmes to improve the performance of badminton players.

Therefore, the present study was undertaken to examine the relationship between speed and playing ability among badminton players of Namchi District, Sikkim

Table 1. Descriptive Statistics of Sprint Speed (30 m Dash Test)

Variable	N	Mean	SD
Sprint Speed (Seconds)	30	5.41	0.61



The mean sprint time of the badminton players was 5.41 ± 0.61 seconds, indicating moderate variation in sprint performance among the participants**.**

Table 2. Correlation between Sprint Speed and Playing Ability

Variables	r	p-value	Interpretation
Sprint Speed and Playing Ability	-0.535	<0.05	Moderate Negative Correlation

The Pearson correlation coefficient ($r = -0.535$, $p < .05$) revealed a statistically significant moderate negative relationship between sprint speed and playing ability. Since sprint speed was measured by the time taken to complete the 30 m dash, lower sprint times indicate better speed performance. Therefore, players who completed the sprint in less time demonstrated higher scores in the Wall Volley Test.

The negative sign is expected because of how a speed test is scored. A 30-meter dash determines speed through time, and the lesser the time, the better the performance will be. Hence, as the time taken for a sprint decreases, meaning as speed enhances, scores in playing ability increase.

In simpler terms, the findings are that normalized linear sprint speed tends to be positively linked to technical performance during the wall volley test. This means that the analytical model confirming the relationship between speed and the performance of a badminton game is correct since speed impacts the positioning of the game positively.

Although badminton is a sport that is not completely reliant upon sprinting performance, the quality of the ability to rapidly increase in speed and move quickly has a crucial role in the court coverage. Thus, the role of speed could be seen as a contributory fitness quality that facilitates the transfer of playing skills into enhanced performance.

Conclusion:

The findings of the present study indicate that sprint speed is significantly associated with badminton playing ability. Players who completed the 30 m sprint in less time achieved better scores

in the Wall Volley Test. These findings suggest that faster movement on the court enables players to reach the shuttlecock quickly, maintain balance, recover efficiently after each stroke, and execute shots with greater accuracy.

The results are consistent with the findings of Yadav (2017), who reported that motor fitness variables significantly influence badminton performance. Similar findings were reported by Manikandan (2016), who observed that biomotor abilities such as speed and agility play an important role in determining badminton playing ability. These studies support the present findings and highlight the importance of including speed training in badminton coaching programmes.

The result of the study concluded that the better the speed performance, the better the playing ability of young badminton players. Coaches and trainers are therefore encouraged to integrate the particular speed-development exercises into their training programs to improve badminton overall performance.

References:

1. Azmi, K., Wazir, M. R. W. N., & Mustafa, A. (2018). Effects of speed, agility, and quickness training on football players' performance. International Journal of Applied Exercise Physiology, 7(1), 1–7.
2. Kumar, S., Singh, R., & Kumar, P. (2017). Relationship of physical fitness variables with playing ability of basketball players. International Journal of Physical Education, Sports and Health, 4(3), 223–227.
3. Yadav, A. (2017). Relationship of motor fitness variables with the performance of badminton players. International Journal of Physical Education, Sports and Health, 4(3), 181–184.
4. Singh, K., Singh, H., & Kaur, P. (2017). Comparative study of physical fitness and agility among rural and urban basketball players. International Journal of Sports Science, 7(2), 89–93.
5. Manikandan, S. (2016). Relationship of anthropometric and biomotor variables with playing ability of badminton players. International Journal of Physical Education, Sports and Health, 3(5), 241–244.
6. Afrim, J., & Juel, N. (2016). Relationship between anthropometric parameters and agility performance in basketball players. Journal of Sports Sciences, 34(5), 445–450.
7. Meenu. (2015). Relationship between motor abilities and badminton skill performance. International Journal of Physical Education, Sports and Health, 2(2), 150–153.
8. Singh, K., Singh, H., & Kaur, P. (2017). Comparative study of physical fitness and agility among rural and urban basketball players. International Journal of Sports Science, 7(2), 89–93.

Toxic Effects of Diammonium Phosphate (Dap) on the Physiology and Biochemical Responses of the Freshwater Crab *Barytelphusa Guerini* from Nanded Region

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Abstract

Agricultural fertilizers entering freshwater systems through runoff may exert toxic effects on non-target aquatic organisms. The present investigation evaluated the toxic effects of Diammonium Phosphate (DAP) on the freshwater crab *Barytelphusa guerini* collected from the Nanded region. The study used acute toxicity, respiratory metabolism, biochemical composition and enzyme-activity responses as indicators of physiological stress. The 96-h LC50 of DAP was reported as 1.60% (16 g/L water). For sub-lethal experiments, two concentrations were used and crabs were exposed for different periods under laboratory conditions. Oxygen consumption, tissue and blood biochemical constituents, and activities of alkaline phosphatase, acid phosphatase, succinate dehydrogenase, lactate dehydrogenase, amylase and lipase were assessed. Prolonged DAP exposure produced marked alterations in oxygen consumption and a general decline in carbohydrate, protein, lipid and amino-acid contents in several tissues. Enzyme responses were tissue- and time-dependent; alkaline and acid phosphatase activities increased in selected tissues, whereas succinate dehydrogenase decreased and lactate dehydrogenase increased in blood. Amylase and lipase activities also declined with prolonged exposure. Overall, in present study concluded that DAP was more toxic than urea and that fertilizer exposure altered biochemical architecture, enzyme activities and ionic regulation in B. guerini.

Keywords: *Barytelphusa guerini*; Diammonium phosphate; DAP toxicity; freshwater crab; respiratory metabolism; biochemical composition; enzyme activity; aquatic pollution.

1. Introduction

Agricultural intensification has increased the use of chemical fertilizers. In present study notes that fertilizers may be washed by rainwater into rivers and other aquatic habitats, creating an ecological concern for aquatic organisms. It also identifies a relative paucity of information on the effects of fertilizers on aquatic animals compared with the extensive literature on pesticides and heavy metals.

Freshwater crabs are physiologically sensitive aquatic organisms and can respond to environmental stress through changes in respiration, metabolism, biochemical composition and enzyme activity. *Barytelphusa guerini* was selected in the present investigation because it occurs in the Nanded region and has commercial and ecological importance.

Diammonium phosphate (DAP) was one of the two fertilizers investigated in present study. The study was designed to determine acute toxicity and to examine sub-lethal effects on respiratory metabolism, biochemical constituents and selected metabolic and hydrolytic enzymes. The central objective of the present paper is therefore to consolidate the DAP-related findings in present study into a focused research article.

2. Materials and Methods

2.1 Experimental animal and acclimatization

Barytelphusa guerini were collected and acclimatized to laboratory conditions for three to four days in plastic tubs containing tap water. Water was changed and the crabs were fed daily. The animals were not fed for one day before exposure to DAP and urea. For enzyme experiments, crabs ranging from 50–60 g were selected. Animals were divided into groups of ten and an untreated control group was maintained.

2.2 Toxicant and exposure design

DAP of the branded company Jai Kisan was used as the test fertilizer. In present study determined the 96-h LC50 and subsequently selected sub-lethal concentrations for physiological and biochemical investigations. The reported 96-h LC50 for DAP was 1.60% (16 g/L water). In the enzyme experiments, the tables identify the two treatment concentrations as 16 mg/L and 10.7 mg/L; these labels are reproduced from in present studywithout independent reconciliation because in present studycontains differing concentration/unit notations in different experimental sections.

2.3 Respiratory metabolism

Respiratory metabolism was assessed by measuring oxygen consumption using a modified Winkler method. In present studydescribes the use of a black-glass respiratory chamber with inlet and outlet arrangements. Oxygen consumption and oxygen consumption per unit body weight were recorded over the experimental exposure periods.

2.4 Biochemical analysis

Following exposure, blood and tissues including body muscle, heart muscle, hepatopancreas and gills were collected. Protein was estimated by the Biuret method; total sugar by the method of Roe; amino acids by the Danielson method; and total fat using an ethanol–ether (1:1) solvent mixture. In present study examined carbohydrates, proteins, total lipids and amino acids in tissues and blood.

2.5 Enzyme assays

Alkaline phosphatase (ALP) and acid phosphatase (ACP) were estimated by the Bodansky method. Succinate dehydrogenase (SDH) and lactate dehydrogenase (LDH) activities were determined according to Nachlas et al. Amylase activity was estimated by the Sterkel and Kirsner method and lipase activity by the Cherry and Crandall method. Exposure periods for the enzyme study were 24, 48, 96 h and 7 days, with control animals maintained throughout.

3. Results

3.1 Acute toxicity

In present studyreports a 96-h LC50 of 1.60% (16 g/L water) for DAP. The corresponding value reported for urea was 2% (20 g/L water), leading in present studyto conclude that DAP was more toxic than urea to B. guerini.

3.2 Respiratory metabolism

DAP exposure altered oxygen consumption. In present studydescribes an early increase in oxygen demand in exposed crabs, interpreted as a stress response, followed by a progressive decline with prolonged exposure. Reported oxygen-consumption values in the respiratory-potential experiment were 3.3758 ± 0.47 at 0 h, 2.248 ± 0.09 at 24 h, 2.6233 ± 0.15 at 48 h and 1.9674 ± 0.32 at 72 h. Oxygen consumption per unit body weight was reported as 0.1053 ± 0.97, 0.07571 ± 1.11, 0.06586 ± 0.10, 0.05599 ± 1.12, 0.06599 ± 0.20 and 0.05307 ± 0.39 at 0, 24, 48, 72, 96 and 120 h, respectively. These values are reproduced as reported; in present studyshould be consulted for the original units.

3.3 Biochemical composition

DAP exposure produced a general decreasing trend in carbohydrates, proteins, total lipids and amino acids during prolonged exposure. The effect was documented in body muscles, heart muscles, hepatopancreas, gills and blood. For example, hepatopancreatic protein at 7 days was 10.12 ± 0.005 in controls compared with 6.36 ± 0.005 and 5.66 ± 0.02 in the two treatment groups. Body-muscle protein at 7 days was 8.05 ± 0.029 in controls compared with 3.12 ± 0.025 and 2.82 ± 0.02 in the treatment groups. In present study reports statistically significant differences for these comparisons.

3.4 Enzyme responses

ALP activity in body muscle increased with DAP exposure. In the reported table, values at 7 days were 0.90 ± 0.11 in controls, 1.26 ± 0.09 and 1.30 ± 0.11 in the two treatment groups, with the reported t-tests significant. In present studyalso reports increased ALP activity in hepatopancreas.

SDH activity decreased with exposure. In hepatopancreas, the 96-h values were 470 ± 22.55 in controls, 395 ± 17.22 and 380 ± 25.28 in the two treatment groups. In gills, corresponding 96-h values were 292 ± 25.84, 235 ± 22.45 and 222 ± 26.41. These reductions were reported as significant.

LDH activity in blood increased with DAP exposure. At 96 h, the reported values were 434 ± 28.18 in controls, 535 ± 32.84 and 571 ± 32.45 in the two treatment groups. In present studyreports significant differences for both treatment comparisons.

Amylase activity declined with exposure. In blood, 96-h values were 65 ± 3.48 in controls, 60 ± 2.97 and 57 ± 2.32 in the treatment groups; at 7 days the corresponding values were 66 ± 2.29, 59 ± 2.52 and 55 ± 2.21. Lipase activity in hepatopancreas also declined markedly; at 7 days values were 0.52 ± 0.04, 0.15 ± 0.01 and 0.12 ± 0.02 for control and the two treatments, respectively.

Table 1. Selected DAP-related enzyme responses reported in the in present study

Parameter	Tissue	Control	Treatment 1	Treatment 2
ALP, 7 days	Body muscle	0.90 ± 0.11	1.26 ± 0.09	1.30 ± 0.11
SDH, 96 h	Hepatopancreas	470 ± 22.55	395 ± 17.22	380 ± 25.28
SDH, 96 h	Gills	292 ± 25.84	235 ± 22.45	222 ± 26.41
LDH, 96 h	Blood	434 ± 28.18	535 ± 32.84	571 ± 32.45
Amylase, 7 days	Blood	66 ± 2.29	59 ± 2.52	55 ± 2.21
Lipase, 7 days	Hepatopancreas	0.52 ± 0.04	0.15 ± 0.01	0.12 ± 0.02

4. Discussion

The present DAP-focused analysis shows that fertilizer exposure affected several levels of physiological organization in B. guerini. In present studyinterpretation is consistent across the experimental sections: DAP produced an initial respiratory stress response followed by depressed oxygen consumption during prolonged exposure, while biochemical reserves and several enzyme activities were altered.

The reduction in protein, carbohydrate, lipid and amino-acid contents during prolonged exposure suggests a disturbance of normal metabolic balance. In present studyreports these changes across multiple tissues and blood, indicating that the response was not restricted to a single organ. Such tissue-wide biochemical alterations were considered evidence of stress and altered utilization of stored metabolites.

The enzyme data demonstrate that DAP did not produce a uniform directional response in every enzyme. ALP and ACP showed increases in several tissues, whereas SDH declined. The reduction in SDH, an enzyme associated with aerobic energy metabolism, occurred in hepatopancreas and gills. At the same time, LDH increased in blood, indicating a shift in the pattern of metabolic enzyme response under fertilizer stress. Amylase and lipase activities declined with longer exposure, further supporting disturbance of digestive and metabolic functions.

Recent literature further supports the environmental relevance of fertilizer-derived nutrient pollution. Agricultural nitrogen and phosphorus losses through runoff can impair freshwater ecosystems, contribute to eutrophication and threaten aquatic biodiversity. A 2023 review specifically identified acute ammonia-nitrogen toxicity as an emerging risk for aquatic decapod crustaceans, providing contemporary context for interpreting fertilizer-related physiological stress in crabs. Recent work on agricultural watersheds has also demonstrated storm-driven nitrogen transport from agricultural land into receiving waters, while studies of aquatic invertebrate communities show that nutrient levels and agricultural landscape management can influence invertebrate richness. These findings strengthen the ecological significance of the present DAP toxicity study, while the experimental results reported here remain based on the original in present study dataset.

5. Conclusion

DAP produced acute and sub-lethal toxic effects in the freshwater crab *Barytelphusa guerini*. The reported 96-h LC50 was 1.60% (16 g/L water). Exposure altered respiratory metabolism and produced prolonged declines in carbohydrates, proteins, lipids and amino acids in several tissues and blood. Enzyme responses included increased alkaline phosphatase and lactate dehydrogenase in

selected tissues, decreased succinate dehydrogenase, and reduced amylase and lipase activities with prolonged exposure. In present studyconcludes that DAP was more toxic than urea and that fertilizer exposure can alter biochemical architecture, enzyme activities and ionic regulation in B. guerini. Further work on neurosecretory cells and reproductive physiology was identified in in present studyas a future research direction.

References

1. Alabaster, J. S., Shurben, D. G. & Kowles, G. (1979). The effect of dissolved oxygen and salinity on the toxicity of ammonia to smolts of Salmon, Salmo salar L. Journal of Fish Biology, 15, 705–712.
2. Ambore, N. E. (1976). Studies on some aspects of physiology in freshwater crab, *Barytelphusa guerini* with special reference to sex and size. Ph.D. In present study, Marathwada University, Aurangabad.
3. APHA (1975). Standard Methods for the Examination of Water and Wastewater. 14th ed. American Public Health Association, New York.
4. Bhagyalakshmi, A. (1981). Physiological studies on the freshwater field crab Oziotelphusa (Paratelphusa) senex senex in relation to pesticide impact. Ph.D. In present study, S.V. University, Tirupati.
5. Bhattacharya, S. & Mukherjee, S. (1978). Toxic effect of Endrin on hepatopancreas of teleost fish, Clarias batrachus. Indian Journal of Experimental Biology, 13, 185–186.
6. Colowick & Kaplan (1969). Methods in Enzymology. Academic Press, New York, 2, 501–589.
7. Everse, T. & Kaplan, N. O. (1973). Lactate dehydrogenase: Structure and function. Advances in Enzymology, 27, 61–133.
8. Jadhav, S. M. & Sontakke, V. B. (1997). Studies of respiratory metabolism in the freshwater bivalve Corbicula striatella exposed to Carbaryl and Cypermethrin. Pollution Research, 16(4), 219–221.
9. Jones, J. R. E. (1947). The oxygen consumption of Gasterosteus aculeatus L. in toxic solutions. Journal of Experimental Biology, 23, 298–311.
10. Mali, R. P., Jagtap, A. R., Kothale, S. D. & Shaikh, Afsar (2009). Effect of zinc sulphate on oxygen consumption and heartbeat in the freshwater female crab, *Barytelphusa guerini*. Journal of Aquatic Biology, 24(1), 139–144.
11. Nachlas, M. M. et al. (1960). Method cited in in present studyfor determination of succinate dehydrogenase and lactate dehydrogenase activities.
12. Oser, B. L. (1965). Methodological source cited in in present studyfor biochemical and enzyme estimations.
13. Deshmukh, V. M. (2017). Toxic Effect of Fertilisers on the Physiology of Freshwater Crab *Barytelphusa guerini* from Nanded Region. Ph.D. In present study, Swami Ramanand Teerth Marathwada University, Nanded

Current literature additions:

1. Goyal, S. S., Dave, R., Kumar, R., et al. (2024). Indian interstate trade exacerbates nutrient pollution in food production hubs. Communications Earth & Environment, 5, 9. https://doi.org/10.1038/s43247-023-01178-6.
2. Kirk, M. A., et al. (2024). Crop cover and nutrient levels mediate the effects of land management type on aquatic invertebrate richness in prairie potholes. Scientific Reports, 14, 8390.
3. Lin, W., Luo, H., Wu, J., Hung, T.-C., Cao, B., Liu, X., Yang, J., & Yang, P. (2023). A review of the emerging risks of acute ammonia nitrogen toxicity to aquatic decapod crustaceans. Water, 15(1), 27. https://doi.org/10.3390/w15010027.
4. Wang, Y., Wang, F., Fang, Y., Fu, Y., & Chen, N. (2024). Storm-induced nitrogen transport via surface runoff, interflow and groundwater in a pomelo agricultural watershed, southeast China. Environmental Pollution, 346, 123629.

A Study of the Role and Limitations of the Public Sector

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Introduction,

In India, after independence, the public sector was given special importance to accelerate economic development. The implementation of a planned economy started through the Planning Commission from 1951 and under the leadership of Pandit Jawaharlal Nehru, the public sector was considered the main instrument of development. Since the capacity of the private sector was limited in basic and capital industries like steel, energy, transport, communication, defense, minerals, the government tried to strengthen the industrial base by establishing industries itself. The public sector was created with the aim of social justice, regional balance, employment generation and protecting national interest. Therefore, it can be said that the public sector is an industry owned and controlled by the government which prioritizes social welfare along with profit.

The need for the public sector arose mainly for the all-round development of the country. The public sector took the lead in such long-term and capital-intensive industries where the private sector was reluctant to invest. The main objectives of the public sector were to develop the weaker and backward areas, provide employment opportunities, provide essential goods and services at reasonable prices and reduce economic inequality. However, over time, many public enterprises became loss-making, their efficiency decreased, administrative inefficiency increased and a huge financial burden began to fall on the government exchequer. This raised questions about the functioning of the public sector.

Against this background, the need for a disinvestment or disinvestment policy arose. Disinvestment means the government reducing its stake in public enterprises, completely or partially. In India, this policy was first systematically addressed in the New Economic Policy of 1991, which was implemented by the P. V. Narasimha Rao government. The increasing fiscal deficit, losses in public enterprises, the need to increase efficiency and create competition through private sector participation were the main reasons behind the disinvestment policy. This policy provides funds to the government, improves the efficiency of public enterprises and helps in reducing the government's burden on the economy. Therefore, the public sector and disinvestment/disinvestment policy are an important and complementary component of the modern Indian economy.

❖ **Objectives Of the Study**

1) To Study the Concept & Definition of Public Sector.
2) To Study the Characteristics of Public Sector.
3) To Study the Role of the Public Sector in India.
4) To Study the Shortcomings / Limitations of Public Sector.

❖ **Definition of Public Sector :-**

1) According to Pandit Jawaharlal Nehru,

"Public sector is an economic system where important industries and means of production are owned by the government and are used for the industrial development of the country as well as for social justice and national interest."

2) According to economist Dr. V. K. R. V. Rao,

"Public sector is a sector in which the ownership, control and management of industries is with the government and whose objective is to achieve economic development, employment generation and social welfare rather than making profit."

3) According to the Indian economic perspective,

"Public sector is the industry and service sector established and controlled by the government, which works for economic stability, balanced development and public interest by making proper use of national resources."

❖ **Characteristics of Public Sector :-**

1) Public sector industries are owned and controlled by the government.
2) Social welfare and national interest are given priority over profit making.
3) Industries requiring large capital and long-term investment are established in the public sector.
4) The public sector performs the important function of employment generation and achieving regional balanced development.
5) The objective is to make essential goods and services available to the public at reasonable prices.

❖ **Role of the Public Sector in India**

The role of the public sector in India is clear to us on the basis of the following points.

1) Promoting industrialization:-

After independence, since the industrial base in India was weak, the public sector took on the responsibility of industrialization. Production capacity was increased by establishing large-scale industries. This led to the start of modern industries in the country. The public sector accelerated industrial development and created a favorable environment for the private sector.

2) Development of capital and basic industries:-

Capital and basic industries like steel, coal, energy, transport, telecommunications were established in the public sector. These industries require large capital and long-term investment. Since these industries are risky for the private sector, the government took the initiative. These industries made the development of the entire industrial structure possible.

3) Employment generation:-

The public sector created direct and indirect employment opportunities on a large scale. The development of industries, services and infrastructure provided employment to lakhs of people. The public sector played an important role in reducing unemployment. Employment generation became necessary to maintain social stability.

4) Reducing regional imbalance:-

The public sector tried to achieve regional development by establishing industries in backward and remote areas. Factories were set up in industrially neglected areas. Due to this, economic and social development of those areas was boosted. The public sector has a major role in reducing regional imbalance.

5) Achieving social welfare and public interest:-

The purpose of the public sector is not only to earn profit but also to achieve social welfare. Emphasis is placed on providing essential goods and services to the common people. Public interest is cultivated in areas like education, health, transport. Due to this, all sections of the society benefit.

6) Protection and control of national resources:-

Important national resources like minerals, energy resources, water resources were kept under the control of the public sector. This prevents misuse of resources. Proper planning of resources for the long-term interest of the country is possible. The public sector performs the function of protecting national wealth.

7) Helping in economic stability and planning:-

The public sector plays an important role in a planned economy. Public enterprises are used to implement the objectives of the five-year plans. During periods of economic fluctuations, the public sector provides stability to the economy. Thus, balanced economic development is achieved.

8) Providing essential goods and services at reasonable prices:-

Public sector enterprises provide essential goods and services at reasonable prices. Priority is given to the needs of consumers rather than making profits. The public sector helps in keeping inflation under control. Its main function is to provide relief to the common people.

9) Playing a complementary role to the private sector:-

The public sector plays a complementary role to the private sector without competing with it. Private investment is promoted by creating infrastructure. Private industries are helped by providing necessary raw materials and services. Thus, balanced development of both the sectors is achieved.

10)Development of National Defence and Strategic Industries:-

Strategic industries like defence, nuclear energy, space research have been developed in the public sector. These industries are very important for national security. The role of the public sector is crucial in reducing foreign dependence. The public sector helps in protecting the sovereignty of the country.

The public sector has played a very important and decisive role in the economic and social development of India. The contribution of the public sector has been significant in all the areas of industrialization, employment generation, regional balance and social welfare. Although many challenges are facing the public sector in the changing economic situation, its basic need still remains. Efforts are being made to make the public sector more efficient and competitive through disinvestment and reform policies. Therefore, only by coordinating the public sector and the private sector can India achieve balanced and sustainable economic development.

❖ **Shortcomings / Limitations of Public Sector :-**

1) Inefficient Management :-

Many public sector enterprises lack professional management. Appointments are often based on seniority or other factors rather than skills. Due to this, discipline and efficiency in work are reduced. As a result, production costs increase and profits decrease.

2) Political interference :-

Political interference is widely seen in the decision-making process of public enterprises. Even economically unsound decisions have to be taken due to political pressure. This affects the efficiency of the enterprises. Short-term interests are given priority over long-term development.

3) Increasing number of loss-making enterprises :-

Many public enterprises continue to run in losses. Inefficiency, rising costs and low productivity are the main reasons behind this. Loss-making enterprises put a heavy burden on the government exchequer. Due to this, funds are less available for developmental expenditure.

4) Excess staff and low productivity :-

In the public sector, more employees are often appointed than required. Due to improper division of work, productivity remains low. Employee efficiency is neglected. As a result, output per employee decreases.

5) Delay in decision-making process:-

The decision-making process in the public sector requires approval at many levels. This causes a huge delay in decision-making. It is not possible to respond to changing market conditions in time. This reduces competitive ability.

6) Technological backwardness:-

Many public enterprises lack modern technology. There is a delay in adopting new technology. Due to this, the quality and efficiency of the product remains low. Public enterprises lag behind the private sector.

7) Increasing financial burden:-

The government has to provide continuous financial assistance to save loss-making public enterprises. This increases government expenditure. The public sector is responsible for increasing the fiscal deficit. There is an additional burden on taxpayers' money.

8) Lack of competition:-

Public sector enterprises often operate in a monopoly manner. Due to lack of competition, there is little incentive to improve efficiency. The quality of service and product is neglected. Customer needs are not adequately taken into account.

9) Lack of customer orientation:-

Public sector enterprises give more importance to rules and procedures than customer satisfaction. There is delay and dissatisfaction in service delivery. Complaints are not redressed effectively. This reduces customer trust.

10) Corruption and wastage:-

Lack of transparency in the public sector increases the chances of corruption. There is a large amount of wastage of resources. Expenditure is not properly controlled. This negatively affects the efficiency of industries.

Although the public sector has made a valuable contribution to India's development, many limitations in its functioning are clearly visible. Inefficient management, political interference, losses and financial burdens have reduced the efficiency of the public sector. Reforms are necessary to maintain competitiveness in the changing economic environment. This requires professional management, transparency and technological modernization. The public sector can be made more efficient and effective through disinvestment and structural reforms.

Conclusion,

It is clear from the presented study that the public sector has played a very valuable and historic role in laying the industrial foundation, social justice and inclusive development of India in the post-independence period. The contribution of the public sector on all fronts including building infrastructure industries, creating employment, eliminating regional imbalances and preserving national security has been unparalleled. However, with the changing times, political interference, inefficient management, bureaucratic delays and increasing financial losses have clearly exposed the limitations and shortcomings of this sector, which has put a huge strain on the government exchequer.

In today's competitive and globalized era, the implementation of the Liberalization and Disinvestment Policy of 1991 has become very necessary to maintain the existence of the public sector. Commercial modernization of public sector enterprises, bringing transparency and, if necessary, proper coordination with the private sector have become the need of the hour. In short, removing limitations in the public sector, increasing its efficiency, and balancing the use of the private and public sectors is the true path to sustainable and dynamic economic development in modern India.

References :-

1) Jalan, B. The Indian Economy: Problems and Prospects. Penguin Books India, New Delhi.
2) Kapila, U. Indian Economy: Performance and Policies, Academic Foundation, New Delhi.
3) Ahluwalia, I. J. Industrial Growth in India: Stagnation Since the Mid-Sixties. Oxford University Press, New Delhi.
4) Chatterjee, A. Industrial Policy and Economic Development in India. New Century Publications, New Delhi.
5) Dhar, P. N. The Evolution of Economic Policy in India: Selected Essays. Oxford University Press, New Delhi.
6) Dr. Sudhakar Joshi – Indian Economy, Phadke Publications, Kolhapur.
7) Dr. A. N. Sardesai and Dr. C. G. Vaidya – Business Economics and Public Finance, Vidya Publications, Nagpur.
8) Dr. Vijay Kumbhar – Indian Economy: Problems and Development, Nirali Publications, Pune.
9) Prof. V. B. Jagtap and Dr. B. D. Kumbhar – Public Economics, Phadke Publications, Kolhapur.
10) Dr. B. R. Kshirsagar – Industrial Economics, Vidya Publications, Nagpur.

Sublethal Effects of Diammonium Phosphate and Urea on Metabolic and Digestive Enzyme Activities in the Freshwater Crab "*Barytelphusa Guerini*" From Nanded Region

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Abstract

The present study evaluated the effects of sublethal concentrations of diammonium phosphate (DAP) and urea on selected enzyme activities in the freshwater crab, **Barytelphusa guerini**. Crabs of 50–60 g body weight were acclimatised for three to four days and exposed to two concentrations of each fertiliser for 24, 48, 96 h and 7 days, with a control group. Alkaline phosphatase (ALP), acid phosphatase (ACP), succinate dehydrogenase (SDH), lactate dehydrogenase (LDH), amylase and lipase were assayed in the tissues and blood specified in the thesis. The verified 7-day observations show tissue-specific responses. DAP increased ALP in body muscle and hepatopancreas but decreased ALP in gills and blood. ACP increased in the examined tissues. SDH decreased markedly whereas LDH increased under DAP. Amylase and lipase declined. Urea produced a similar decrease in SDH and increase in LDH, while ALP and digestive-enzyme responses varied by tissue. These results indicate that fertiliser exposure is associated with marked biochemical changes in **B. guerini**.

Keywords: *Barytelphusa guerini*; diammonium phosphate; urea; alkaline phosphatase; acid phosphatase; succinate dehydrogenase; lactate dehydrogenase; amylase; lipase; fertiliser toxicity

1. Introduction

The present study notes that agricultural fertilisers can enter rivers through rainwater runoff and that information on their effects on aquatic animals is limited compared with pesticide and heavy-metal toxicity. The study therefore used the freshwater crab **Barytelphusa guerini** to examine biochemical responses to DAP and urea. Enzyme-level changes were selected as indicators of toxic stress.

The enzyme chapter explains the importance of alkaline phosphatase in phosphate transport and metabolite hydrolysis and considers changes in enzyme activity as a useful measure of toxicant effects. The present paper consolidates the enzyme experiments reported in Chapter V of the thesis.

2. Materials and Methods

Crabs weighing 50–60 g were acclimatised for three to four days in plastic tubs containing tap water. Animals were divided into groups of ten. Two sublethal concentrations of DAP (16 mg/L and 10.7 mg/L) and urea (20 mg/L and 13.4 mg/L) were used. Exposure periods were 24, 48, 96 h and 7 days, with a control group. Blood was collected using a sodium-oxalate-rinsed syringe and body muscle, heart muscle, hepatopancreas and gills were isolated.

ALP and ACP were estimated by the Bodansky method as reported through Oser (1965). SDH and LDH were determined by Nachlas et al. (1960). Amylase was estimated by the Sterkel and Kirsner method and lipase by the Cherry and Crandall method.

3. Results

The original Chapter V contains 39 numbered enzyme tables (Tables 5.1–5.39). For transparent verification, the tables below reproduce the 7-day mean ± SD values exactly as they appear in the supplied thesis. The concentration columns are retained in the thesis order rather than being relabelled as 'low' or 'high'.

Table 1. DAP: 7-day alkaline phosphatase (ALP)

Parameter / tissue	Control	16 mg/L	10.7 mg/L
Body muscle (Table 5.1)	0.9	1.26	1.3
Hepatopancreas (Table 5.2)	1.4	2.05	2.15
Gills (Table 5.3)	0.79	0.6	0.54

Blood (Table 5.4)	1.82	1.57	1.49

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 2. DAP: 7-day acid phosphatase (ACP)

Parameter / tissue	Control	16 mg/L	10.7 mg/L
Body muscle (Table 5.5)	0.71	1.1	1.1
Gills (Table 5.6)	1.03	2.06	1.81
Blood (Table 5.7)	1.05	1.62	1.71

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 3. DAP: 7-day succinate dehydrogenase (SDH)

Parameter / tissue	Control	16 mg/L	10.7 mg/L
Body muscle (Table 5.8)	341	261	250
Hepatopancreas (Table 5.9)	468	381	370.5
Gills (Table 5.10)	291	231	212
Blood (Table 5.11)	553	460	449

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 4. DAP: 7-day lactate dehydrogenase (LDH)

Parameter / tissue	Control	16 mg/L	10.7 mg/L
Body muscle (Table 5.12)	462	630	645
Hepatopancreas (Table 5.13)	454	621	642
Gills (Table 5.14)	442	610	640
Blood (Table 5.15)	430	570	598

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 5. DAP: 7-day digestive enzymes

Parameter / tissue	Control	16 mg/L	10.7 mg/L
Amylase – hepatopancreas (Table 5.16)	47	38	36
Amylase – blood (Table 5.17)	66	59	55
Lipase – hepatopancreas (Table 5.18)	0.52	0.15	0.12
Lipase – blood (Table 5.19)	1.04	0.83	0.81

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 6. Urea: 7-day alkaline phosphatase (ALP)

Parameter / tissue	Control	20 mg/L	13.4 mg/L
Body muscle (Table 5.20)	1.67	1.46	1.38
Hepatopancreas (Table 5.21)	3.54	3.82	3.21
Gills (Table 5.22)	2.76	2.45	2.34
Blood (Table 5.23)	3.18	3.57	3.41

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 7. Urea: 7-day acid phosphatase (ACP)

Parameter / tissue	Control	20 mg/L	13.4 mg/L
Body muscle (Table 5.24)	1.78	2.09	2.16
Hepatopancreas (Table 5.25)	2.05	2.32	2.43
Gills (Table 5.26)	2.6	3.12	3.44
Blood (Table 5.27)	2.21	2.75	2.95

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 8. Urea: 7-day succinate dehydrogenase (SDH)

Parameter / tissue	Control	20 mg/L	13.4 mg/L
Body muscle (Table 5.28)	341	301	291

Hepatopancreas (Table 5.29)	472	429	418
Gills (Table 5.30)	292	245	232
Blood – source Table 5.31 (title says gills)	554	491	481

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 9. Urea: 7-day lactate dehydrogenase (LDH)

Parameter / tissue	Control	20 mg/L	13.4 mg/L
Body muscle – source Table 5.32 (title is inconsistent)	480	540	580
Hepatopancreas (Table 5.33)	480	555	615
Gills (Table 5.34)	465	555	595
Blood (Table 5.35)	415	520	590

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

Table 10. Urea: 7-day digestive enzymes

Parameter / tissue	*Control*	*20 mg/L*	*13.4 mg/L*
Amylase – hepatopancreas (Table 5.36)	49	42	41
Amylase – blood (Table 5.37)	67	60	57
Lipase – hepatopancreas (Table 5.38)	0.52	0.28	0.25
Lipase – blood (Table 5.39)	2.05	1.89	1.78

7-day values; mean ± SD. Numerical values are reproduced from the corresponding thesis table.

4. Summary of enzyme responses

DAP produced an increase in ALP in body muscle and hepatopancreas and a decrease in gills and blood at 7 days. ACP increased in body muscle, gills and blood. SDH declined in all four reported samples, while LDH increased in body muscle, hepatopancreas, gills and blood. Amylase and lipase declined in hepatopancreas and blood.

Under urea exposure, ALP decreased in body muscle and gills, while the hepatopancreas and blood showed tissue-specific responses. ACP increased in all four reported samples. SDH declined in body muscle, hepatopancreas, gills and the sample reported in Table 5.31. LDH increased in the body-muscle sequence represented by Table 5.32, hepatopancreas, gills and blood. Amylase and lipase decreased in hepatopancreas and blood.

5. Discussion

The present study interprets changes in phosphatase activity in relation to fertiliser stress and altered tissue conditions. It notes that DAP exposure produced mucus around the body and gills, which was considered capable of restricting oxygen uptake and contributing to hypoxia, tissue acidosis and changes in buffering conditions. The present study associates these changes with the observed phosphatase responses.

The most consistent metabolic response is the reciprocal pattern of reduced SDH and increased LDH. The present study interprets this as suppression of oxidative metabolism with stimulation of anaerobic glycolysis, reflecting metabolic reorganisation under fertiliser stress.

The decrease in amylase and lipase indicates alteration of digestive enzyme activity during prolonged exposure. The present study discusses enzyme-level changes as biochemical indicators of toxicant effects and compares the observations with earlier studies on pesticide and metal stress.

6. Conclusion

Sublethal exposure to DAP and urea altered several enzyme systems of **Barytelphusa guerini**. The consistent reduction in SDH together with increased LDH indicates a marked change in energy metabolism, while the changes in ALP and ACP demonstrate tissue-specific phosphatase responses. Decreases in amylase and lipase indicate altered digestive enzyme activity. The enzyme profile therefore provides a useful biochemical indication of fertiliser-associated stress in the freshwater crab.

7. References

1. Abdul Naveed, Janaiah, C. and P. Venkateshwarlu (2005). Triazophos exposures alters serum biochemical parameters in Channa punctatus. J. Comp. Toxicol. Physiol. 2(I and II): 74–80.
2. Anuradha, C.H. and Raju, T.N. (1996). Effect of selenium toxicity on dehydrogenases in the fish, Anabas scadens. J. Ecotoxicol. Environ. Monit. 1(2): 14–151.
3. Borah, N. and Yadav, K. (1996). Effect of Rogor on the activity of alkaline phosphatase in Heteropneustes fossilis. Poll. Res. 5(3): 112–115.
4. Dalela, R.C., Rani, S. and Varma, S.R. (1980). Physiological stress induced by sublethal concentration of phenol and pentachlorophenol in Notopterus: hepatic acid/alkaline phosphatases and succinate dehydrogenase. J. Environ. Poll. 11: 112–113.
5. Everse, T. and Kaplan, N.O. (1973). Lactate dehydrogenase: structure and function. In: Advances in Enzymology, 27: 61–133.
6. Ganesh, R., Janaiah, C. and Shobha Rani, V.J. (2006). Kinetic study of acetylcholinesterase and dehydrogenase enzymes in Clarias batrachus on exposure to organophosphorus pesticide. J. Aqua. Biol. 21(2): 200–205.
7. Ghosh, T.K. (1987). Toxic impact of three organophosphate pesticides on carbohydrate metabolism in Clarias batrachus. Proc. Indian Natl. Sci. Acad. 53: 135–142.
8. Nachlas, M.M., Margulies, S.I. and Seligman, A.M. (1960). Colorimetric determination of succinate dehydrogenase activity. Method cited in the thesis.
9. Oser, B.L. (1965). Hawks Physiological Chemistry. Method source cited in the thesis.
10. Rana, R.A., Yegari, S.G. and Koli, V.A. (2002). Effect of pesticides on alkaline phosphatase activity in mudskipper, Boliophthalmus dussumier. J. Aqua. Biol. 17(1): 59–60.
11. Shobha Rani, A., Sudharsan, Reddy, T.N., Reddy, P.U.M. and Raju, T.N. (2000). Alteration in levels of dehydrogenases in Tilapia mossambica exposed to arsenite toxicity. Indian J. Environ. Health 42(3): 130–133.
12. Srinivasa Reddy, A., Venkat Reddy, M. and Radhakrishnaiah, K. (2006). Impact of lead on energetics of common carp Cyprinus carpio. J. Aqua. Biol. 21(2): 234–238.
13. Tilak, K., Veeraiah and Koteshwarao (2005). Biochemical changes induced by chlorpyrifos and organophosphate compounds in freshwater fishes. Journal of Environmental Biology 26(2): 341–347.
14. Vasanthi, M. and Ramaswamy, M. (1987). A shift in metabolic pathway of Sarotherodon mossambicus exposed to thiodon (endosulfan). Proc. Indian Acad. Sci. (Animal Sci.) 96(1): 55–62.
15. Verma, S.R. and Ramesh Chand, S. (1986). Toxicity effects of HgCl2 on enzymes of carbohydrate metabolism of Notopterus notopterus. Indian J. Environ. Health 28(1): 1–7.

Primary source

1. Deshmukh, V. M. Ph.D. Thesis in Zoology, June 2017, Chapter V: "Changes in Activity Level of Some Enzymes".

Recent Literature Update (2021–2026)

1. Recent literature provides contemporary context for the biochemical responses observed in the present study. Wang et al. (2021) reported that ammonia exposure in juvenile Eriocheir sinensis altered metabolic regulation, induced oxidative stress and caused protein damage. In Litopenaeus vannamei, acute ammonia stress was associated with metabolic disorders, enhanced glycolysis and altered nutrient-sensing pathways (2023). These findings provide independent contemporary support for interpreting the present SDH–LDH response as part of a broader metabolic stress response.
2. A 2026 review emphasizes that ammonia toxicity in aquatic organisms is species-specific and influenced by environmental variables including pH, temperature and salinity. Recent work in Macrobrachium rosenbergii also reports disruption of oxidative stress, nitrogen metabolism and immune pathways under ammonia exposure (2026). These studies support the use of enzyme and metabolic biomarkers for detecting sublethal aquatic contaminant stress.

Recent / Current References

1. Liaqat, N., Li, X., Yang, H., Aboleila, S.M., Shahzadi, K., Khan, N., Hassona, N.N. and Dai, X. (2026). Integrated multi-omics and biochemical insights into ammonia-induced oxidative stress, metabolic disruption, and apoptosis in Macrobrachium rosenbergii gills. Fish & Shellfish Immunology, 172, 111202. https://doi.org/10.1016/j.fsi.2026.111202.
2. Yun, S.C., Jeong, H., Lee, J.S., Kim, J.H., Kim, I.C., Maszczyk, P., Yang, Z., Hagiwara, A. and Lee, J.S. (2026). A review of ammonia toxicity on aquatic organisms: Species-specific responses, microbial

shifts, and environmental interactions. Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology, 300, 110388. https://doi.org/10.1016/j.cbpc.2025.110388.

3. Wang, T., Yang, C., Zhang, S., Rong, L., Yang, X., Wu, Z. and Sun, W. (2021). Metabolic changes and stress damage induced by ammonia exposure in juvenile Eriocheir sinensis. Ecotoxicology and Environmental Safety, 223, 112608. https://doi.org/10.1016/j.ecoenv.2021.112608.
4. Nutrient sensing signaling and metabolic responses in shrimp Litopenaeus vannamei under acute ammonia stress. (2023). Ecotoxicology and Environmental Safety, 253, 114672. https://doi.org/10.1016/j.ecoenv.2023.114672.
5. Deshmukh, V.M. and Jagtap, A.R. (2025). A Comparative Account on Respiratory Metabolism under exposure to Urea and DAP (Diammonium Phosphate) on Freshwater Crab, *Barytelphusa guerini*. Journal of Research & Development, 17(3III), 59–62. DOI: 10.5281/zenodo.15273196.

Note: These recent references were added as external literature to update the discussion. They do not replace the thesis-derived experimental data or the original references. The 2025 Deshmukh and Jagtap paper is included as a related publication from the same research programme and should be retained only if the target journal permits such self-citation and the overlap is transparently described.

Ayurvedic Management of Shushka Akshipak W.R.T. Dry Eye:A Literature Study

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Abstract

Dry Eye Syndrome is a common ocular condition characterized by inadequate tear production or excessive tear evaporation, leading to dryness, burning, irritation and foreign body sensation.Treatment includes artificial tears, lubricating eye drops, adequate hydration, avoidance of prolonged screen exposure and management of underlying causes. In Ayurveda, treatment is aimed at balancing the involved *Doshas* and improving ocular lubrication through suitable *Netra Kriyakalpa* and internal medicines.

Introduction

Dry eye syndrome is a multifactorial disease of the ocular surface characterized by loss of homeostasis of the tear film and accompanied by ocular symptoms resulting in discomfort, visual disturbance, and tear-film instability, with potential ocular-surface damage.[1] Dry eye can occur because of inadequate tear production, excessive tear evaporation, or a combination of both.[2] This is among the commonest ocular disorder,especially in postmenopausal women & elderly.[3]

The patient was apparently healthy several years before presentation and gradually developed dryness and grittiness in both eyes. Symptoms initially were mild but progressively increased. The reported symptoms included burning, irritation, foreign-body sensation, occasional redness, heaviness and intermittent blurring of vision. Symptoms were reported to worsen after prolonged reading, mobile/computer use, and exposure to dust or wind, and to improve after closing the eyes or resting.

There was no reported history of significant ocular trauma, ocular surgery, discharge, or severe eye pain.

Clinical Features

- Dryness and gritty/sandy or foreign-body sensation in both eyes.
- Burning and irritation.
- Heaviness and eye strain.
- Occasional redness.
- Reflex watering / intermittent excessive tearing.
- Intermittent blurring or changed vision.
- Worsening with prolonged screen exposure, reading, dust and wind.
- Improvement with eye closure and rest.

Ayurvedic Interpretation (Samprapti)

The supplied case material interprets the condition through a *doshic* framework. The onset was described with a *Pitta rakta*-dominant disturbance, followed by impairment of *Dhatwagni* and tissue nourishment.[4] Subsequently, *Vata* became dominant while *Kapha* was considered depleted, contributing to ocular dryness (*Rookshata*) and the clinical picture correlated with *Shushkakshipaka*.

Proposed Ayurvedic sequence:

1. *Pitta* rakta aggravation

2. Disturbance of *Dhatwagni*/tissue metabolism
3 . *Vata* predominance with *Kapha* depletion
4. Increased *Rookshata Shushkakshipaka*-type ocular symptoms.

Contributing Factors Discussed

- Prolonged mobile/computer and reading exposure.
- Reduced blinking during screen use, increasing tear evaporation.
- Exposure to dust and wind.
- Irregular meal timing.
- *Katu-rasa-pradhana* foods mentioned in the case material, including pickles, snacks and potatoes.
- *Nishajagarana* (awakening during night hours).
- Occupational requirement for continued screen use.

Treatment

The material describes a *Vata-Pitta*-hara and predominantly local/supportive Ayurvedic approach.

Therapy / modality	Details given in supplied material
Snehana / oral therapy	Ghee-based preparations are referenced, including preparations described in *Ashtanga Sangraha*.
Basti	Milk-based *basti* is referenced in the supplied *Ashtanga Sangraha* material.
Nasya	*Anutaila*

Therapy / modality	Details given in supplied material
Nasya formulation	A formulation including *Sariva*, *Vidarikand*, *Balamul*, *Yashtimadhu*, *Kamal*, *Manuka*, *Adulsa*, *raktachandan*.
Local ocular therapy	*Ashchotana* and *Anjana* with *Morchud* and *Daruharidra*
Lacrimation management	Honey mixed with decoctions/powders including *Manuka*, *raktachandan*, *Karanj* seeds and rice-water.
Pain-relieving topical preparation	A decoction of *Lodhra* flowers and *Koranti* flowers is referenced.

Conventional Management Context

According to modern science artificial tears as a mainstay of dry-eye management, with tear substitutes available as drops, ointments and slow-release inserts.[5] It also mentions topical cyclosporine and mucolytics such as acetylcysteine as treatment options with variable results.Any accompanying inflammation may be treated with mild steroids or cyclosporine 0.05% drops.[6]

Discussion

The case material emphasizes prolonged screen exposure as an important aggravating factor. Reduced blinking during screen use may increase tear evaporation and contribute to ocular-surface symptoms. From the Ayurvedic perspective presented in the case, reduced blinking and dryness are interpreted as contributing to *Vata* vitiation and *Rookshata*.[7] Because the patient's occupation required continued screen use, the symptoms were described as becoming more pronounced, particularly heaviness and eye strain.

The case also connects irregular dietary habits, *Katu-rasa-pradhana* foods and *Nishajagarana* with *Vata* aggravation. The overall treatment philosophy was therefore described as systemic and local management, including *Vata-Pittahara* oral measures, local ocular procedures and *nasya* (*Snehana*).

Conclusion

According to the supplied case report, a holistic approach to *Shushkakshipaka* was considered beneficial when systemic and local measures were combined. The conclusion

emphasizes that chronic ocular-surface symptoms may involve more than a single local factor and that management should address contributing systemic, behavioral and environmental factors along with appropriate local therapy.

References

1. Dr.Ramanjit Sihota,Dr.Radhika Tandon;Parsons' Diseases of the Eye Reprint edition 2016 chapter-14,Elserier-a division of Reed Elserier India Private Limited;Pg-188.
2. Dr.Ramanjit Sihota,Dr.Radhika Tandon;Parsons' Diseases of the Eye Reprint edition 2016 chapter-14,Elserier-a division of Reed Elserier India Private Limited;Pg-188.
3. Dr.Ramanjit Sihota,Dr.Radhika Tandon;Parsons' Diseases of the Eye Reprint edition 2016 chapter-14,Elserier-a division of Reed Elserier India Private Limited;Pg-188.
4. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chapter-6 verses 26,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-39.
5. Dr.Ramanjit Sihota,Dr.Radhika Tandon;Parsons' Diseases of the Eye Reprint edition 2016 chapter-29,Elserier-a division of Reed Elserier India Private Limited;Pg-474.
6. Dr.Ramanjit Sihota,Dr.Radhika Tandon;Parsons' Diseases of the Eye Reprint edition 2016 chapter-14,Elserier-a division of Reed Elserier India Private Limited;Pg-189.
7. Ambikadatta Shastri Sushrut Samhita uttartantra Reprint Edition,2012 Chapter-6 verses 26,Varanasi Chaukhamba Sanskrit Sansthan 2012;Pg-39.

Ipo's in India and Their Progression Through the Decades

Shreya Harwande

Abstract

One can choose to earn money from any source nowadays. However, IPO's seem to be the source that is gaining traction day by day. The US markets have seen a great boom in the IPO's in the fintech industry, similar to the Indian Primary Markets over the last decade.

However, this research majorly focuses on the development of the Indian Primary Markets. It includes the evolution of the IPO over a period of time majorly focusing on the stretch including- The history, the current scenario and future trajectory.

The Indian stock market is one of the oldest stock markets in Asia. The numbers of IPO has increased exceptionally from the couple of previous years. There are numerous reasons for this increase in the number. Research has shown that almost everyday or every week, a new IPO is brought into the markets.

In order to understand the evolution and explore the future predictions of the IPO, simply secondary data has been used. Various research papers, news articles and podcast has been referred to, in order to understand and evaluate the conditions regarding IPO's in Indian Primary Markets.

This research also focuses on the type of primary issue that is being brought into the markets, and its impact on the companies along with the investors.

The real question remains that the increasing IPO's in Indian Primary Markets would result into creation of a bubble or does it genuinely indicate growth of the organization.

KeyWords- IPO, Indian Primary Markets, Evolution, Future predictions

Introduction

Capital markets consists of Primary markets and Secondary markets. In primary markets fresh capital is brought through IPO whereas the secondary markets is a part of the growth of the primary markets.

This section majorly focuses on the history of the IPO's. First let us understand what an IPO is? IPO- Initial Public Offering refers to the process wherein a private company converts into public company in order to raise funds for growth and expansion.

A group of brokers started trading under a banyan tree near the 1850's in front of Town Hall in Bombay. The formalization of this system resulted in the formation of **Native Share and Stock Broker's Association**, later coming to be known as **BSE (Bombay Stock Exchange).** It is the oldest stock exchange in Asia formed by a group of 22 brokers.

The first modern IPO was brought in 1602 when the Dutch East India Company offered shares to the public to raise capital. However in India, the first Indian Company to go public was the Reliance Industries in 1977, before SEBI (Securities and Exchange Board of India) was established.

During the initial decades of the stock markets, the IPO activity has been modest, the regulatory framework was underdeveloped and lacked sophistication. Back then there was no official regulatory body to govern the stock markets. However, in 1988 SEBI marked a pivotal moment.

Before the establishment of SEBI, there was no formalized regulatory body to analyse and take actions against any irregular market activities, thus reducing the involvement of retail investors in the markets. However, after SEBI came into picture, there also followed economic liberalization and various financial reforms. The regulatory framework strengthened and thus attracted a larger crowd of retail investors. Establishment of SEBI brought in some much needed changes like transparency, digitalization and investor protection. It was a turning point for the IPO's, more companies started going public to raise more funds for expansion. Some prominent IPO's during this period includes the Reliance Industries, Infosys as well as HDFC.

During the period of late 1990's to 2000's more of technology related IPO's could be seen in

the markets. Companies such as Wipro and Satyam went public during this period. It resulted into creation of the DOT COM BUBBLE. As the dot com bubble burst, retail as well as institutional investors suffered huge losses. The Dot Com Bubble negatively impacted the market sentiment reducing the volume of investment. As the volume decreases and the investors turn negative, the companies do not prefer to publish the IPO's.

From the period of 2010 to 2020, more of IPO's could be seen from the finance, healthcare, consumer goods and infrastructure segment indicating economic growth of the country. During this period it is seen that some of the IPO showed exceptionally well listing gains for some particular years, however that is not the same for some other years.

The following diagrams would show to what extent the IPO's were oversubscribed during the period of 2010 to 2020 and what were the listing gains during those times.

Listing gain- Listing gain refers to the difference between the IPO price and the opening market price of that share.

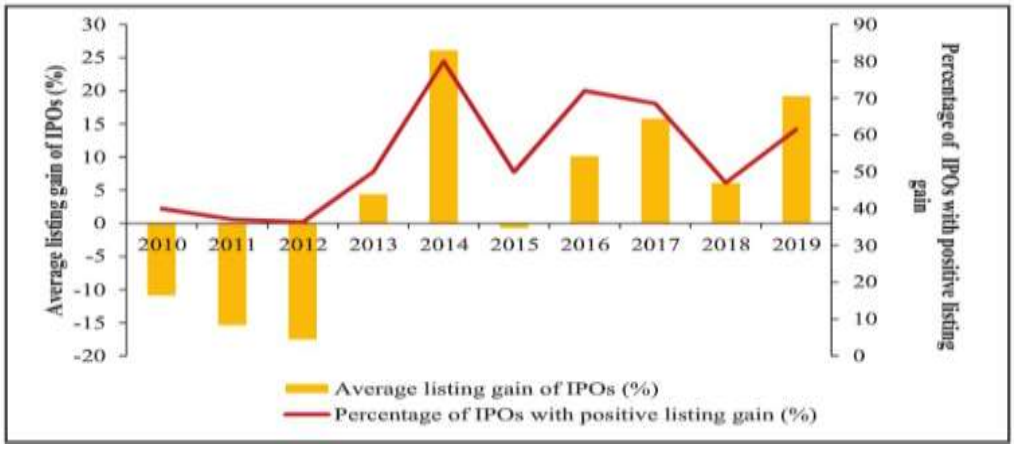


FIGURE:1 LISTING GAINS OF INDIAN IPO'S LISTED ON BSE AND NSE

Source: India budget, Economic Survey, e-book

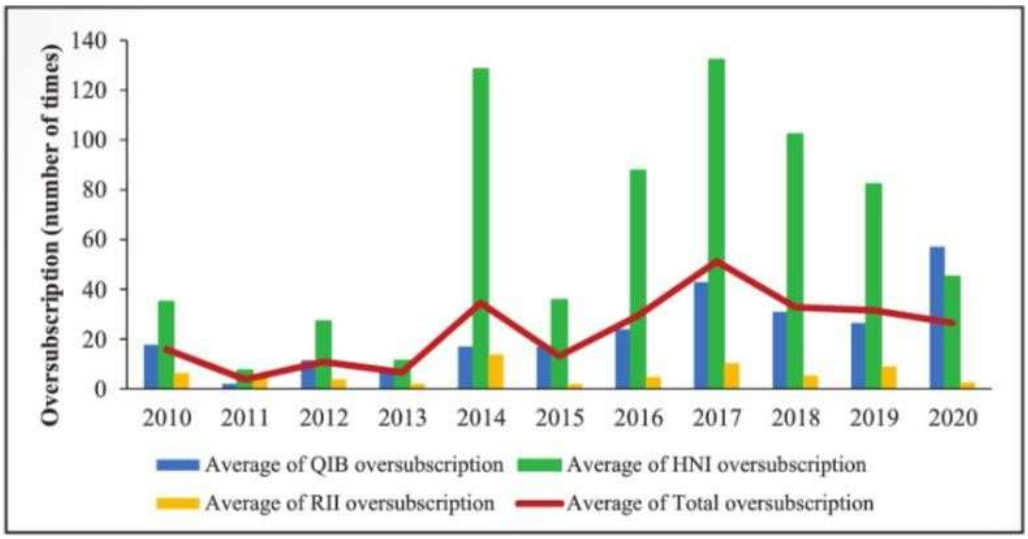


Figure 2: Oversubscription of Indian Ipo's Listed on Nse and Bse (2010-20)

Source: India budget, Economic Survey, e-book

Figure 1 shows the listing gains of the IPO listed on BSE and NSE wherein it is seen that for the last 6 or 7 years of the decade there were better listing gains contrasted to the initial couple of years wherein the listing gains were in negatives.

Figure 2 shows how much the IPO listed on NSE and BSE has been oversubscribed and by which class of investor during the period of 2010 to 2020. In the last 5 years the average total subscription has been 20 to 40 times as compared to the lower one of the previous years.

Since the 2020's , more IPO's can be seen in the tech driven ,startup, fintech, e-commerce and new age technology, indicating the country's technological development.

Basically, today IPO's prove to be one of the source of funds for investors if they are lucky enough to be allotted the IPO. Also there have been various reforms and these reforms in the primary markets are affecting the investors and well as the companies positively. The establishment of SEBI and further strengthening the rules of the capital markets have made investors more confident about the markets.

Literature Review

Literature review refers to a comprehensive review and analysis of the various literatures that have been published. It can include various forms of literature like news articles, journal articles, research papers, books, magazines and blog articles as well. It proves to be one of the important parts of the research as it provides some idea to the readers on the main or topic of the research. In this section we will mainly focus on what the people, regulators or the financial ministers say about the growing IPO's in India and their effect on the economy as well as its meaning.

Kiran, N. S., Babu, V., & Manisha, R. (2025)

In their research paper have focused on the problem where the IPO's underperform even after all the fundamentals and necessary financials have been disclosed due to inaccurate pricing. In this research paper they have focused on the use of machine learning (ML) and deep learning (DL) techniques in order to predict the IPO outcomes, reduce pricing errors and improve decision making for the companies as well as investors. A pattern was observed in the IPO' s that were listed during the period of 2017 to 2023. Mostly the tech and fintech sector showed higher listing gains as compared to the traditional sectors like the infrastructure or real estate. It has also been noticed that during their research period the machine learning models gave the accuracy of upto 85%. A sentiment analysis was also done showing that social media platforms like twitter had great impact on the short term listing performance. They have also included the performance of the IPO's like the LIC, Zomato, Nykaa etc. to analyse listing gains based on the pre listing market sentiment.

Finally coming to the conclusion the paper revealed that a hybrid model would be much more effective and accurate, that would combine the financial metrics with the sentiment analytics using ML and DL.

Prajapati, M., & Patawari, M. (2026)

In their research paper- Capital Markets and the regulatory tussle between SEBI and SAT have highlighted how the regulatory background of the financial markets kept changing contradicted to the above mentioned research paper that focused more on the developing sectors of the IPO and not the developments in the regulatory structure. The research paper enlightens us on the fact that there has been a couple of regulatory bodies prior to SEBI (Securities and Exchange Board of India). It includes Bombay Securities Contracts Control Act, 1925 (" BSCC Act") which was brought into existence to protect the hard earned money of the investors, though the act failed miserably. Further as the government realised that the financial markets in India require regulation, the Indian Parliament enacted the Securities Contract Regulation Act, 1956, with the objective of solving 3 major issues in the then capital markets- insider trading, protecting investors, to regulate transactions. Further post liberalization, SEBI was given the responsibility to regulate the markets in 1992. Later this research paper also decodes various scams since a couple of decades. It includes Shruti Vohra Whatsapp Leak Case, the NSE co-location scam, scam by MR. Manoj Gokulchand Seksaria and the Karvy Stock Broking Limited Scam.

This research also explores various regulatory powers with SEBI, Government and the amendments made in the regulations according to the changing dynamics of the markets.

(ET Now, 2025)

This video first starts off with the fact that more than 100 mainboard IPO's have come into the primary market in the year 2025. It also mentions "the country has also seen its largest IPO this year". India's primary market has mobilised around Rs. 5.4 lakh crore over the period of 2020 to 2025. TATA

Capital raised arounf 15500+ crore this year through IPO though its listing was muted around 1%

Not only this but HDB Financials listed at around 13% premium which is among the best listing premiums of 2025. Extreme retail interest could be seen in the IPO's of the companies like Lenskart, Groww, Physicswallah. The video also reveals some f the most notable IPO's of 2025, first on the list being the TATA Capital, followed by Groww, Pine labs, Lenskart and HDB Financials. The reporter has also mentioned that the IPO's in 2026 would be even bigger and better initiating to expect from companies like Reliance, SBI MF, Flipkart an even NSE.

(The Hindu Originals, 2025)

This video majorly focuses on different aspects that the retail investors should be aware of in the Primary as well as Secondary Markets. It contradicts the above video by highlighting the fundamental aspects of the IPO's in recent times. It doesn't only focus on the numbers of IPO but also the source and the regulatory aspects. It starts off by enlightening the investors of the fact that nowadays the IPO's are a source for the early investors to sell their shares and make profits. It is no longer a way to raise funds by the company for expansion, reducing debt or investing in research and development. The next major focus is how the Indian primary markets behaved in 2025-the Indian Primary Market has expected to mobilise almost Rs. 1.6 lakh crore in the year 2025. It has surpassed US NASDAQ in funds raised and is also now coming to be known as a capital formation hub. The 2026 IPO fundraising may touch around 25 billion USD (14% higher than the current year)

There have been certain notable regulatory amendments through SEBI this year. SEBI has announced that it will try to approve the majority of IPO's within 3 months of filing. SEBI has also declared that it will be using AI to scan the documents as well as tie up with merchant bankers to ensure clarifications whenever needed.

(Mehta, 2024)

The research paper that exclusively focuses on the IPO's in India, the future prospects, developments as well as the impact of technology on the IPO's in Indi. The major focus goes onto the impact of global events on the IPO, the future trends in India's IPO and the major challenges faced by the Indian IPOs.

Some global factors that affect the Indian IPO's include- European and the US markets. Since these markets set the tone of the global financial markets it also impacts the IPO's and the participation in India. The regulatory environment that defines the taxation policies and other modifications define with how much ease can a company go public in domestic or international markets. The next major influential factor is the technological advancements. Depending on how a company adapts to the technological changes or incorporates it in their operations affects how it is perceived among the public thus affecting its share prices and investment traction.

Certain major challenges in front of the Indian IPO markets is as follows-

Market Volatility: as the participation in the Indian primary markets has increased excessively it has also resulted into extreme volatility resulting into changes in the prices of the stocks each second or minute. Another major issue is the overvaluation of firms which creates a huge problem for investors. Various stringent regulatory rules / compliances also reduce the chances of subscription to the IPO's or reduce the number of issues due to costlier and time consuming processes. Also competition with the Private Equity and Venture Capitals lead to reduced IPO's in certain type of industry.

One of the major and the best aspect taken up in this research paper includes the future prospect of ESG instruments in the Indian Financial Markets.

Thus the overall Indian primary markets have undergone terrible changes with 1991 being a turning point with the introduction of SEBI as well as Liberalisation. Even though certain irregularities persist in the markets, India would be able to overcome those with some more progress.

References:

1. A STUDY ON INITIAL PUBLIC OFFERING. (n.d.). *International Journal of DATA SCIENCE AND IOT MANAGEMENT SYSTEM*,58-62.

2. Prajapati, Milan & Patawari, Manisha. (2026). Capital Market in India and Regulatory Tussle Between SEBI and SAT. 10.1007/978-3-031-98141-8_9.
3. ET Now. (2025, December 22). *IPO boom ahead: Primary market on fire, 2026 to see bigger & better IPO's | Business News* [Video]. YouTube. https://www.youtube.com/watch?v=aQUgy-FzpP4
4. The Hindu Originals. (2025b, December 24). *2025: The great Indian IPO boom — What retail investors must know | Business Matters* [Video]. YouTube. https://www.youtube.com/watch?v=PE2KZ-LWVlg
5. Mehta, Vrushabh. S., S. & Modern Law College, Pune. (2024). The future of IPO'S in India: Emerging trends and prospects. In *International Journal of Research Publication and Reviews* (Vol. 5, Issue 9, pp. 2131–2136). https://ijrpr.com/uploads/V5ISSUE9/IJRPR33292.pdf

Discussion

According to the recent conditions there have been an excessive rise in the number of IPO's in the Primary Markets in India, not only this, but also the funds raised through the IPO's are significant in amounts.

"India's primary equity market touched a historic high in 2025, with companies raising a record a through more than 365 initial public offerings (IPOs), making it the strongest year ever for fundraising, according to a strategy report by Motilal Oswal Financial Services". (*India&Rsquo;S IPO Boom Hits Record High in 2025 as Companies Raise Nearly Rs 2 Lakh Crore: Report*, 2025)

India has seen a severe boom in the number of IPO. There are multiple reasons why this is happening. In the recent years as the rules have changed, the systems have changed, more and more people can be seen getting involved in the financial markets.

Let us discuss the various **reasons** contributing to the growth of the financial markets ultimately affecting the Primary Markets in India.

Earlier in order to subscribe to the IPO people had to stand in huge lines for the submission of application form only to be unsure if they would be allotted the IPO or no. However after the introduction of digital platforms that enabled applying to the IPO or buying and selling of shares, stocks, currency, commodity at a click of a button, applying for the IPO became easier and hassle free for the public improving the response towards financial markets.

One of the major innovation after the establishment of SEBI is the digitalization of the financial markets. Financial inclusion became easier with online trading platforms. As the people started showing more interest in the primary markets, more companies started getting their IPO's.

Moreover as suggested in one of the podcast by "The Ken" , in 2021 SEBI revised the rules for the companies that can bring their IPO's. It was decided that even loss making companies can bring in the IPO's. Earlier it was so that only the companies who have reported profits for the previous 3 years were eligible for IPO's.

Also during COVID times, it was made mandatory for the issuer company to disclose their material documents not only in the offline mode for physical inspection, but also through the online mode to improve transparency and overcome the obstacle of curtailed physical movement during the time.

Before COVID-19 people inclined a lot towards capital markets. Stocks, Crypto and Mutual Funds seemed like a money making machine wherein people thought that investing in these instruments would definitely give them returns. However COVID-19 came, certain industries crashed and people suffered huge losses, however there were certain industries that did not make such losses like the e commerce and pharma and definitely Gold stood as an investment haven during the tough times. Gradually people learnt about the markets- the fundamental analysis, the technical analysis, and the people who adapted to the drastic changes have now survived the markets , learnt from them and are making profits.

Social media platforms also play a major role in the improved market participation by the retail investors. Various news channels also recommend stocks for the day or week (though referring to it and following it would be the investors personal choice). Various informative courses available online

along with awareness programmes about capital markets either free of cost or for a minimal value increased retail investors interest attracting them towards investing.

Another reason includes the introduction of the system of ASBA (Application Supported By Blocked Amount) in September 2008. It was introduced by SEBI in order to make applying for the IPO more affordable for the retail investors. It is a system wherein the amount of the IPO is not debited from the account of the investor unless the IPO is allotted to the person. The amount is only blocked and thus keeps earning interest (though for a short period of time), also the transaction costs involved in debiting the amount from the investors bank account on application and further crediting it in case of non-allotment is saved , thus making the system extremely favourable for the investors. In case of non-allotment the blocked amount is only unblocked and doesn't require any transfer of funds.

FOMO- Fear of Missing Out. Something the youngsters hate and fear the most. There has been a silent notion that if you miss a particular stock when it falls or when it has its IPO you would be missing out on enormous profits. However its not true. In reality markets give a chance to everyone eventually. People started applying for the IPO's out of the fear that they might miss out on the profits. According to the news from multiple resources, the general market sentiment from January to April in 2025 is observed to be as follows:

Jan 2025 – The IPO market was upbeat for more of industrial and tech IPO's, strong oversubscriptions, high first day gains. (it was observed the retail interest was extremely strong)

Feb 2025 – A delicate and a poor retail sentiment was observed, this resulted in weaker returns for the month of march

Mar 2025 - Investors were pretty risk averse due to the volatile markets. Most small IPO's had difficulty subscribing.

Apr 2025 – It was recorded to be a hybrid month with a balance of negative and positive market sentiment.

Where did the question of "IPO's in 2025 being a bubble" come from?

It was observed that most of the IPO's in 2025 have been trading at a price lower than the listing price. Not only this but there are some other factors as well that created a perception that the IPO's in 2025 constitute a speculative bubble.

It has been observed that retail investors are investing without actually understanding the fundamentals of the company. They either invest because they use the product of the company, are familiar with the company or have just heard about it from some Finfluencer.

Moreover nowadays, once we analyze we realize that the shares are extremely overvalued than what it should be.

(What does being overvalued mean?- An overvalued stock is the one whose price of the stock is more than what the company's earnings or the fundamentals can justify.

According to a news article from Economic Times, published on 23rd December 2025, the listing gains of the IPO's have significantly reduced from 30.25% to approx. 9% from 2023 to 2025, even though the amount raised through the IPO's has been remarkably high during the given period.

The retail investors need to understand that nowadays, the IPO's coming in to the markets are more of the Offer For Sale type, which only means that they are a way for the early investors to sell off their shares, making profits. Offer For Sale issues does not always result in losses for the Investors, but by understanding the fundamentals of the company and the financial statements the retail investors need to analyze why the shares are being sold by the promoters. There can be reasons like losses of the company or maybe changes in management. Most people as said above do not look at the fundamentals before applying for the IPO. Thus creating an unnecessary high demand , creating in a bubble like situation.



Source : *Indian IPOs Set New Record; Raise Rs 1.22 Lakh Crore in 2024*, 2024, MONEYCONTROL

FIGURE 3: NUMBER OF ISSUES AND THE AMOUNT RAISED THROUGH THE IPO FROM 2014 RO 2024

The above chart shows when theamount raised through the IPO's hit more than Rs. 1.22 lakh crore which was higher than the 2021's amount Rs. 1.18 lakh crore. The number of issues have been mentioned below in red circles to compare how much amount was raised through the number of issues. We can see in 2020 the number of IPOissue was as low as 15 which suddenly hyped upto 63 IP''s in 2021. Similarly we can see a significant rise in the number of issues in 2024 (upto 72 issues) as compared to any other year in the decade.



Source: *Record-breaking IPO Year: 2025 Fundraising Tops Rs 1.6 Lakh Crore With More to Come*, 2025, MONEYCONTROL

Figure 4 : The Number Of Issues And The Amount Raised Through Ipo's From 2014 To 2025

Similarly the above chart shows the amount raised through IPO's in the year 2025 and its comparison with the previous years. If we see overall, there has been tremendous growth in the number of IPO's issued in the primary markets from 2014 to 2025. As we can see in the above chart the total number of issues in 2024 has been around 90 and the amount raised was around 1.59 lakh crores. In the year 2025, until November 2025 , the total amount raised had crossed the 1.59 lakh crore high of the year 2025, with more issues anticipated in the last month of the year.

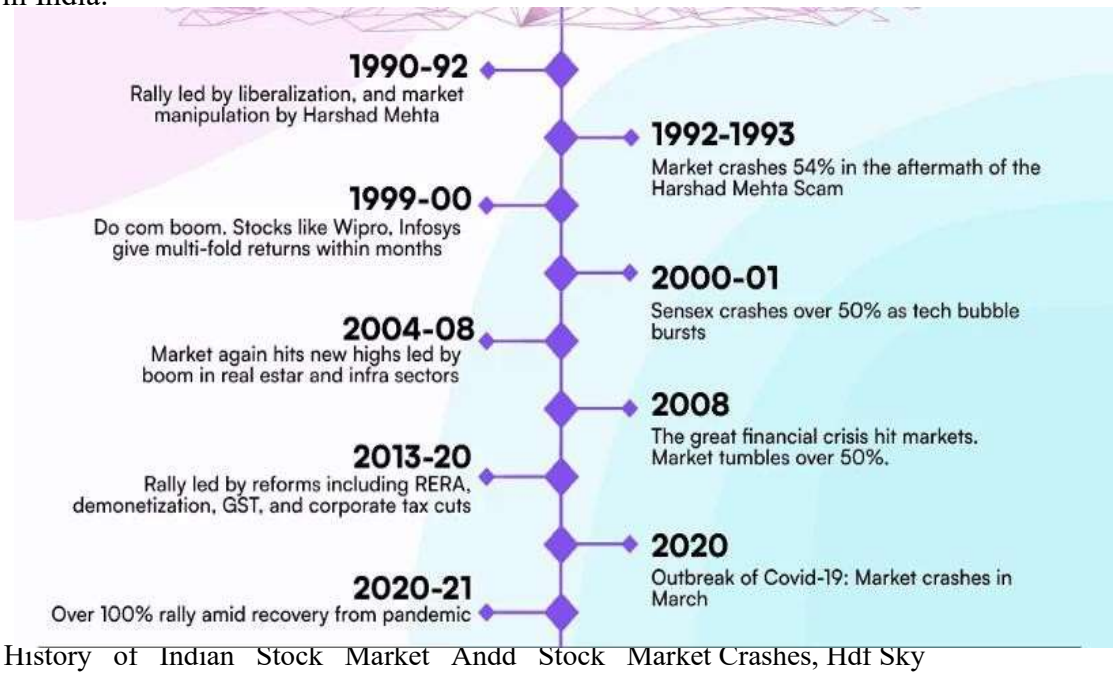
Here we would like to end the discussion part. In the above section of the research we saw various topics like why is there increased demand in the IPO's , what constitutes to the possible creation of an IPO bubble, and the progression of the number of issues and the amount raised through IPO in the last decade.

Conclusion

The concept of IPO is as old as 1600's when the British East India Company issued a part of

the ownership of their company in order to gather funds for expansion and growth. Further, in India the concept developed tremendously, even though there were multiple hurdles combined with positive changes.

The IPO's in India did not get traction up until the establishment of the Bombay Stock Exchange (BSE) in 1875. The following can be traced to be the timeline for the development of the Financial Markets in India.



Source: History of Indian Stock Market Andd Stock Market Crashes, Hdf Sky

Figure 5: Development of Stock Markets in India Through Decades

The above chart depicts various changes that have occurred in the stock markets in India. It highlights different unforgettable events that have impacted the markets and the retail public- positively or negatively depending on the situation.

In 2020 markets crashed majorly because of COVID 19 however it recovered greatly post that and now we can see tremendous progress in it. The volumes traded have gone up, the number of IPO issues have increased similar to the amounts raised through primary and secondary markets.

People do not look at the fundamentals over a period of time, only the recent profits or losses of a company are seen and investment decision is taken, especially the retail investors. It has been analyzed that the bar of IPO is dropping. Even though the supply side of the stocks is increasing, there is no significant impact on the demand. There is no culmination of decades of hard work of a company. Its only the recent developments that are accounted for. This results in inaccurate valuations and investment decisions.

In todays times the financials of the company are looked for ON the day of the IPO event. People keep forgetting that IPO is not the culmination of a company's journey but the beginning of the company's journey as a public company.

In a podcast by 'The Ken' the brutal truth has been revealed that the IPO's in India are more like the great Indian Marriage- people are more interested in the event and not what happens after the marriage. Today more and more IPO's are being over subscribed only because people are familiar with the brands or the company. Over time people realize the true valuations of the company and thus the post listing performance keeps deteriorating.

The year 2024 was the one of Mega IPO's. Before that LIC was the company that raised most amount through the IPO's (Rs. 21000 crore)

During the year 2024- Hyundai brought up its IPO and raised even more amounts (Rs. 27000 crores) with an oversubscription of 2.4x

However in 2024 it was predicted that 2025 would be the year where the holding companies may list

their subsidiary companies on the stock exchange.
Now 2025 is said to be the year f IPO's.

According to an article in WION news, 2024 raised around 18 billion$ with 268 IPO issues.

However uptil 2025 October, $26 billion was already raised with more than 110 issues in the Indian Primary Markets.

We have also seen a comparison of how the IPO's have evolved through the decades. There are 2 ways through which IPO's are offered to the public- Offer For Sale and Fresh Issue.

Offer For Sale is when the shares are not actually brought into the market by the company but it is offered by the early investors or promoters. The amount raised through this issue does not contribute to the expansion and growth of the company but is transferred to the respective promoter. It can also be the venture capitalists selling their shares on earning early profits.

On the other hand Fresh Issue are the IPO's that are offered by the respective company and the funds raised through this method directly go towards the gowth and expansion objectives.
Here 's how the issue type has been evolved through decades-

1990 to 2010 : IPO's mostly consisted of the fresh issue. Only 13% of the total issue was that of the Offer For Sale. Back then most of the capital for growth was raised through IPO's. However majority of the companies that initiated an IPO during this period either failed or just vanished.

2015 to 2025 : During this period most of the risk or growth capital came from the private equities or venture capitalists. The percentage of Offer For Sale has gone upto 68% or more currently. It has also been noticed that 2015 onwards, 113 pure Offer For Sale Issues came in the Indian markets and gave about 351% returns. Whereas on the other side 81 pure Fresh Issue were introduced which gave upto 173% returns.

This research aims to throw light on the different positives and the negatives that the other researchers or studies think are getting impacted due to the increasing number of IPO's.

It is further being said that 2026 is going to be a year for more IPO's , even more as compared to 2025. The major questions, answers to which only time can reveal still persist in the markets-is the increasing IPO numbers a bubble, or does it reveal actual, factual growth of the country's economy.

The second question is as the number of issues through Offer For Sale increases, should the investors be worried that the promoters are selling more?

These questions can only be answered as time passes and the people react to the prevailing market conditions.

Bibliography

1. Bhaisora, S. S. (2024, August 12). Evolution of the Indian Stock Markets: A Historical Overviewfrom 19thCenturyto2024.*WrightResearch*.mhttps://www.wrightresearch.in/blog/evolution-of-the-indian-stock-markets-a-historical-overview-from-19th-century-to-2024/
2. Persson, E. (2025, September 11). *Four Decades of IPOs: An Overview*. Quartr. https://quartr.com/insights/company-research/four-decades-of-ipos-an-overview
3. IPO Market 2025: Reliance Jio, HDB Financial And More IPOs This Year, Should Investors Invest? (2025, January). [Video]. YOUTUBE.
4. Indian IPO Market (Jan–Apr 2025): A review of trends, listings, and market sentiment. (n.d.). https://enrichmoney.in/blog-article/top-indian-ipo-market-2025
5. Inside India's IPO Boom: What's Driving Record-Breaking Listings | WION. (2025, November). [Video]. YOUTUBE.
6. ThegreatbigIndianIPO.(n.d.).TheKen. https://www.youtube.com/watch?v=Mbut1hlbWAM
7. *Scribbr. (2021, June 2). Literature Review Playlist Introduction | Scribbr [Video]. YouTube. https://www.youtube.com/watch?v=PM7m05ATgY8*
8. Aditya, R. P. (2025, July 23). *Types of IPO: Fresh issue, OFS, fixed price and Book building*. Cleartax. https://cleartax.in/s/types-of-ipo
9. *ES2020-21_Volume-1-2[28-01-21]*.(n.d.). https://www.indiabudget.gov.in/economicsurvey/ebook_es2021/index.html#p=206
10. A STUDY ON INITIAL PUBLIC OFFERING. (n.d.). *International Journal of DATA SCIENCE AND IOT MANAGEMENT SYSTEM*, 1–5.
11. Tyagi, S., & Etcfo. (2025, December 23). More IPOs, less pop: 2025 sees record ₹1.75 lakh cr raisedbutlisting gainsfallto9.9%.*ETCFO.com*https://cfo.economictimes.indiatimes.com/news/corporate-finance/2025-ipos-

break-records-in-india-but-listing-gains-plummet/126132212

12. IPOs in the Modi Government's era: PSUs raised Rs 57,280 crore. (2024, April 22). Angel One. https://www.angelone.in/news/ipos/ipos-modi-governments-era
13. *Record-breaking IPO year: 2025 fundraising tops Rs 1.6 lakh crore with more to come*. (2025, November 27). Moneycontrol.https://www.moneycontrol.com/news/business/ipo/record-breaking-ipo-year-2025-fundraising-tops-rs-1-6-lakh-crore-with-more-to-come-13700482.html
14. *Indian IPOs set new record; Raise Rs 1.22 lakh crore in 2024*. (2024, October 31). Moneycontrol. https://www.moneycontrol.com/news/business/ipo/indian-ipos-set-new-record-raise-rs-1-22-lakh-crore-in-2024-12855750.html
15. The Hindu, T. H. O. (2025, December 25). *2025: The great Indian IPO boom — What retail investors must know | Business Matters* [Video]. YOUTUBE. https://www.youtube.com/watch?v=PE2KZ-LWVlg
16. *Prajapati, Milan & Patawari, Manisha. (2026). Capital Market in India and Regulatory Tussle Between SEBI and SAT. 10.1007/978-3-031-98141-8_9*

Digital Media, Culture and Political Propaganda: Transforming Political Mobilisation in India

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Abstract;

The rapid expansion of digital media has fundamentally transformed political communication and political mobilisation in India. The growth of smartphones, social media platforms, messaging applications, online news portals, video-sharing platforms, podcasts and artificial intelligence has created a new political communication environment in which political parties, governments, political influencers, civil-society organisations and citizens can communicate directly with large audiences. This transformation is particularly significant in India because political communication operates within a highly diverse social and cultural environment characterised by multiple languages, religions, castes, regions, historical memories and political identities. And analyses how their interaction is transforming political mobilisation in India. It argues that digital political mobilisation is not simply a technological development but a socio-political process in which existing cultural identities, historical memories and political narratives are reproduced, modified, contested and amplified through digital networks. The study analyses social media, WhatsApp networks, hashtags, memes, short-form videos, political influencers, algorithmic communication and digital political campaigns. It also examines the democratic possibilities of digital media, including enhanced political participation, citizen communication, political awareness and continuous evaluation of elected representatives. At the same time, it identifies major challenges including misinformation, disinformation, political polarisation, echo chambers, emotional manipulation, privacy concerns, deep fakes and the digital divide.

The paper concludes that digital media can strengthen Indian democracy when it facilitates informed participation, pluralistic debate and political accountability. However, technological expansion alone cannot guarantee democratic outcomes. A democratic digital political culture requires media literacy, transparent political communication, responsible platform governance, ethical use of artificial intelligence, effective regulation and active citizenship. The paper proposes a movement from digital propaganda towards digital participation, deliberation and continuous democratic accountability.

Keywords: Digital Media, Political Propaganda, Political Mobilisation, Political Culture, Social Media, Democracy, Political Communication, India, Misinformation, Digital Citizenship.

Introduction

The emergence of digital media has transformed the relationship between citizens, political institutions and political communication. During the twentieth century, political communication was largely mediated through newspapers, radio, television, posters, pamphlets, public meetings and political rallies. Political parties and traditional media organisations acted as important gatekeepers between political actors and citizens. The expansion of the internet and social media has substantially altered this structure. Political leaders can communicate directly with citizens through social-media platforms, while citizens can respond, comment, remix, share and create political content. The distinction between producer and consumer of political information has therefore become increasingly blurred. India provides an important context for examining this transformation. The country combines a large digital population with enormous linguistic, cultural, religious, caste and regional diversity. Political competition is intense, and elections involve multiple levels of political mobilisation. Digital communication has consequently become integrated into political campaigning, public debate, political activism and electoral communication.

Digital Media and the Transformation of Political Communication in India

Digital media has fundamentally changed the structure of political communication in India. Traditional political communication generally followed a relatively linear pattern in which political actors communicated through newspapers, radio or television and citizens primarily consumed the information. Digital communication has created a more interactive and multidirectional environment.

Political leaders can communicate directly with citizens through social-media platforms, while citizens can respond to political statements, challenge political claims, share political information and produce their own political content. The boundary between political communicator and political audience has therefore become increasingly blurred. This transformation has made political communication faster, more interactive, visual, personalised and decentralised. A political speech can be uploaded immediately after delivery, converted into short clips and distributed through multiple platforms. A political statement can generate thousands of responses within minutes. Citizens can create counter-narratives without depending upon traditional media organisations. The significance of this transformation is particularly visible in India because of the country's large digital population and highly competitive electoral environment. Political parties increasingly use digital platforms for political branding, campaign communication, voter outreach, volunteer mobilisation and public messaging. Digital media has therefore not simply added another communication channel to Indian politics. It has changed the structure through which political communication takes place.

Culture as a Resource of Political Propaganda

Culture occupies an important position in political communication because political messages are often understood through shared cultural meanings. Political actors can use cultural symbols to establish emotional connections with citizens and to construct political identities. Religion, language, caste, region, nationalism, historical personalities, festivals, folklore, mythology, cinema and popular culture can all become resources of political communication. A cultural symbol may communicate a political message more quickly and emotionally than a detailed political argument. Digital platforms have increased the political significance of cultural symbolism because cultural content can be reproduced, modified and circulated rapidly. A photograph, historical quotation, festival image or symbolic reference can become a political message when placed within a particular digital narrative. The political process can therefore be understood as a movement from cultural symbolism to political interpretation and finally to political mobilisation. Cultural identity creates recognition, recognition produces emotional association, and emotional association can contribute to political identification. This does not mean that every use of culture constitutes propaganda. Cultural references are a normal component of political communication. The distinction becomes important when cultural symbols are selectively manipulated to create misleading perceptions, hostility towards political opponents or exaggerated political identities.

Historical Memory and Political Propaganda

Historical memory occupies an important place in political propaganda because societies understand their present partly through interpretations of the past. Political actors frequently refer to historical events, personalities and struggles in order to construct contemporary political narratives. In India, political communication may invoke colonialism, the freedom movement, Partition, social reform movements, caste oppression, religious conflicts, regional struggles, freedom fighters, historical rulers and national leaders. These historical references can provide political legitimacy and strengthen collective identities. Digital media has significantly increased the speed with which historical narratives circulate. A complex historical event can be reduced to a short video, image, quotation or meme. While this can increase public interest in history, it can also remove historical context and encourage simplified interpretations. The political use of historical memory therefore involves a process in which historical events are selectively remembered, digitally represented and connected with contemporary political concerns. Historical memory can contribute to political education when it encourages critical understanding of the past, but it can become propaganda when historical complexity is deliberately replaced by selective or distorted narratives.

Memes and Visual Political Communication

Political memes have emerged as an important form of digital political communication. A meme can combine an image, text, humour, cultural reference and political message into a highly shareable form. The political effectiveness of memes comes partly from their simplicity and accessibility. Citizens do not need to read a lengthy political argument to understand a meme. A political position can be communicated through humour, satire or visual symbolism within seconds. Political memes can support political leaders, criticise opponents, construct group identities and simplify complex political issues. They can also create a sense of political community among individuals who share similar political attitudes. However, the same characteristics that make memes politically powerful can also create problems. Complex issues may be reduced to misleading representations, while emotionally powerful images may circulate without reliable evidence. Memes therefore represent both an innovative form of political participation and a potential instrument of political propaganda

Hashtag Politics

Hashtags have become an important mechanism of digital political mobilisation. They allow individuals who may be geographically separated to participate in a common political conversation. A political hashtag can create visibility around an issue, establish political identity, organise discussion and attract the attention of traditional media. When large numbers of users participate, a digital conversation can become politically significant beyond the original platform. Hashtag politics therefore represents a transformation from geographically concentrated mobilisation to networked mobilisation. A traditional political rally requires people to gather physically in one place, whereas a digital campaign can connect thousands or millions of individuals across different geographical locations. However, the visibility of a hashtag does not automatically indicate genuine public consensus. Coordinated campaigns, political organisations, automated accounts and highly active groups can influence online visibility. Therefore, digital popularity must not always be equated with democratic legitimacy.

WhatsApp and Interpersonal Political Mobilisation

Messaging applications have introduced another important dimension to political mobilisation. Unlike public social-media platforms, messaging applications often operate through personal and community networks. Political information can therefore circulate through relationships based on family, friendship, neighbourhood, occupation and community. This creates a powerful network effect. A political message received from a known person may appear more trustworthy than the same message received from an unknown political organisation. Political mobilisation can consequently spread through existing social relationships. However, the same characteristic creates a serious challenge. False or misleading political information can circulate through trusted interpersonal networks. Recipients may forward information without verifying its authenticity because it has been received from someone they know. The political significance of messaging applications therefore lies not simply in their technological capacity but in their integration with existing social networks. Digital political mobilisation increasingly combines technological networks with social relationships.

Political Influencers and the New Political Public Sphere

Digital media has created a new category of political communicators, including YouTubers, podcasters, independent journalists, political commentators, activists and social-media influencers. These actors occupy a growing space between traditional journalism, political activism and citizen communication. They can reach large audiences without depending upon established media organisations. The emergence of political influencers has expanded the range of voices participating in political debate. Citizens can access political interpretations from multiple sources and may encounter perspectives that are not represented in traditional media. At the same time, the rise of political influencers creates questions concerning accountability and credibility. Unlike established media organisations, many independent content creators may not operate under equivalent editorial structures or professional standards. Political sponsorship, ideological bias, commercial incentives and the search for online engagement can influence content. The digital political public sphere is therefore more pluralistic but also more fragmented.

Algorithms and Political Visibility

Algorithms have become a significant component of contemporary political communication. Digital platforms do not simply display information chronologically. Recommendation systems and other algorithmic processes influence which content receives visibility. Content that generates high levels of engagement may receive greater exposure. Political content that produces anger, fear, controversy, humour or emotional excitement can therefore potentially receive greater attention than complex policy discussions. This creates a structural challenge for democratic communication. The content that attracts the greatest engagement is not necessarily the content that provides the greatest public value. Political actors may consequently have incentives to produce emotionally powerful content rather than detailed policy explanations. Algorithmic visibility can therefore influence the nature of political communication itself. The relationship between algorithms and politics requires greater transparency because citizens should be able to understand, at least in broad terms, how political information is being recommended and amplified.

Digital Political Propaganda and Emotional Mobilisation

Digital political propaganda frequently operates through emotions. Political communication may attempt to generate pride, fear, anger, hope, humiliation, solidarity or anxiety. This emotional dimension is not entirely new. Traditional political propaganda also used emotional appeals. What has changed is the speed, scale and personalisation through which emotional communication can now operate. Digital platforms allow political messages to combine text, images, music, video and personal storytelling. A short video can therefore create a strong emotional response without presenting a detailed policy argument. Emotional communication can strengthen political participation when it creates solidarity around legitimate democratic causes. However, it can also contribute to manipulation when fear or hostility is deliberately intensified to influence political behaviour. The challenge for democratic politics is therefore not to eliminate emotion from political communication but to balance emotional engagement with evidence, reason and deliberation.

Politics Digital Media and Electoral

Digital media has become an important component of electoral campaigning in India. Political parties and candidates use digital platforms for political advertising, public speeches, voter outreach, volunteer mobilisation, campaign branding and rapid responses to opponents. Digital campaigning also allows political parties to communicate with different audiences using different messages and formats. A national political narrative can be adapted to regional, linguistic and cultural contexts. The Election Commission of India has recognised the importance of social media in electoral politics. During the 2024 General Election, the Commission issued directions concerning social-media campaigning, political advertising, the Model Code of Conduct and misinformation. It also emphasised responsible use of social media by political parties and candidates. This institutional recognition demonstrates that digital political communication has become an integral part of electoral democracy rather than an external activity.

Digital Media and Political Participation

Digital media has expanded the meaning of political participation. Voting remains the most important institutional mechanism of democratic participation, but citizens can now participate politically between elections through digital communication. They can express political opinions, communicate with elected representatives, participate in campaigns, report local problems, produce political content and mobilise support for social or political causes. This creates a transformation in the role of the citizen. The citizen is no longer merely a voter who receives political information from institutions. The citizen can become a communicator, content creator, political critic and political mobiliser. Digital participation therefore has the potential to strengthen participatory democracy. However, participation is meaningful only when citizens have access to reliable information and opportunities for genuine political influence.

From Periodic Elections to Continuous Political Accountability

One of the most important possibilities created by digital media is the development of continuous political accountability. Traditional electoral democracy provides a major mechanism of accountability through elections. Citizens evaluate representatives periodically and decide whether to continue supporting them. Digital technology creates the possibility of extending this evaluation throughout the entire term of office. Publicly available information could potentially be used to monitor election promises, legislative participation, constituency development, public works and responses to citizen grievances. A digitally enabled accountability system could therefore create a cycle in which elections are followed by continuous monitoring, citizen feedback, performance evaluation and public discussion. Such a model could make representatives more responsive. However, digital evaluation must be based on verified information and transparent criteria. Otherwise, political rating systems themselves could become instruments of propaganda.

Misinformation and Disinformation

Misinformation and disinformation constitute some of the most serious challenges to digital democracy. Misinformation refers broadly to inaccurate information circulated without necessarily intending to deceive, whereas disinformation involves deliberate production or dissemination of false or manipulated information. In political contexts, misleading information can affect electoral choices, damage reputations, intensify social tensions and reduce public trust in democratic institutions. The problem becomes more serious because digital content can be reproduced and redistributed almost instantly. A false claim may reach a large audience before journalists, fact-checkers or institutions have an opportunity to respond. Therefore, democratic societies require citizens who possess sufficient media literacy to evaluate sources, identify manipulated content and distinguish political opinion from factual claims.

Political Polarisation and Echo Chambers

Digital communication can contribute to political polarisation by creating information environments in which individuals repeatedly encounter politically similar opinions. Users may select particular political pages, influencers and communities. Algorithms may then recommend additional content based on their previous interactions. Over time, this can produce a cycle of selective exposure and ideological reinforcement. Such environments can reduce opportunities for meaningful interaction with opposing viewpoints. Political disagreement may consequently become interpreted as hostility rather than democratic difference. However, political polarisation cannot be attributed exclusively to social media. Political institutions, social inequalities, caste and religious identities, economic conditions, partisan organisations and traditional media also influence polarisation. Digital platforms should therefore be understood as mechanisms that can amplify existing divisions rather than necessarily creating all divisions themselves.

Artificial Intelligence, Deep fakes and Political Propaganda

Artificial intelligence is creating a new stage in the evolution of political propaganda. Generative AI can produce realistic images, voices, videos and written political content. This creates new possibilities for political communication but also introduces serious risks. Deep fake technology can make a person appear to say or do something that never happened. Synthetic audio can imitate political leaders, while AI-generated images can create fictional political events. Such technologies create a serious challenge for electoral democracy because citizens may find it increasingly difficult to distinguish authentic content from manipulated content. The rapid development of AI therefore requires new forms of digital literacy, technological verification, platform responsibility and political ethics. AI-generated political content should be clearly identified where appropriate, and citizens need practical tools for verifying suspicious audio and video.

Digital Divide and Political Inequality

The expansion of digital politics does not automatically produce equal political participation. Access to digital technology varies according to income, geography, education, digital literacy and language. Citizens who lack reliable internet access or adequate digital skills may be excluded from emerging forms of political communication. India's linguistic diversity adds another dimension to the

digital divide. Political information that is available primarily in English or a limited number of languages may not reach citizens who primarily communicate in other Indian languages. Therefore, digital democracy must be understood as a question not merely of connectivity but of meaningful and inclusive participation.

Regulation and Ethical Challenges

The regulation of digital political communication presents a complex democratic dilemma. Excessive regulation may restrict freedom of expression and political dissent, while insufficient regulation may allow misinformation, manipulation, hate speech and electoral abuses to spread. A democratic regulatory framework should therefore balance freedom of expression with electoral integrity, individual rights and public safety. Transparency is particularly important in digital political advertising. Citizens should be able to identify who is responsible for political advertisements and, where legally appropriate, understand the nature of their sponsorship. Political parties, platforms, journalists, civil-society organisations and citizens all have responsibilities in maintaining a healthy digital political environment.

Digital Culture and Indian Political Identity

Indian political identity is complex because individuals may simultaneously identify with the nation, state, region, language, caste, religion, community, occupation and political ideology. Digital media allows political actors to communicate with these overlapping identities through different narratives and cultural references. A political campaign can therefore maintain a broad national message while simultaneously adapting its communication to regional or community contexts. This creates a form of personalised political communication in which citizens encounter political messages that are culturally familiar and socially relevant to their particular environments. Digital politics therefore does not eliminate traditional identities. Instead, it provides new mechanisms through which those identities can be expressed, strengthened and contested.

Positive Democratic Consequences

The expansion of digital political communication has several potential democratic benefits. First, it can increase access to political information. Citizens can obtain political statements, policy documents, speeches and debates more quickly than in the traditional media environment. Second, digital media facilitates direct communication between political representatives and citizens. This can potentially reduce communication barriers and improve responsiveness. Third, digital platforms create opportunities for citizen journalism and alternative political voices. Individuals who were previously dependent on institutional media can now document events and communicate political perspectives themselves. Fourth, digital media can facilitate rapid mobilisation around political and social issues. Citizens can organise campaigns and coordinate political activities without requiring large formal organisations. Finally, digital communication can strengthen political accountability by making government actions and political statements more visible to citizens.

Negative Democratic Consequences

Despite these opportunities, digital political communication also creates serious risks. Misinformation can undermine informed political decision-making, while deliberate disinformation can manipulate public opinion. Political polarisation may increase when citizens become concentrated within ideologically homogeneous networks. Hate speech and identity-based hostility can intensify social divisions. Political manipulation can also become more sophisticated because digital platforms allow political messages to be targeted at specific audiences. Privacy represents another major concern. Political communication increasingly generates large amounts of behavioural data, creating the possibility of political profiling. Artificial intelligence creates an additional challenge through deep fakes and synthetic political content. Finally, citizens who lack digital access or digital literacy may become politically disadvantaged.

Digital Media, Culture and Political Mobilisation: An Integrated Model

The relationship between digital media, culture and political mobilisation can be understood as a continuous process. Political actors begin with cultural resources such as religion, language, caste,

regional identity, historical memory, nationalism or popular culture. These resources are transformed into digital forms such as memes, videos, hashtags, images, slogans and political narratives. Digital platforms then distribute these messages through network structures and algorithmic systems. Citizens interpret the content through their existing cultural and political identities. They may respond emotionally, share the content, create new content or challenge tithe result can be political mobilisation in the form of voting, campaigning, political discussion, protest or volunteer participation. However, the same process can also produce polarisation, misinformation or political manipulation.

Thus: **Culture → Digital Representation → Political Narrative → Algorithmic Circulation → Citizen Interpretation → Networked Mobilisation → Democratic Consequences** This model demonstrates that digital political mobilisation is simultaneously technological, cultural, psychological and political.

Major Findings

The study demonstrates that digital media has fundamentally transformed political communication and mobilisation in India. Political communication is increasingly multidirectional rather than exclusively one-way. Citizens are no longer merely consumers of political information; they are increasingly producers, distributors and interpreters of political content. The study also finds that cultural identity remains central to digital politics. Technology has not replaced culture. Instead, it has created new mechanisms for reproducing and contesting cultural meanings. Historical memory has become an important resource of digital political communication, while memes, hashtags and short videos have made political communication increasingly visual and emotionally oriented. Messaging applications have strengthened interpersonal political networks, while political influencers and independent content creators have expanded the political public sphere beyond traditional media institutions. At the same time, algorithmic systems influence the visibility of political information. Misinformation, disinformation, political polarisation and AI-generated content create significant challenges for democratic decision-making. Most importantly, digital media provides the possibility of moving from periodic electoral accountability towards continuous citizen engagement and evaluation of elected representatives.

Suggestions

India's digital democracy requires a comprehensive approach that combines technological development with democratic education and institutional responsibility. First, digital and media literacy should become an important component of education. Citizens need practical skills for identifying misinformation, evaluating sources and recognising manipulated images, videos and audio. Second, political advertising on digital platforms should be transparent. Citizens should be able to identify political sponsors and understand the context in which political advertisements are distributed. Third, AI-generated political content should be subject to appropriate transparency and labelling mechanisms. Citizens should have access to reliable verification tools. Fourth, independent fact-checking should be strengthened while protecting freedom of expression and editorial independence. Fifth, digital political information should be available in multiple Indian languages to reduce linguistic exclusion. Sixth, digital platforms can be used to provide verified information about the performance of elected representatives. Such systems should rely upon transparent indicators rather than politically manipulated ratings. Seventh, privacy protections should remain central to digital political communication. Political participation should not become a justification for excessive surveillance or misuse of personal data. Finally, democratic digital culture should encourage deliberation rather than merely engagement. Political communication should promote evidence, policy discussion, respectful disagreement and pluralism.

Conclusion

Digital media has transformed political mobilisation in India by changing the speed, scale, structure and style of political communication. Political parties, leaders, influencers, journalists,

activists and citizens now operate within a complex digital environment in which political messages can be created and circulated rapidly across large networks.

However, digital political mobilisation cannot be understood solely as a technological phenomenon. Culture remains deeply embedded within political communication. Religious symbols, caste identities, regional traditions, language, historical memory, nationalism and popular culture continue to shape political narratives. Digital technology provides new mechanisms for representing and amplifying these cultural resources. The central argument of this study is that digital political mobilisation in India represents a **technological mediation of existing political and cultural structures**. Digital media can create greater political participation, communication and accountability, but it can also amplify misinformation, polarisation, emotional manipulation and political propaganda. The democratic future of digital politics therefore depends not merely on expanding internet access but on developing a responsible digital political culture. The challenge is to transform:

Digital Propaganda into Digital Participation;
Digital Participation into Digital Deliberation; and
Digital Deliberation into Digital Accountability.

Such a transformation can contribute to a more participatory, informed, inclusive and accountable democracy in India.

Reference :

1. Bennett, W. L., & Segerberg, A. (2013). The logic of connective action: Digital media and the personalization of contentious politics. Cambridge University Press.
2. Castells, M. (2009). Communication power. Oxford University Press.
3. Chadwick, A. (2017). The hybrid media system: Politics and power (2nd ed.). Oxford University Press.
4. Dahlgren, P. (2005). The Internet, public spheres, and political communication: Dispersion and deliberation. Political Communication, 22(2), 147–162.
5. Habermas, J. (1989). The structural transformation of the public sphere. MIT Press.
6. Jenkins, H. (2006). Convergence culture: Where old and new media collide. New York University Press.
7. Pariser, E. (2011). The filter bubble: What the Internet is hiding from you. Penguin Press.
8. Sustain, C. R. (2017). #Republic: Divided democracy in the age of social media. Princeton University Press.
9. Bhatia, K. V., & Arora, P. (2024). Clip the blue bird: Discursive strategies of Hindutva digital mobilization against Twitter in India. The Information Society, 40(3), 232–244.
10. Taylor & Francis Online[2024 study] Do political elite endorsements influence online mobilization? A study of Twitter behaviour in Narendra Modi's 2019 election campaigns. Asian Journal of Communication, 34(6).
11. Taylor & Francis Online[2024 study] Empowering the religious minority: Examining the mobilizing role of social media for online political participation in an Asian democracy. Asian Journal of Communication, 34(2).
12. Taylor & Francis Online Election Commission of India. (2024). Responsible and ethical use of social media platforms by political parties and their representatives.
13. Elections 24
14. Election Commission of India. (2024). Myth vs Reality: Election-related misinformation and disinformation.
15. Election Commission of India Reuters Institute for the Study of Journalism. (2025). Digital News Report 2025: India. University of Oxford. reutersinstitute.politics.ox.ac.uk
16. Reuters Institute for the Study of Journalism. (2026). Digital News Report 2026: India. University of Oxford. reutersinstitute.politics.ox.ac.uk

A Study on Economic Changes and the Decline of Traditional Carpentry: A Case Study of the Carpenter Community in Khed Taluka, Ratnagiri District, Maharashtra

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Abstract:

Traditional carpentry has been an important source of livelihood for rural communities in Maharashtra. However, rapid economic changes, rising prices of timber and other raw materials, increasing labour costs, changing consumer preferences, competition from machine-made furniture, and limited profitability have created challenges for traditional carpenters. These changes may be gradually reducing the attractiveness of carpentry as a hereditary occupation and encouraging members of the younger generation to seek alternative employment opportunities.

The present study examines the impact of economic changes on the traditional carpentry occupation in Khed Taluka of Ratnagiri District, Maharashtra. The study particularly focuses on the rising cost of raw materials, changes in demand and income, profitability of carpentry, willingness to continue the traditional occupation, and the possibility of shifting to alternative occupations or migrating from rural areas to urban centres. Primary data will be collected from 50 carpenters in Khed Taluka through a structured questionnaire. The study adopts a descriptive and analytical research design. Percentage analysis, mean analysis and appropriate statistical tests such as Chi-square and correlation will be used to examine the relationship between economic factors and occupational decisions.

The study seeks to understand whether the traditional carpentry occupation is undergoing economic transformation or gradually declining as a livelihood among the carpenter community. It also highlights the need for skill development, access to affordable raw materials, technological support, market opportunities and appropriate policy interventions to make traditional carpentry economically sustainable.

Keywords: Traditional Carpentry, Carpenter Community, Economic Changes, Material Cost, Occupational Change, Rural-Urban Migration, Khed Taluka, Ratnagiri.

1. Introduction:

Traditional occupations have played an important role in providing employment and sustaining rural communities in India. Carpentry is one such occupation that has historically been associated with skilled craftsmanship, household furniture production, agricultural implements, and construction-related work and repair services. In rural Maharashtra, carpenters have traditionally acquired their skills through family-based learning and practical experience.

However, the economic environment surrounding traditional carpentry has changed considerably. The cost of timber, plywood, hardware, polish, tools, transportation and other inputs has increased. At the same time, carpenters face competition from factory-produced furniture, modular furniture, machine-based production and ready-made products. Consumers increasingly prefer relatively inexpensive and quickly available furniture, reducing the demand for certain forms of traditional carpentry.These developments have implications not only for the income of carpenters but also for the continuation of the occupation across generations. Younger members of carpenter families

may prefer salaried employment, construction work, business, industrial employment or other occupations that offer more predictable income.

Khed Taluka of Ratnagiri District provides an important setting for examining this transition. The area includes rural communities where traditional occupations continue to provide livelihoods, while migration and changing employment opportunities are also influencing occupational choices.

The present study therefore attempts to examine whether economic changes are contributing to a decline in traditional carpentry and whether members of the carpenter community are considering alternative occupations or migration towards urban areas.

2. Statement of the Problem

The traditional carpentry occupation is facing several economic and structural challenges. Increasing raw-material prices, declining profitability, changing consumer preferences and competition from modern furniture businesses may make traditional carpentry less attractive as a livelihood.

The major concern addressed in this study is:

"Are economic changes and rising material costs causing the carpenter community in Khed Taluka to reduce their dependence on traditional carpentry and seek alternative occupations, including migration to urban areas?"

3. Objectives of the Study

1. To study the present economic condition of traditional carpenters in Khed Taluka.
2. To examine the impact of increasing raw-material costs on carpentry businesses.
3. To study changes in income and profitability among traditional carpenters.
4. To examine whether demand for traditional carpentry has declined.
5. To study the willingness of carpenters and their younger generation to continue the traditional occupation.
6. To examine the tendency towards alternative occupations and rural-to-urban migration.
7. To suggest measures for making traditional carpentry economically sustainable.

5. Hypotheses:

Hypothesis 1

H_0: There is no significant relationship between rising material costs and the profitability of traditional carpentry.

H_1: There is a significant relationship between rising material costs and the profitability of traditional carpentry.

Hypothesis 2

H_0: There is no significant association between profitability and willingness to continue traditional carpentry.

H_1: There is a significant association between profitability and willingness to continue traditional carpentry.

Hypothesis 3

H_0: There is no significant association between economic difficulties and willingness to shift to an alternative occupation.

H_1: There is a significant association between economic difficulties and willingness to shift to an alternative occupation.

Hypothesis 4

H_0: There is no significant association between age and willingness to continue traditional carpentry.

H_1: There is a significant association between age and willingness to continue traditional carpentry.

6. Research Methodology:

6.1 Research Design

The study adopts a **descriptive and analytical research design** to examine the economic conditions and occupational changes among traditional carpenters.

6.2 Study Area

The study is restricted to **Khed Taluka of Ratnagiri District, Maharashtra**.

6.3 Sample Size

The study is based on **50 carpenters** belonging to the carpenter community in Khed Taluka.

6.4 Sampling Method:

A suitable sampling technique will be used to identify 50 respondents engaged in carpentry. The final paper should state the exact sampling method actually used during data collection.

6.5 Sources of Data:

Primary Data: Structured questionnaire administered to 50 carpenters.

Secondary Data: Books, research papers, government publications, reports and other relevant literature relating to traditional occupations, rural employment and economic change.

6.7 Scope of the Study:

The study is geographically limited to Khed Taluka of Ratnagiri District and focuses specifically on the carpenter community and its traditional occupation.

6.8 Limitations:

The study is based on a sample of only 50 respondents. Therefore, the findings may not represent the entire carpenter community of Ratnagiri District or Maharashtra. The study also depends partly on respondents' perceptions and self-reported information.

7. Proposed Variables for the Survey

The questionnaire for the 50 carpenters should cover:

Area	Variables
Personal Profile	Age, education, experience
Business Profile	Years in carpentry, type of work
Economic Condition	Income, expenditure, profitability
Material Cost	Timber, plywood, hardware, transportation
Market	Orders, demand, competition
Employment	Working days and working hours
Occupational Choice	Continue/change occupation
Younger Generation	Interest in traditional carpentry
Migration	Willingness to move to urban areas
Alternative Occupation	Type of occupation preferred
Government Support	Awareness and access to schemes

8. Data Analysis and Interpretation

Important: The following tables should be completed from the actual responses of your 50 carpenters. Actual numbers should not be fabricated.

Table 1: Age-wise Classification of Respondents

Age Group	Number of Respondents	Percentage
20–30	10	**20%**
31–40	20	**40%**
41–50	11	**22%**
51–60	9	**18%**
Total	**50**	**100%**

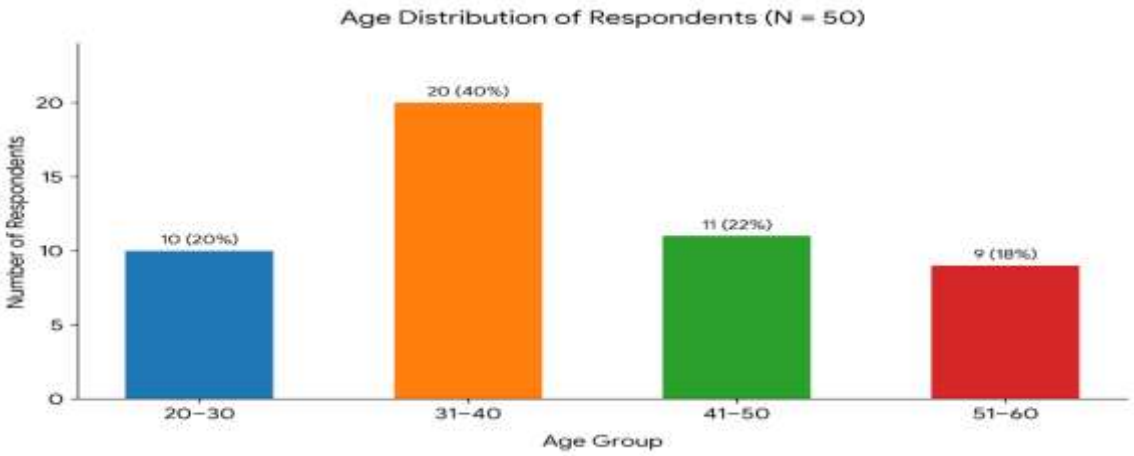


Table 2: Experience in Carpentry

Experience	Number	Percentage
Below 10 years	8	**16%**
10–20 years	18	**36%**
21–30 years	15	**30%**
Above 30 years	9	**18%**
Total	**50**	**100%**

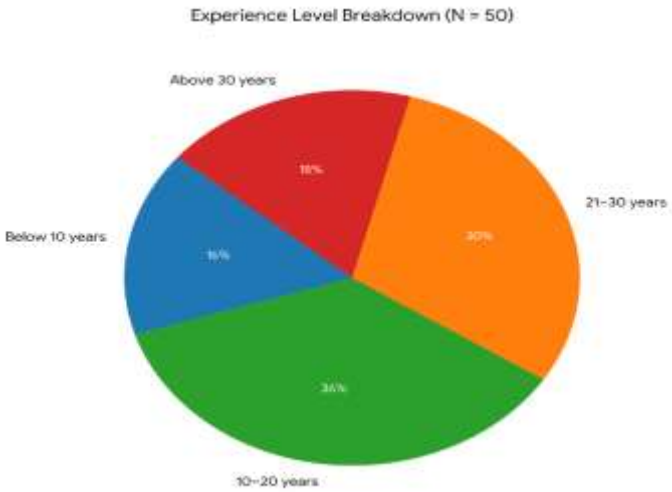


Table 3: Impact of Rising Material Costs

c	Number	Percentage
Very high impact	18	**36%**
High impact	17	**34%**
Moderate impact	10	**20%**
Low impact	3	**6%**
No impact	2	**4%**
Total	**50**	**100%**

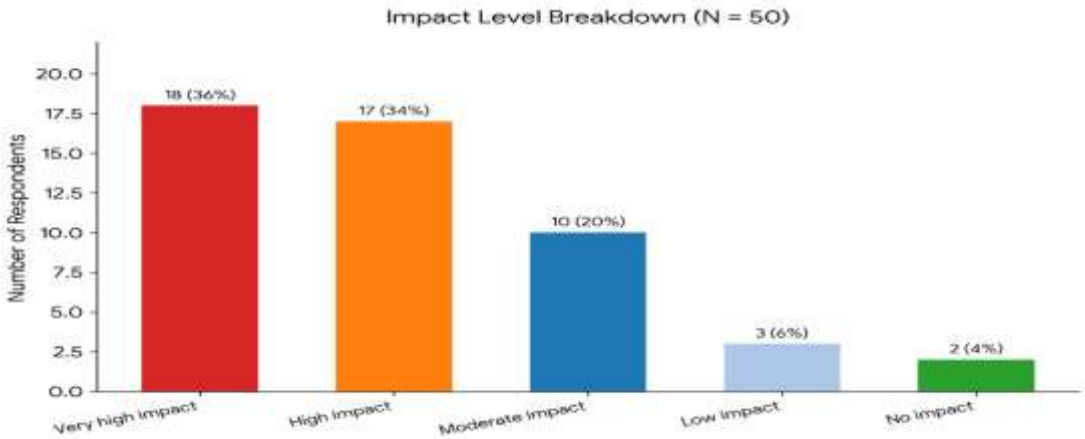


Table 4: Change in Profitability

Response	Number	Percentage
Increased	4	8%
No major change	8	16%
Decreased	38	76%
Total	50	100%

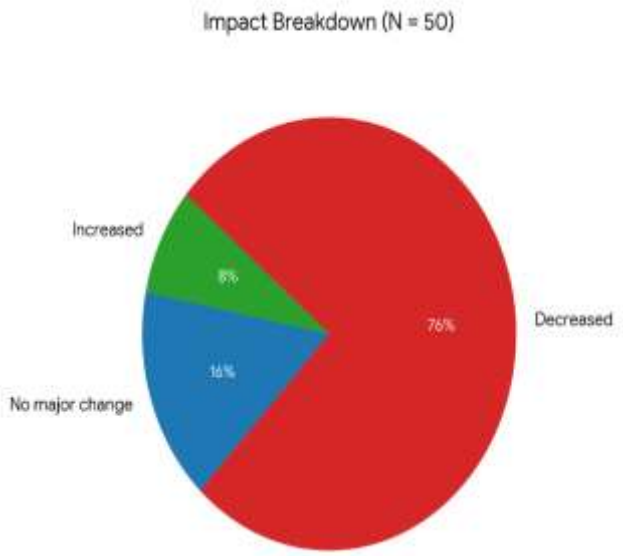


Table 5: Intention to Continue Traditional Carpentry

Response	Number	Percentage
Definitely continue	8	16%
Probably continue	10	20%
Not sure	9	18%
Probably discontinue	13	26%
Definitely discontinue	10	20%
Total	50	100%

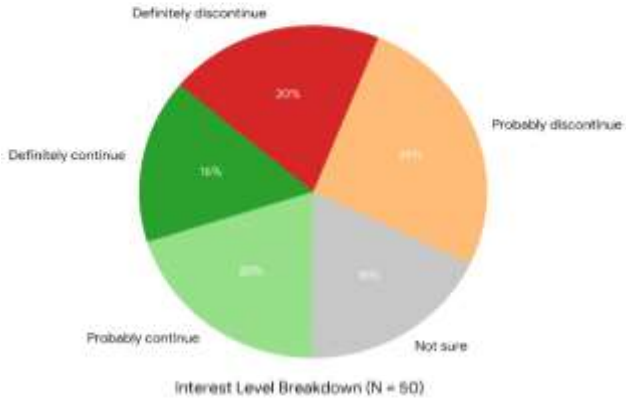


Table 6: Interest of Younger Generation in Carpentry

Response	Number	Percentage
Highly interested	5	10%
Interested	8	16%
Neutral	7	14%
Less interested	15	30%
Not interested	15	30%
Total	50	100%

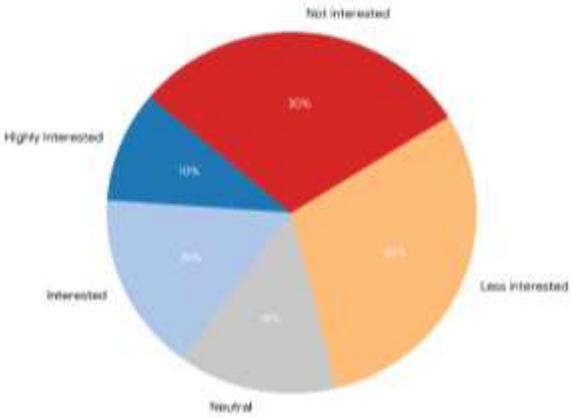


Table 7: Willingness to Shift to an Alternative Occupation

Response	Number	Percentage
Yes	30	60%
No	15	30%
Undecided	5	10%
Total	**50**	**100%**

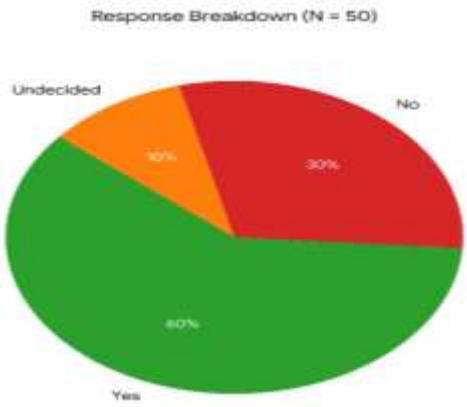
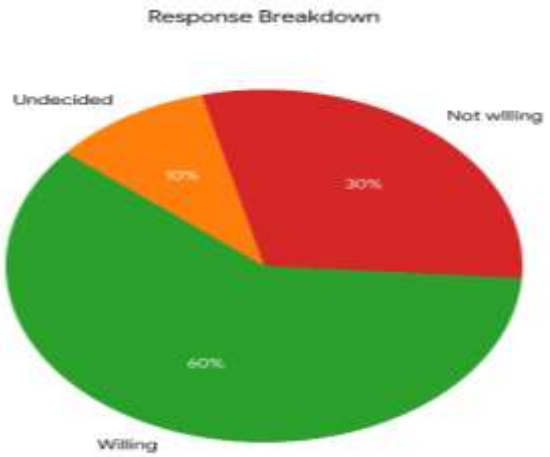


Table 8: Willingness to Migrate to Urban Areas

Response	Number	Percentage
Willing	30	60%
Not willing	15	30%
Undecided	5	10%
Total	**50**	**100%**



9. Statistical Analysis:

The relationship between economic factors and occupational decisions will be tested using the **Chi-square test**.

For example:

Variable 1: Impact of increasing material costs

Variable 2: Intention to discontinue traditional carpentry

The Chi-square test can determine whether the observed relationship is statistically significant.

Similarly, the relationship between:

- profitability and continuation of occupation;
- age and willingness to continue;
- economic difficulty and migration intention;

can be examined.

The final statistical interpretation will be added after the actual responses of the 50 respondents are entered into the dataset.

10. Expected Major Findings:

Based on the research questions, the study is expected to examine whether:

1. Increasing raw-material prices have reduced the profitability of traditional carpentry.
2. Competition from ready-made and machine-produced furniture has affected traditional carpentry businesses.
3. Changing consumer preferences have reduced demand for certain traditional carpentry products.
4. Younger members of carpenter families show lower interest in continuing the hereditary occupation.
5. Economic uncertainty encourages some carpenters to consider alternative employment.

6. Urban employment opportunities may become an attractive alternative for rural carpenters.
7. The traditional occupation may gradually transform from a hereditary livelihood into a secondary or supplementary occupation.

11. Suggestions:

- **Affordable Raw Materials**
  Government agencies and cooperative institutions should explore mechanisms through which traditional carpenters can obtain timber and other essential materials at reasonable prices.
- **Skill Development**
  Training programmes should introduce carpenters to modern furniture design, modular furniture, digital design and advanced woodworking techniques.
- **Technology Upgradation**
  Access to modern tools and machinery can improve productivity and reduce production costs while retaining traditional craftsmanship.
- **Market Linkages**
  Carpenters should be connected with online marketplaces, local exhibitions, tourism-related markets and institutional buyers.
- **Financial Assistance**
  Affordable credit and suitable government schemes can help carpenters modernise their businesses without abandoning their traditional occupation.
- **Youth Engagement**
  Special programmes should encourage younger members of carpenter families to combine traditional craftsmanship with modern entrepreneurial skills.
- **Rural Employment Opportunities**
  Development of rural furniture clusters and artisan cooperatives could create local employment and reduce the need for migration.

12. Conclusion:

The case of the carpenter community in Khed Taluka is particularly relevant because it reflects the broader challenge faced by traditional occupational groups: how to preserve inherited skills while adapting to changing economic realities. If traditional carpentry remains economically unviable, younger members of the community may increasingly prefer alternative occupations and urban employment. Therefore, preserving traditional carpentry should not mean resisting economic change. Instead, policies should focus on **modernising traditional skills, reducing production costs, improving market access and creating sustainable entrepreneurial opportunities**. Such measures could enable the carpenter community to adapt to economic change without completely abandoning its traditional occupation.

13. References:

1. **Deshpande, S., & Palshikar, S.** (2008). Occupational Mobility and Caste in Rural India: A Micro-Level Analysis. Economic and Political Weekly, 43(35), 61–70.
2. **Gadgil, M., & Guha, R.** (1992). This Fissured Land: An Ecological History of India. University of California Press. .
3. **Government of India.** (2020). Annual Report: Ministry of Micro, Small and Medium Enterprises (MSME). New Delhi: Government of India.
4. **Kulkarni, A. R.** (1991). Rural Society and Economy in Maharashtra. Pune: Diamond Publications.
5. **Ministry of Skill Development and Entrepreneurship (MSDE).** (2023). Pradhan Mantri Vishwakarma Yojana: Scheme Guidelines for Traditional Artisans and Craftspeople. Government of India.
6. **NSSO.** (2019). Key Indicators of Household Expenditure on Services and Durable Goods in India (75th Round). National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
7. Ministry of Micro, Small and Medium Enterprises (MoMSME) Official Portal
8. Ministry of Statistics and Programme Implementation (MoSPI)
9. Economic and Political Weekly (EPW) Article Page

Between Choice and Belonging: Existential Dilemmas and the Search for Self in Anuja Chauhan's Fiction

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The novels of Anuja Chauhan have a blend of humor, love, popular culture, as well as gender issues, identity, politics, family, and the individual's power to act. Where earlier criticism of her novels has been conducted through a framework that is feminist and socio-cultural in nature, this paper will build on an existential-feminist approach to Chauhan's novel The Zoya Factor to explore other four novels by the author: The Zoya Factor (2008), Battle for Bittora (2010), Those Pricey Thakur Girls (2013), and The House That BJ Built (2015). It suggests that they all practice situated existential freedom, which is the freedom of redefining one's self within the framework of the familial, cultural, gender, political and economic systems. Zoya struggles with an assigned identity; Jinni struggles with the issues of autonomy and belonging; the Thakur sisters struggle with their self within the familial confines; and Bonu struggles with the issues of professional autonomy and familial responsibility. In essence, the study shows that there is a common trend in the writings of Chauhan, from being defined, to choosing, to belonging, to responsibility.

Keywords: Anuja Chauhan, existentialism, existential feminism, Simone de Beauvoir, Jean-Paul Sartre, freedom, choice, identity, belonging, responsibility, female agency, Indian English fiction

Introduction:

Anuja Chauhan's fictional work is a blend of humor, romance, popular culture, and issues related to gender, identity, family, politics, and individual empowerment. Despite considerable scholarly engagement with Anuja Chauhan's novels from a feminist and socio-cultural point of view, there has been very little scholarship on the existential aspects of her works.

This paper builds upon the authors' previous research on the existential and feminist dimensions of The Zoya Factor, which explores freedom, choice, belongingness, and responsibility through an analysis of four novels: The Zoya Factor (2008), Battle for Bittora (2010), Those Pricey Thakur Girls (2013), and The House That BJ Built (2015).

Using Sartre's notions of freedom and responsibility and de Beauvoir's theories of situation, ambiguity, and otherness, it is proposed that Chauhan's characters practice "existential freedom in situation". They take decisions even as they remain influenced by their familial, cultural, gender, and social surroundings.

It is for this reason that there exists a constant trajectory in Chauhan's fiction, namely, "from definition to choice, from choice to belonging, and from belonging to responsibility". Thus, through this analysis, the popularity of Chauhan's fiction as an important site of existential selfhood in contemporary Indian women's writing becomes apparent.

2. Review of Literature

2.1 Chauhan and Popular Fiction

Chauhan's novels are characterized by a blend of romance, humor, and popular culture together with issues of gender, class, politics, and social change. Scholarship on Battle for Bittora and Those Pricey Thakur Girls* pays attention to the issues of gender, language, class, politics, and Indian popular culture (Kazmi).

2.2 Feminism and Female Agency

Existing scholarship mostly analyzes Chauhan's women from the perspective of feminism, addressing gender inequalities, empowerment, occupational identity, and female agency. Contemporary research on The House That BJ Built especially stresses women's financial independence and property.

2.3 The Author's Earlier Existential-Feminist Study

Previous research by the authors, titled "Beyond Mascots and Men: Reclaiming Identity through Existential Feminism in The Zoya Factor" (2025), explored the identity conflicts of Zoya Solanki under the existential feminist philosophy of Beauvoir. The current study draws on previous research but goes beyond one book and one character.

2.4 Research Gap

Despite the extensive research done on the works of Chauhan using feminist, gender, and socio-cultural perspectives, there is a lack of comparative existential research. The current study will explore the freedom, choices, belongingness and responsibility of the characters in four novels of Chauhan**.** Sartre believes that people are responsible for defining their identities through choices. Concepts of freedom, choice and responsibility by Sartre can be used to analyze the response of Chauhan's characters towards the identities and situations imposed on them.

3. Theoretical Framework

3.1 Sartre: Freedom, Choice and Responsibility

Sartre believes that people are responsible for defining their identities through choices. Concepts of freedom, choice and responsibility by Sartre can be used to analyze the response of Chauhan's characters towards the identities and situations imposed on them.

3.2 Beauvoir: Situated Freedom

Beauvoir argues that freedom is always 'situated' in a social, historical, gendered, and economic context. Concepts of 'Otherness, ambiguity and situation' by Beauvoir can be used to understand how Chauhan's characters strive to attain freedom but remain attached to their families and society at the same time.

3.3 Application to Chauhan

Combination of the two theoretical perspectives offers an insight into how Chauhan's characters deal with issues of selfhood, freedom, belonging and responsibility. This research maintains that the freedom of Chauhan's characters is not absolute and not non-existent, but 'it is situated in their life situations'.

4. Methodology

This research utilizes a qualitative and comparative textual analysis of four novels written by Anuja Chauhan such as The Zoya Factor (2008), Battle for Bittora (2010), Those Pricey Thakur Girls (2013), and The House That BJ Built (2015). A close reading approach will be employed to explore the recurrent themes of identity, freedom, choices, belonging and responsibility. The use of Sartrean and Beauvoirian existentialism will enable the researcher to analyze the characters' experience of agency in the family, cultural, and social context.

5. Analysis and Discussion

5.1 The Zoya Factor

Transformation of Zoya Solanki into the lucky charm of the Indian cricket team brings forth a conflict between externally constructed identity and self-identity. The transformation of Zoya Solanki shows the difficulty in regaining individual identity amidst social and cultural pressures. Whereas the previous research conducted by the authors on Zoya's identity reclamation was through existential feminism, this research focuses on the responsibility that accompanies freedom.

5.2 Battle For Bittora

The character Jinni Pande has a contradiction in living an independent life in the city and her political and family connection to Bittora. She has to reassess her connection with her past and her community because of her coming back. It shows how an individual's freedom and independence can always be affected by historical and social realities.

5.3 Those Pricey Thakur Girls

The Thakur sisters struggle to balance their own ambitions within the framework of a traditional and respected family setup. These instances illustrate how there exist conflicts between individual identity and family expectations. Instead of viewing family and individuality as polar opposites,

Chauhan demonstrates how the characters endeavor to form their identities amidst their family connections.

5.4 The House That BJ Built

Ambitions and connection to Bonu's inheritance lead to contradiction between her independence and inheritance responsibilities. Entrepreneurship of Bonu is the symbol of her independence, and the house is the element which represents the family heritage and responsibilities. Therefore, freedom in this novel means not liberation from responsibilities, but the acquisition of new opportunities and responsibilities.

6**. From Reclamation to Responsibility: A Comparative Framework**

The four novels can be placed along a conceptual trajectory.

Novel	**Central conflict**	**Existential question**
The Zoya Factor	Imposed identity vs self-definition	Who am I?
Battle for Bittora	Autonomy vs belonging	Where do I belong?
Those Pricey Thakur Girls	Individuality vs family structure	Can I remain myself within belonging?
The House That BJ Built	Independence vs inherited responsibility	What do I do with my freedom?

The existential dilemma depicted by Chauhan in her fiction does not remain static.

It changes.

Identity: Stage 1-Zoya must be allowed to reclaim the ability to define her identity.

Choice: Stage 2-Jinni must make a decision on how she can move through the various elements of her life.

Belonging: Stage 3-Thakur sisters demonstrate that individual identity is connected to kinship.

Responsibility: Stage 4-Bonu demonstrates that freedom creates responsibility.

Therefore, the process can be summarized as:

Being defined → choice → belonging → taking up responsibilities.

In other words, it is an elaboration of the existential-feminist argument made by the author.

7. The Existential Meaning of Belonging

It is also important to mention that belonging and freedom are not viewed as opposites by Chauhan. On many occasions, her characters accept the very relations that hinder their freedom of choice.

This is another paradox because people try to liberate themselves from those very structures through which they sense belonging. According to Beauvoir, such an idea can be considered as ambiguity. Human beings are never truly free; rather, they are formed in some sort of context. In other words, being human does not mean being autonomous. It is about being able to negotiate one's relations and circumstances. In relation to the Indian family structure, characters of Chauhan can be considered as examples of relational existentialism.

8. **Gender and Situated Freedom**

The question of gender plays a significant role in the existential problems that arise in the context of Chauhan's works, as the characters face certain expectations in regard to their personal life, marriages, family, looks, careers and household chores. However, one should not perceive gender just as oppression. It is essential to pay attention to the concept of 'situated freedom', which is used as the theoretical framework to demonstrate how gender is a part of a particular situation in which people find themselves. This means that the heroines of Chauhan operate in the context of agency through constraint, reacting to gender roles.

9. Humour, Romance and Existential Ambiguity

Humour and romance are used uniquely by Chauhan to discuss issues pertaining to existence. Though she does not get rid of the sensation of unease, the nature of her humour is altered. The Zoya Factor deals with the ludicrous identity of Zoya in the context of superstition; Battle for Bittora deals

with politics and romance; Those Pricey Thakur Girls deal with social expectations in terms of family humour; and The House That BJ Built deals with inheritance and family rivalry in terms of an interesting narrative. Thus, the humour employed by Chauhan can be said to be 'comic existentialism'.

10. Romance and Authenticity

For Chauhan, romance exceeds the normative purpose of the narrative, becoming rather the source of the existential problem. The love must be negotiated alongside profession and family, identity and status. In order for the relation to be sincere, according to Beauvoir, the notion of freedom should be known by both of them. This is due to the fact that romance includes freedom and relation.

11. From Female Agency to Existential Agency

While female agency is about the capacity of the women to exercise actions in the socio-patriarchal constructs, existential agency is about the manner by which people make use of their freedom and take responsibility for their actions.

It may be observed in the stories written by Chauhan that while freedom is what sets the characters free from their troubles, it does not mark the end of their sufferings. From freedom arises choice; from choice come consequences; from consequence follows responsibility.

12. Model of Situated Existential Freedom

The comparative analysis reveals four steps:

Situation → Possibility → Choice → Responsibility

They are put in a situation that resembles that of the family, gender, class, history, and social pressure, but simultaneously, they also have their possibilities for self-definition and professional growth. Hence, freedom is not an absolute and finite concept.

Conclusion

In this paper, the difficulties faced by characters in four novels written by Anuja Chauhan have been discussed. They are The Zoya Factor, Battle for Bittora, Those Pricey Thakur Girls, and The House That BJ Built. It continues from the previous research of the authors on the existentialism-feminism in The Zoya Factor to investigate the wider issues of freedom, choice, belongingness, and responsibility.

The characters in these novels have the desire to realize themselves and belong somewhere. Zoya breaks free from the imposed identity, Jinni manages to maintain autonomy and sense of community, the Thakur sisters have found their place amidst the conflict between the desire for individuality and the needs of the family, and Bonu understands that being independent requires responsibility.

So, the study reveals the pattern:

Identity → Choice → Belongingness → Responsibility

The characters in the fiction of Chauhan possess situational existential freedom since they make their choices within situations that are not their fault and still sustain connections in terms of social relationships. Therefore, the fiction of Chauhan does not just present the theme of the empowerment of women; on the contrary, she presents self as a constant balancing of freedom and connection. Lastly, according to Chauhan, to be oneself means not isolation from society, but a continuous process of making choices and their consequences.

References

1. Beauvoir, Simone de. *The Ethics of Ambiguity*. Translated by Bernard Frechtman, Citadel Press, 1948.
2. Beauvoir, Simone de. *The Second Sex*. Translated by Constance Borde and Sheila Malovany-Chevallier, Vintage, 2011.
3. Chauhan, Anuja. *The House That BJ Built*. Westland, 2015.
4. Chauhan, Anuja. *The Zoya Factor*. HarperCollins India, 2008.
5. Chauhan, Anuja. *Battle for Bittora*. HarperCollins India, 2010.
6. Chauhan, Anuja. *Those Pricey Thakur Girls*. HarperCollins India, 2013.
7. Chauhan, Anuja. *Baaz*. Westland, 2017.
8. Chauhan, Anuja. *Club You To Death*. HarperCollins India, 2021.
9. Kazmi, Zehra. "The Representation of Popular Culture in Anuja Chauhan's *Battle for Bittora* and *Those Pricey Thakur Girls*." *Jabberwock*, Department of English, Lady Shri Ram College for Women, 2016.

10. Kulkarni, Vibhati Vasantrao, and Smita Gautam Kundalwikar. "Chronicles of the Present: A Critical Exploration of Contemporaneity in *Those Pricey Thakur Girls* by Anuja Chauhan." *TIJER*, vol. 10, no. 12, 2023.
11. Lad, Ashwini, and Anshu Sharma. "Beyond Mascots and Men: Reclaiming Identity through Existential Feminism in *The Zoya Factor*." *Archives: Global Dimensions of Multidisciplinary Research*, 2025, pp. 7–11. https://doi.org/10.25215/9371837764.02.
12. Patel, Asif Ishak. "Role of Gender Inequality and Feminist Concerns in the Works of Anuja Chauhan." *Aayushi International Interdisciplinary Research Journal*, Special Issue 146, 2025.
13. Sartre, Jean-Paul. *Being and Nothingness*. Translated by Hazel E. Barnes, Washington Square Press, 1992.
14. Sartre, Jean-Paul. *Existentialism Is a Humanism*. Translated by Carol Macomber, Yale University Press, 2007.

Authorial Disclosure

This paper represents a significant expansion of the work done by the same authors previously entitled "Beyond Mascots and Men: Reclaiming Identity through Existential Feminism in The Zoya Factor" (2025). While the previous paper dealt only with The Zoya Factor and the process of Zoya Solanki reclaiming her identity using existential feminism, this paper includes four novels in its corpus and builds an argument based on the notions of situated freedom, existential freedom, belonging and responsibility. No argument put forth is claimed to be entirely new, and in the case that it stems from the previous research, the latter is explicitly cited as its base.

From Oppression to Resistance: Voices from the Margins—A Critical Study of Caste, Trauma, Identity and Social Justice in Selected Indian Dalit Literature

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Abstract

Dalit literature has emerged as one of the most powerful literary movements in modern India, giving voice to communities that have historically experienced caste-based discrimination, social exclusion, and institutional oppression. Unlike conventional literary traditions that often overlook marginalized experiences, Dalit writing foregrounds the lived realities of humiliation, exploitation, resistance, and the enduring struggle for dignity. The present study, "From Oppression to Resistance: Voices from the Margins—A Critical Study of Caste, Trauma, Identity, and Social Justice in Selected Indian Dalit Literature," examines how selected Dalit texts transform personal suffering into collective resistance and challenge the hegemonic structures of caste, power, and social inequality.The study explores the interconnected themes of caste oppression, trauma, identity formation, and the pursuit of social justice through the lens of Dalit literary discourse. It argues that Dalit literature is not merely a representation of suffering but a transformative literary and political intervention that exposes the violence of the caste system while asserting the humanity, agency, and dignity of marginalized communities. By narrating experiences of exclusion, untouchability, economic exploitation, and cultural erasure, Dalit writers resist dominant historical narratives and reconstruct alternative histories rooted in lived experience and collective memory.

This research adopts an interdisciplinary critical framework by drawing upon Dalit Studies, Subaltern Studies, Postcolonial Theory, Trauma Studies, and Social Justice discourse. The study offers close textual analysis of selected works by major Dalit writers, including B. R. Ambedkar's Annihilation of Caste, Omprakash Valmiki's Joothan, Bama's Karukku, Sharan Kumar Limbale's Akkarmashi (The Outcaste), and Daya Pawar's Baluta. These texts collectively reveal the persistence of caste hierarchies while simultaneously demonstrating the emergence of resistance through education, self-representation, memory, and political consciousness. The research further investigates how autobiography, memoir, and social critique become literary strategies for reclaiming identity and challenging dominant ideological structures.Furthermore, the paper highlights the significance of voice and memory in constructing Dalit identity. It examines how individual narratives of pain evolve into collective expressions of resistance, thereby transforming literature into a powerful instrument for social awareness and democratic change. The study contends that Dalit literature extends beyond aesthetic expression by functioning as an ethical and political discourse that demands equality, justice, and human rights. It redefines the relationship between literature and society by placing marginalized experiences at the center of literary criticism and cultural studies.

Keywords*:* Dalit Literature; Caste Oppression; Social Justice; Identity; Trauma; Resistance; Marginalization; Subaltern Studies**.**

Introduction

Dalit literature occupies a significant position in contemporary Indian literary discourse as a powerful medium of social critique, cultural resistance, and political assertion. Emerging from the lived experiences of communities historically subjected to caste-based discrimination and untouchability, Dalit writing challenges the ideological foundations of the caste system and exposes the structural inequalities embedded within Indian society. Unlike mainstream literary traditions that often marginalized or silenced the voices of the oppressed, Dalit literature foregrounds the experiences of exclusion, humiliation, exploitation, and resilience, transforming personal narratives into collective

testimonies of resistance. It is, therefore, not merely a literary movement but an emancipatory discourse that seeks to redefine the relationship between literature, history, and social justice.The caste system, deeply rooted in the socio-cultural fabric of India, has historically institutionalized hierarchies based on birth, restricting access to education, economic opportunities, religious spaces, and social mobility. For centuries, Dalit communities endured systematic oppression through practices of untouchability, segregation, forced labour, and cultural exclusion. While constitutional safeguards and social reform movements have challenged these practices, caste-based discrimination continues to influence contemporary social, political, and economic realities. Against this backdrop, Dalit literature emerged as a transformative intellectual movement that not only documents the lived realities of marginalization but also interrogates the structures of power responsible for sustaining social inequality.

The present study, "From Oppression to Resistance: Voices from the Margins—A Critical Study of Caste, Trauma, Identity, and Social Justice in Selected Indian Dalit Literature," examines the complex relationship between caste, identity, trauma, and resistance in selected Dalit texts. It argues that Dalit literature transcends the representation of suffering by constructing a counter-discourse that reclaims agency, dignity, and selfhood. Through autobiographies, memoirs, essays, and narratives, Dalit writers challenge dominant historical and cultural narratives while asserting the legitimacy of marginalized voices. Their writings reveal how memory and lived experience become powerful tools for resisting oppression and reconstructing identity.This study draws upon interdisciplinary theoretical perspectives, including Dalit Studies, Postcolonial Theory, Subaltern Studies, Trauma Studies, and Social Justice discourse, to analyse the selected texts. These critical frameworks facilitate a deeper understanding of how caste operates as a system of social exclusion and how literature functions as a site of resistance against institutionalized injustice. The research focuses on influential works such as B. R. Ambedkar's Annihilation of Caste, Omprakash Valmiki's Joothan, Bama's Karukku, Sharan Kumar Limbale's Akkarmashi (The Outcaste), and Daya Pawar's Baluta. These texts collectively illuminate the realities of caste oppression while articulating the transformative possibilities of education, self-representation and collective consciousness.It investigates how individual experiences of discrimination are transformed into collective narratives that expose systemic injustice and inspire social change. The study also emphasizes that Dalit literature is fundamentally concerned with human dignity, equality, and democratic values rather than merely documenting victimhood. By interrogating dominant ideologies and advocating social transformation, Dalit writers contribute to a broader discourse on human rights and inclusive citizenship.By tracing the journey from oppression to resistance, it highlights the resilience of marginalized communities and the enduring power of literature to challenge injustice, recover silenced histories, and imagine a more equitable and humane society. Through its critical engagement with caste, trauma, identity, and social justice, this research contributes to the growing body of scholarship that recognizes Dalit literature as an essential site of intellectual inquiry, ethical reflection, and social transformation.

Literature Review

Kumar (2024), in the article "From Silence to Speech: Transformation of the Dalit Subject in Post-Independence Indian Literature," argues that Dalit literature has transformed marginalized communities from passive victims into active agents of resistance. Through an analysis of works such as Joothan, Karukku, and The Outcaste, the study demonstrates how Dalit autobiographies challenge caste hierarchies and reclaim identity through self-representation. Kumar contends that these narratives reject the silence imposed by the caste system and establish a new literary voice rooted in dignity, equality, and social justice. The article further emphasizes that Dalit literature functions not only as a literary movement but also as a socio-political intervention that questions dominant ideologies and advocates democratic values.

Vyas (2020), in "A Cultural Psychological Reading of Dalit Literature: A Case Study of Joothan by Omprakash Valmiki," examines Joothan through the perspective of cultural psychology. The study explores how caste discrimination influences an individual's psychological development, identity

formation, and social relationships. Vyas argues that Valmiki's autobiography illustrates the emotional trauma, humiliation, and alienation experienced by Dalits while simultaneously highlighting education as a means of empowerment and liberation. The article concludes that autobiography serves as an effective medium for negotiating identity and resisting caste-based oppression.

Sabu (2023), in "Dalit Literature and Social Injustice: Unveiling the Injustices Faced by Dalits in Joothan," analyses the representation of caste discrimination, untouchability, educational exclusion, and economic exploitation in Omprakash Valmiki's autobiography. The study argues that Joothan reflects the harsh realities of everyday Dalit life and exposes the structural inequalities embedded in Indian society. Sabu further maintains that the text is not simply an autobiographical account but a collective testimony that represents the experiences of an entire marginalized community. The article highlights the significance of literature in creating awareness about social injustice and promoting equality and human dignity.

Mondal (2019), in "Voices of Dalit Literature Through Self Narration," examines major Dalit autobiographies, including Joothan, Karukku, and Akkarmashi. The study argues that Dalit autobiographies differ significantly from conventional life writing because they transform personal experiences into collective histories of caste oppression and social exclusion. According to Mondal, self-narration becomes an act of resistance that preserves memory, reconstructs identity, and challenges dominant historical narratives. The article concludes that autobiographical writing is one of the most powerful literary forms through which Dalit writers reclaim agency and assert their cultural identity.

Prabha (2025), in "Dalit Autobiography as a Literary Genre: Asserting Identity and Reclaiming Narrative Space in the Works of Omprakash Valmiki and Bama," examines Dalit autobiography as a distinct literary genre that challenges mainstream literary traditions. Through a comparative study of Joothan and Karukku, the article explores themes of caste oppression, gender discrimination, religion, identity, and social resistance. Prabha argues that these autobiographies reclaim narrative space for marginalized communities by presenting authentic lived experiences rather than idealized social realities. The study concludes that Dalit autobiographies have significantly expanded the scope of Indian literature by foregrounding voices historically excluded from literary discourse.

Kanak Kshitij (2025), in "Narrating Dalit Identity and Social Justice: A Critical Analysis of Omprakash Valmiki's Joothan," interprets Joothan as one of the foundational texts of modern Dalit literature. Using the theoretical perspectives of Dalit Studies and Subaltern Studies, the paper examines how Valmiki critiques caste hierarchy, social exclusion, and institutional discrimination. The study argues that education, self-respect, and collective consciousness become important instruments of resistance against caste oppression. It concludes that Joothan continues to be a significant text for understanding Dalit identity, human rights, and the ongoing struggle for social justice in contemporary India.Although existing scholarship has extensively examined individual texts such as Joothan, Karukku, and Akkarmashi, relatively few studies provide a comprehensive comparative analysis of caste, trauma, identity, resistance, and social justice across multiple canonical Dalit texts. Most previous research concentrates on a single author or autobiography, thereby limiting a broader understanding of the collective evolution of Dalit consciousness. The present study addresses this gap by comparatively analysing selected works of B. R. Ambedkar, Omprakash Valmiki, Bama, Sharan Kumar Limbale, and Daya Pawar. It seeks to demonstrate how these texts collectively transform narratives of oppression into powerful discourses of resistance, identity formation and social emancipation while contributing to contemporary debates on equality, democracy and human rights.

I. Annihilation of Caste: A Critical Analysis of Caste, Oppression, and Social Justice remains one of the most influential and revolutionary texts in the history of modern India. Originally written as a presidential address for the Jat-Pat Todak Mandal in 1936, the speech was never delivered because of its uncompromising criticism of the Hindu caste system. Ambedkar later published it independently, transforming it into a foundational text of Dalit consciousness and one of the most significant works

advocating equality, liberty, and social justice. Unlike reformist approaches that sought merely to improve the condition of the lower castes, Ambedkar argued that the caste system itself was inherently oppressive and had to be completely dismantled. The text therefore serves as both a philosophical critique of caste and a manifesto for democratic transformation.At the centre of Annihilation of Caste lies Ambedkar's assertion that caste is not simply a social institution but a system of graded inequality that legitimizes discrimination, exclusion, and exploitation. He contends that the caste system destroys the principles of fraternity and equality by dividing society into rigid hierarchical groups based on birth rather than merit or humanity. Through logical reasoning, historical evidence, and sociological analysis, Ambedkar demonstrates that caste is sustained through religious authority, social customs, and institutional practices. Consequently, he rejects superficial reforms and argues that genuine social justice can only be achieved through the complete annihilation of caste.

The text also foregrounds the psychological and social trauma experienced by Dalit communities. Ambedkar illustrates how untouchability and caste discrimination deprive individuals of dignity, education, economic opportunities, and political participation. This systematic exclusion creates a culture of fear, humiliation, and alienation that extends across generations. Rather than portraying Dalits as passive victims, however, Ambedkar emphasizes the importance of self-respect, education, and political consciousness as instruments of liberation. His famous call to "Educate, Agitate, and Organize" reflects his belief that resistance begins with intellectual awakening and collective action.Another significant aspect of the text is its reconstruction of Dalit identity. Ambedkar challenges the dominant narratives that define Dalits through notions of impurity and inferiority. Instead, he argues that every individual possesses inherent dignity and equal human worth regardless of caste. By exposing the ideological foundations of caste oppression, he encourages marginalized communities to reject imposed identities and reclaim their agency. Thus, Annihilation of Caste becomes not only a critique of social hierarchy but also a powerful assertion of human rights and democratic citizenship.

From the perspective of social justice, Ambedkar envisions a society founded on the constitutional principles of liberty, equality, and fraternity. He argues that political democracy cannot survive without social democracy, as legal equality remains ineffective in the presence of entrenched caste discrimination. His critique extends beyond religion and tradition to examine the economic, educational, and political dimensions of inequality. Consequently, the text advocates structural transformation rather than symbolic reform, making it highly relevant to contemporary debates on caste, social exclusion, and human rights.In the context of the present research, Annihilation of Caste provides the theoretical and ideological foundation for understanding the transition from oppression to resistance in Indian Dalit literature. Ambedkar's arguments profoundly influenced later Dalit writers such as Omprakash Valmiki, Bama, Sharan Kumar Limbale, and Daya Pawar, whose literary works transform lived experiences of caste discrimination into narratives of resistance and self-assertion. Therefore, Annihilation of Caste should be understood not merely as a political text but as a landmark literary and intellectual intervention that continues to inspire struggles for equality, dignity, and social justice in contemporary India.

II. Joothan: A Critical Analysis of Caste, Trauma, Identity, and Resistance is one of the most significant autobiographical works in Indian Dalit literature. First published in Hindi in 1997 and later translated into English by Arun Prabha Mukherjee, the autobiography presents a powerful account of caste-based discrimination, humiliation, and the struggle for dignity experienced by the author. Unlike conventional autobiographies that celebrate personal achievements, Joothan documents the collective suffering of the Dalit community and exposes the deeply entrenched realities of untouchability in Indian society. Through his personal experiences, Omprakash Valmiki transforms autobiography into a political and literary act of resistance, making Joothan a landmark text in Dalit Studies.The title Joothan, meaning leftover food discarded by upper-caste households, symbolizes the dehumanizing conditions imposed upon Dalits within the caste hierarchy. Valmiki recalls how his family was forced to survive on leftovers collected from upper-caste families, an experience that becomes a metaphor

for centuries of social exclusion and economic exploitation. This recurring image illustrates not only material deprivation but also the denial of dignity and humanity. By foregrounding such lived experiences, the autobiography exposes the everyday violence of caste and challenges the normalization of discrimination in Indian society.

One of the central themes of Joothan is the psychological trauma produced by caste oppression. Valmiki vividly narrates incidents of humiliation during his childhood, particularly within educational institutions where he was subjected to verbal abuse, segregation, and forced labour because of his caste identity. The school, which should have functioned as a space of learning and equality, instead became a site of exclusion and discrimination. These experiences reveal that caste-based violence extends beyond physical oppression and profoundly affects an individual's self-esteem, identity, and sense of belonging. The narrative demonstrates how trauma becomes an enduring psychological reality that shapes the lives of marginalized communities across generations.The autobiography also explores the complex process of identity formation. Throughout the text, Valmiki refuses to accept the identity imposed upon him by the caste system and instead constructs a new sense of self based on dignity, education, and self-respect. Education emerges as a transformative force that enables him to challenge oppressive social structures and question the ideological foundations of caste hierarchy. Influenced by the emancipatory philosophy of , Valmiki portrays knowledge and critical consciousness as essential instruments for achieving social equality and human liberation.

Resistance occupies a central position in Joothan. Rather than portraying Dalits merely as passive victims, the autobiography emphasizes their resilience, determination, and collective struggle against injustice. Valmiki's decision to narrate his experiences itself constitutes an act of resistance, as it challenges dominant historical narratives that have traditionally silenced marginalized voices. Through autobiographical testimony, he reclaims narrative authority and transforms individual suffering into a collective demand for justice, equality, and democratic inclusion. In this sense, Joothan functions not only as a literary text but also as a social document that questions the moral legitimacy of caste-based oppression.Joothan contributes significantly to the discourse of social justice by exposing the structural inequalities embedded within Indian society. It demonstrates that caste discrimination is not an isolated personal experience but a systemic form of oppression sustained by social, cultural, and institutional practices. The autobiography calls for the dismantling of these structures through education, constitutional values, and collective social action. It reinforces the ideals of equality, liberty, and fraternity while advocating the recognition of Dalit voices within the broader framework of Indian democracy.In the context of the present research, Joothan serves as a powerful representation of the journey from oppression to resistance. It illustrates how personal memory becomes collective history and how autobiographical writing transforms lived experiences into a discourse of identity, dignity, and social justice. By giving voice to those historically excluded from mainstream literary traditions, Omprakash Valmiki establishes Joothan as one of the most influential texts in Indian Dalit literature, offering a compelling critique of caste while envisioning a more just and egalitarian society.

III. Karukku: A Critical Analysis of Caste, Gender, Identity, and Resistance is one of the pioneering autobiographical works in Indian Dalit literature and a landmark text in Dalit feminist writing. Originally published in Tamil in 1992 and later translated into English by Lakshmi Holmström, Karukku narrates the lived experiences of Bama, a Dalit Christian woman who confronts the intersecting realities of caste, gender, religion, and social exclusion. The title Karukku, referring to the double-edged serrated leaves of the palmyra tree, symbolizes both pain and resilience. Just as the leaves possess sharp edges on both sides, Bama's narrative reflects the dual experience of suffering and empowerment. The autobiography challenges dominant social structures while affirming the dignity and agency of Dalit women, making it a significant contribution to contemporary Indian literature.A central concern of Karukku is the persistence of caste discrimination despite the promise of religious equality. Bama exposes the contradiction between Christian teachings of love and equality and the continued practice of caste hierarchy within Christian institutions. Through vivid descriptions

of everyday humiliation, segregation, and exclusion, she demonstrates that conversion to Christianity did not eradicate caste prejudice. Instead, caste continued to shape educational institutions, workplaces, and religious communities. By revealing these contradictions, Karukku challenges both social and religious institutions that perpetuate discrimination while claiming to uphold justice and compassion.

The autobiography also foregrounds the intersection of caste and gender. Unlike many earlier Dalit narratives that primarily focus on caste oppression, Bama examines the specific challenges faced by Dalit women who experience discrimination on multiple levels. She portrays women as victims of caste-based exploitation, patriarchal domination, economic hardship, and social marginalization. Through the depiction of domestic labour, unequal opportunities, and gendered violence, Bama illustrates how Dalit women endure a double burden of oppression. Her narrative thus broadens the scope of Dalit literature by integrating feminist concerns with the discourse of caste and social justice.Identity formation constitutes another significant theme in Karukku. Throughout the autobiography, Bama struggles to reconcile her Dalit identity with her religious beliefs and personal aspirations. Rather than accepting the identities imposed upon her by caste and patriarchal society, she gradually develops a sense of self grounded in education, critical awareness, and community solidarity. Her decision to leave the convent symbolizes a rejection of institutional hypocrisy and marks the beginning of her journey towards self-realization. In this process, identity becomes an act of resistance, enabling her to reclaim dignity and assert the humanity of marginalized communities.

Resistance in Karukku is expressed through education, self-expression, and collective consciousness. Bama presents writing as a political act that gives voice to experiences historically excluded from mainstream literary discourse. By documenting the realities of Dalit life, she transforms personal memory into collective testimony and challenges dominant narratives that normalize caste oppression. Her autobiography encourages marginalized communities to question oppressive traditions, pursue education, and assert their constitutional rights. The text therefore represents resistance not through violence but through intellectual awakening, self-respect, and social activism.From the perspective of social justice, Karukku advocates an inclusive society founded on equality, dignity, and human rights. Bama argues that meaningful social transformation requires the dismantling of both caste hierarchy and patriarchal structures. Her narrative calls for educational opportunities, gender equality, and the recognition of Dalit voices within national and literary discourses. The autobiography highlights the importance of democratic values and collective responsibility in creating a just society where every individual is treated with respect regardless of caste, class, or gender.In the context of the present research, Karukku represents a significant stage in the journey from oppression to resistance. It demonstrates how the intersections of caste, gender, and religion shape the experiences of Dalit women while simultaneously revealing their resilience and capacity for transformation. Through its powerful exploration of trauma, identity, and social justice, Bama's autobiography expands the horizons of Dalit literature and establishes itself as an enduring text of resistance, empowerment, and human dignity.

IV. Akkarmashi (The Outcaste): A Critical Analysis of Identity, Marginalization, and Resistance is one of the most influential autobiographical works in Indian Dalit literature. Originally published in Marathi in 1984 and later translated into English by Santosh Bhoomkar, the text presents a deeply moving account of caste oppression, social exclusion, and the crisis of identity experienced by the author. The title Akkarmashi, meaning "illegitimate" or "half-caste," symbolizes the social stigma attached to individuals born outside the rigid boundaries of caste and marriage. Through his autobiographical narrative, Limbale not only documents his personal experiences of discrimination but also exposes the structural inequalities embedded within Indian society. The text stands as a powerful testimony to the struggle for dignity, identity, and social justice, making it a foundational work in Dalit literature.The central concern of Akkarmashi is the fragmented identity of the narrator. Born to a Dalit mother and an upper-caste landlord father, Limbale occupies an ambiguous social position where he is rejected by both communities. This dual marginalization creates a profound

identity crisis that becomes the defining feature of his life. Throughout the autobiography, the author struggles with questions of belonging, legitimacy, and selfhood. His experiences reveal that caste is not merely a social classification but a system that determines one's humanity, opportunities, and place within society. Limbale's search for identity reflects the broader struggle of marginalized communities seeking recognition and equality in a deeply hierarchical social order.

Another significant theme of the autobiography is the pervasive nature of caste-based oppression and economic exploitation. Limbale vividly portrays the harsh realities of poverty, hunger, and deprivation that characterize Dalit life in rural India. The narrative illustrates how caste and economic inequality are inseparably connected, as marginalized communities are systematically denied access to land, education, employment, and basic human rights. Hunger emerges as a recurring symbol throughout the text, representing not only physical deprivation but also the denial of dignity, justice, and social inclusion. Through these experiences, Akkarmashi exposes the human consequences of structural discrimination and challenges the moral legitimacy of the caste system.The autobiography also explores the psychological trauma produced by social exclusion. Limbale's experiences of rejection, humiliation, and discrimination create deep emotional wounds that shape his understanding of himself and the world around him. However, rather than allowing trauma to define his existence, the author transforms his suffering into a powerful narrative of resistance. By recounting the realities of Dalit life with honesty and courage, he challenges dominant historical narratives that have ignored or distorted the experiences of marginalized communities. His act of writing itself becomes a form of resistance, reclaiming a voice that had long been silenced by social prejudice.

Education and self-awareness emerge as significant instruments of empowerment in Akkarmashi. Influenced by the emancipatory philosophy of , Limbale presents education as a means of challenging caste hierarchy and achieving social mobility. The autobiography emphasizes that liberation requires not only political and legal reforms but also intellectual awakening and collective consciousness. Through education, Dalits acquire the confidence to question oppressive traditions, assert their rights, and participate equally in democratic society. Consequently, the text highlights resistance as a continuous process of self-transformation and social activism rather than a single act of rebellion.From the perspective of social justice, Akkarmashi advocates a society founded upon equality, dignity, and constitutional values. Limbale argues that the persistence of caste discrimination undermines the principles of democracy and human rights. His narrative calls for the dismantling of social hierarchies that perpetuate inequality and demands recognition of the humanity of those historically pushed to the margins. The autobiography thus functions as both a literary work and a political intervention, exposing systemic injustice while inspiring collective resistance against oppression.In the context of the present research, Akkarmashi (The Outcaste) occupies a crucial place in understanding the transition from oppression to resistance within Indian Dalit literature. It demonstrates how the intersecting realities of caste, illegitimacy, poverty, and social exclusion shape individual identity while simultaneously fostering resilience and resistance. Through its exploration of trauma, identity, and social justice, the autobiography reinforces the central argument of this study that Dalit literature transforms personal suffering into collective consciousness and literary resistance. As a result, Akkarmashi remains one of the most compelling narratives of human dignity, equality, and emancipation in modern Indian literature.

V. Baluta: A Critical Analysis of Caste, Poverty, Urban Marginality, and Social Justice is widely regarded as one of the pioneering autobiographies of modern Dalit literature. Originally published in Marathi in 1978, the text marked a significant turning point in Indian literary history by bringing the lived experiences of Dalits into mainstream literary discourse. Through a candid and unflinching portrayal of poverty, caste discrimination, social exclusion, and human suffering, Daya Pawar exposes the harsh realities of Dalit life in both rural and urban India. Unlike traditional autobiographies that often celebrate personal success and achievement, *Baluta* presents a collective history of marginalization, giving voice to communities that have long remained invisible within dominant

social and literary narratives. As a result, the text occupies a central position in the development of Dalit consciousness and resistance literature.

The title *Baluta* itself carries deep socio-historical significance. Traditionally, "Baluta" referred to a feudal system in which members of lower castes provided hereditary services to village communities in exchange for a small share of agricultural produce. While appearing as an economic arrangement, the system reinforced caste hierarchy and institutionalized dependency and exploitation. By choosing this title, Pawar highlights the structural nature of caste oppression and demonstrates how social and economic inequalities are deeply intertwined. The text reveals that caste is not merely a cultural identity but a mechanism of power that shapes access to resources, opportunities, and human dignity.

One of the major themes of *Baluta* is poverty and deprivation. Pawar vividly depicts the daily struggles of Dalit communities who are forced to endure hunger, unemployment, inadequate housing, and social neglect. His descriptions of slum life, economic insecurity, and social exclusion expose the persistent inequalities that characterize modern Indian society. Unlike idealized representations of national progress, *Baluta* reveals the realities faced by those excluded from the benefits of development. Through these portrayals, the autobiography demonstrates how poverty is not simply an individual condition but a consequence of historical and structural discrimination rooted in caste hierarchy.

The autobiography also explores the psychological trauma generated by caste-based marginalization. Pawar narrates experiences of humiliation, rejection, and discrimination that profoundly affect an individual's sense of self-worth and belonging. The narrative illustrates how caste oppression operates not only through material deprivation but also through emotional and psychological violence. However, *Baluta* does not remain confined to narratives of suffering. Instead, it transforms trauma into a form of social critique by exposing the injustices embedded within Indian society. Through autobiographical testimony, Pawar challenges dominant narratives that ignore or minimize the experiences of marginalized communities.

Identity formation constitutes another important aspect of the text. Pawar reflects upon his journey from social marginalization to political and intellectual awareness. Influenced by the ideas of and the Dalit movement, he develops a critical understanding of caste and its role in perpetuating inequality. This awareness enables him to resist imposed identities and assert his dignity as a human being. The autobiography thus portrays identity as a dynamic process shaped by memory, experience, and collective consciousness. Through self-representation, Pawar reclaims a voice historically denied to Dalits and contributes to the broader project of social emancipation.

Resistance in *Baluta* emerges through memory, narration, and social awareness. By documenting the realities of Dalit life, Pawar transforms personal experience into collective history and creates a counter-narrative to dominant representations of Indian society. His writing challenges caste prejudice, exposes systemic injustice and calls for social transformation. The autobiography emphasizes that meaningful change requires both individual empowerment and collective action. In this respect, *Baluta* functions as a literary form of activism that seeks to awaken public consciousness and promote democratic values.

From the perspective of social justice, *Baluta* advocates equality, dignity, and human rights for all marginalized communities. It questions the moral foundations of a social order that perpetuates exclusion and discrimination while denying equal opportunities to millions of people. Pawar's narrative underscores the need for structural reforms that address both caste-based and economic inequalities. The text therefore aligns closely with the principles of liberty, equality and fraternity championed by Ambedkar and the broader Dalit movement.

In the context of the present research, *Baluta* represents a crucial stage in the journey from oppression to resistance. It demonstrates how autobiographical writing can expose systemic injustice while simultaneously empowering marginalized communities to assert their rights and identities. Through its exploration of caste, poverty, trauma, and social justice, the autobiography reinforces the

central argument of this study that Dalit literature serves as a powerful instrument of resistance, social critique, and human emancipation. Consequently, *Baluta* remains one of the most important texts in Indian Dalit literature and a lasting testament to the resilience and dignity of marginalized voices.

Conclusion

The present study, "From Oppression to Resistance: Voices from the Margins—A Critical Study of Caste, Trauma, Identity, and Social Justice in Selected Indian Dalit Literature," demonstrates that Dalit literature is far more than a record of suffering; it is a powerful discourse of resistance, self-assertion, and social transformation. Through a critical analysis of B. R. Ambedkar's Annihilation of Caste, Omprakash Valmiki's Joothan, Bama's Karukku, Sharan Kumar Limbale's Akkarmashi (The Outcaste), and Daya Pawar's Baluta, the study reveals how these texts expose the realities of caste oppression, untouchability, poverty, trauma and social exclusion while affirming the values of dignity, equality and justice.

The selected works collectively illustrate that personal experiences of humiliation and marginalization are transformed into narratives of resistance and collective consciousness. They challenge dominant social structures, question the legitimacy of caste hierarchy, and advocate an inclusive society founded on liberty, equality, fraternity, and human rights. Ultimately, this research concludes that Dalit literature remains an indispensable field of academic inquiry, enriching Indian literary studies by foregrounding marginalized voices and contributing to contemporary debates on democracy, identity and social justice. These texts continue to inspire critical reflection and social change, making Dalit literature a vital instrument for achieving a more just, humane, and egalitarian society.

Works Cited

1. Ambedkar, B. R. Annihilation of Caste. Critical Quest, 2014.
2. Bama. Karukku. Translated by Lakshmi Holmström, Oxford University Press, 2012.
3. Limbale, Sharan Kumar. The Outcaste (Akkarmashi). Translated by Santosh Bhoomkar, Oxford University Press, 2003.
4. Pawar, Daya. Baluta. Translated by Jerry Pinto, Speaking Tiger, 2015.
5. Valmiki, Omprakash. Joothan: A Dalit's Life. Translated by Arun Prabha Mukherjee, Columbia University Press, 2003.
6. Caruth, Cathy. Unclaimed Experience: Trauma, Narrative, and History. Johns Hopkins University Press, 1996.
7. Fanon, Frantz. The Wretched of the Earth. Translated by Richard Philcox, Grove Press, 2004.
8. Guha, Ranajit. Elementary Aspects of Peasant Insurgency in Colonial India. Oxford University Press, 1983.
9. Spivak, Gayatri Chakravorty. Can the Subaltern Speak? Macmillan, 1988.
10. Ambedkar, B. R. The Essential Writings of B. R. Ambedkar. Edited by Valerian Rodrigues, Oxford University Press, 2002.

Culture as a Tool of Political Propaganda in India: Cultural Symbols, Identity and Electoral Mobilisation

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Abstract;

Culture occupies a central position in the political life of modern India. Cultural traditions, religious symbols, historical memories, languages, festivals, myths, folk practices and representations of national identity frequently become part of political communication and electoral mobilisation. Political actors use these cultural resources to construct collective identities, communicate political messages, generate emotional attachment and mobilise voters. This article examines the relationship between culture and political propaganda in India, with particular emphasis on cultural symbols, identity formation and electoral mobilisation. It argues that cultural propaganda operates through both traditional political communication and contemporary digital media. Cultural symbols can strengthen democratic participation by creating political awareness and collective solidarity, but their instrumentalisation can also produce exclusion, polarisation, misinformation and the politicisation of social identities. The article further explores how social media, short videos, memes and digital campaigns have transformed the circulation of cultural political narratives. Finally, it proposes a democratic framework in which citizens critically evaluate political claims, cultural narratives and the actual performance of political representatives. The study concludes that culture cannot be separated from Indian politics; therefore, the democratic challenge is not to eliminate cultural political communication but to ensure that it remains inclusive, evidence-based, constitutionally compatible and accountable.

Keywords: Culture, Political Propaganda, Cultural Symbols, Identity Politics, Electoral Mobilisation, Political Communication, Social Media, Democracy, India

1. Introduction

Politics is conducted not only through institutions, constitutions, political parties and elections but also through meanings, symbols, memories, traditions and identities. Culture provides political actors with a powerful language for communicating ideas about community, nation, belonging and political responsibility. This relationship is particularly significant in India because of its extensive linguistic, religious, regional, caste, tribal and cultural diversity. Political parties and leaders frequently draw upon historical personalities, religious traditions, festivals, regional cultures, national symbols, languages and collective memories to communicate political messages and mobilise citizens.The political use of culture should not automatically be considered propaganda. Democratic politics necessarily involves persuasion and symbolic communication. It becomes propagandistic when cultural narratives are deliberately organised, selectively presented and repeatedly communicated to influence political perceptions, attitudes or behaviour. Cultural communication can strengthen social solidarity and democratic participation, but it can also create "us versus them" divisions, simplify complex historical realities and manipulate collective emotions.

Political propaganda may involve selective presentation of information, emotional appeals, repetition, symbolic communication, identity construction, political framing, glorification of leaders and mobilisation around collective identities. Importantly, propaganda does not necessarily depend upon false information. Even factual information can acquire a propagandistic character when it is selectively presented to construct a particular political interpretation. Propaganda should therefore be examined not only through the distinction between truth and falsehood but also through the processes of **selection, framing, repetition, emotionalisation and mobilisation**.

Culture as a Political Resource

Culture provides political actors with pre-existing meanings, symbols and collective memories that can make political communication more familiar and emotionally persuasive. Cultural resources

can therefore be used to construct identities, generate political attachment, mobilise communities and communicate political values. In a culturally diverse democracy such as India, the political use of culture can consequently function both as a means of democratic representation and as an instrument of political propaganda, depending upon how cultural identities and narratives are constructed and mobilised.

Culture Creates Collective Identity

Culture plays an important role in shaping collective political identity because individuals understand themselves not only as citizens but also as members of diverse social and cultural communities. In India, individuals may simultaneously possess national, regional, linguistic, religious, caste, tribal, community and cultural identities shaped by shared traditions, historical experiences, beliefs and social practices. Political actors often incorporate these identities into political communication by invoking cultural symbols, historical personalities, religious traditions, regional memories and linguistic sentiments. Such mobilisation can strengthen democratic participation by providing visibility and representation to communities whose interests may have received limited political attention. However, cultural identity can also become a source of political polarisation when leaders construct rigid boundaries between groups or present one identity as superior to another. Thus, the political significance of culture depends on how identities are interpreted, represented and mobilised within the democratic process.

Culture Creates Emotional Connection

Culture gives political communication an important emotional dimension. Shared traditions, historical memories, festivals, religious practices, language, music and symbols can generate feelings of belonging, pride, dignity and collective responsibility. Political actors may use these cultural resources to connect political objectives with the experiences and emotions of particular communities. References to historical personalities, national achievements and collective struggles can strengthen identification with political movements or leaders. Such emotional communication can promote democratic participation and civic solidarity, but it can also become propagandistic when fear, anger, resentment or exaggerated cultural pride are deliberately used to influence political attitudes. Emotional identification may then overshadow rational evaluation of policies and governmental performance. Culture therefore increases the persuasive power of political communication by connecting political messages with citizens' collective memories and emotional experiences.

Culture Simplifies Complex Political Issues

Culture can also simplify complex political issues by presenting them through familiar narratives and symbolic frameworks. Issues such as economic development, employment, education, welfare, national security and governance often require detailed analysis, while cultural narratives can make political messages easier to understand and communicate. Political actors may connect development, social justice, national identity or governance with historical experiences and cultural values, thereby making complex issues more accessible to citizens. However, excessive simplification can reduce substantive policy questions to emotionally attractive cultural narratives and divert attention from measurable governmental performance. When political actors selectively emphasise cultural explanations while ignoring relevant economic, social or institutional evidence, cultural communication can become propaganda. Cultural framing is therefore democratically valuable when it improves political understanding, but problematic when it distorts complex realities or substitutes emotional narratives for informed political evaluation.

Cultural Symbols and Political Communication in India

Cultural symbols are powerful instruments of political communication because they convey complex ideas, values and identities through familiar representations. In India, political discourse frequently draws upon symbols with historical, social, religious and national significance, including the national flag, Bharat Mata, Mahatma Gandhi, Dr. B. R. Ambedkar, Chhatrapati Shivaji Maharaj, Subhas Chandra Bose, Bhagat Singh, regional saints, religious symbols, historical monuments, languages, festivals and cultural practices. Political actors may invoke these symbols to associate

themselves with nationalism, courage, sacrifice, social justice, equality, cultural pride, regional identity and public service. Historical personalities, for example, may be selectively represented to connect contemporary political actors with particular values or political traditions.However, the meaning of cultural symbols is neither fixed nor universally accepted. Different political parties, social groups and ideological movements may interpret the same symbol or historical figure differently. Cultural symbols are therefore not merely representations of the past; they are actively interpreted and contested within political discourse. Their political use can promote awareness, collective identity and participation, but can also facilitate selective historical narratives, identity-based mobilisation and electoral influence. The democratic significance of cultural symbolism consequently depends on whether it promotes inclusive citizenship and informed participation or is used to manipulate emotions and deepen social divisions.

Historical Memory and Political Propaganda

Historical memory plays an important role in political propaganda because interpretations of the past can influence how societies understand present political realities and future aspirations. Political actors may construct narratives around colonialism, social reform, resistance movements, religious conflicts, independence, Partition, caste oppression and regional struggles, connecting contemporary political objectives with emotionally significant historical experiences. Historical memory can serve a positive democratic function by preserving knowledge, honouring reformers and freedom fighters, developing civic consciousness, strengthening national integration and promoting values such as liberty, equality and justice. However, it can also be politically instrumentalised to revive grievances, establish collective blame, construct political enemies and intensify social divisions. Selective representations may remove historical events from their broader context and reduce complex processes to simplified narratives of heroism, victimhood or conflict. Such narratives can influence electoral preferences by creating emotional identification with particular communities. The problem is therefore not the critical discussion of difficult history, but its deliberate detachment from evidence and transformation into a permanent instrument of political mobilisation. Democratic political culture should encourage citizens to examine history through credible evidence, multiple perspectives and critical scholarship. Historical memory strengthens democracy when it promotes understanding and civic learning, but becomes propagandistic when selectively manipulated to generate fear, resentment, exclusion or political hostility.

Religion and Political Mobilisation

Religion is an important dimension of India's cultural and social life, and religious beliefs, symbols and traditions can consequently acquire political significance. In a democracy, citizens have the freedom to hold and express religious beliefs, while political parties necessarily engage with citizens possessing diverse religious identities. Religious traditions may therefore legitimately enter political discourse, particularly concerning cultural rights, social reform, community welfare and freedom of religion. However, religious mobilisation becomes problematic when it is deliberately used for exclusion, discrimination or political hostility. This occurs when one community is presented as inherently superior, another as an enemy or threat, or when misleading information and inflammatory narratives are used to generate hatred and undermine equal citizenship. In such circumstances, religious identity becomes an instrument of political propaganda rather than simply an expression of cultural or personal belief. The distinction between legitimate religious expression and political instrumentalisation is therefore essential. Religious expression is compatible with democracy when it respects the rights and dignity of others and operates within constitutional principles of equality, liberty and freedom of belief. Conversely, deliberate manipulation of religious identity can weaken social cohesion, intensify electoral polarisation and undermine constitutional democracy. The objective should not be to exclude religion from public life, but to ensure that religious identities participate in political discourse within an inclusive framework of equal citizenship, constitutional values and mutual respect.

Language and Regional Culture

Language is a powerful cultural resource in Indian politics because it is closely connected with identity, belonging and regional consciousness. India's linguistic diversity has historically shaped political movements and regional parties, with language functioning as a medium of political identity, cultural pride and demands for recognition. Linguistic and regional movements have contributed to debates on state formation, linguistic rights, federalism, decentralisation and cultural recognition. Such mobilisation can strengthen democracy by providing political representation to communities whose interests may otherwise remain underrepresented. However, linguistic identity can also become exclusionary when cultural pride is transformed into hostility towards other communities. Cultural politics is therefore not inherently anti-democratic; its democratic value depends on whether cultural identities promote recognition, participation and representation or create exclusionary political boundaries.

Festivals and Cultural Events as Political Communication

Festivals and public cultural events provide important spaces for political communication and interaction between political representatives and citizens. Religious and regional festivals, cultural celebrations, commemorations of historical personalities and social reformers can enable political leaders to demonstrate cultural recognition and community engagement. Such participation may strengthen democratic interaction, but cultural events can also become platforms for political publicity, image-building and identity-based mobilisation. The distinction depends on whether the event encourages genuine civic participation and cultural dialogue or primarily functions as political spectacle. Cultural events therefore have both democratic and propagandistic potential depending on their purpose and political use.

Cinema, Popular Culture and Politics

Cinema, television, music and celebrity culture increasingly influence political communication by reaching audiences beyond conventional political institutions. Political actors may use cinematic language, heroic narratives, patriotic imagery, popular songs, celebrity endorsements and dramatic storytelling to make political messages more attractive and emotionally engaging. This can broaden political participation, particularly among younger audiences, but may also shift political communication from policy-oriented debate towards personality-centred politics. Political leaders may be represented as heroic or cultural figures rather than primarily as representatives responsible for governance. Popular culture can therefore strengthen political communication while simultaneously encouraging political spectacle and personality cults when emotional imagery replaces evaluation of policies and performance.

Social Media and the Digitalisation of Cultural Propaganda

Social media has transformed the speed and reach of political propaganda. Platforms such as YouTube, Instagram, Facebook, X and WhatsApp enable cultural and political narratives to circulate rapidly through memes, short videos, edited speeches, hashtags, viral images, historical quotations, religious imagery and patriotic content. Digital communication combines speed, repetition and emotional engagement, allowing messages to reach large audiences through smartphones. Recommendation systems and engagement-based algorithms can further amplify emotionally powerful content. Consequently, the combination of **emotion, identity, repetition and algorithmic amplification** can produce powerful political mobilisation. At the same time, it can facilitate misinformation, polarisation and the circulation of misleading cultural and historical narratives, making digital media literacy increasingly important.

Cultural Propaganda and Electoral Mobilisation

Elections provide an important context for understanding cultural propaganda because political parties seek to transform cultural identification into electoral support. The process may be understood as **cultural symbol → identity → emotional attachment → political perception → mobilisation → electoral behaviour**. However, cultural identity does not automatically determine voting behaviour. Voters may also consider employment, economic conditions, public services,

welfare programmes, candidate reputation, leadership, local issues, ideology, policy preferences and governance performance. Culture is therefore an important variable in electoral politics but cannot independently explain electoral outcomes. Citizens possess multiple identities and may evaluate political parties through both cultural affiliation and practical political considerations.

From Cultural Mobilisation to Democratic Accountability

Cultural mobilisation may increase political participation, but democracy requires accountability beyond periodic elections. Political representatives should be evaluated not only through cultural identity and campaign rhetoric but also through their actual performance. Citizens should have access to information regarding election promises, legislative participation, constituency development, public expenditure, policy decisions and responses to public grievances. Digital platforms can facilitate continuous evaluation of elected representatives and enable citizens to compare political claims with measurable outcomes. This can shift democratic participation from **identity-based mobilisation to informed participation and accountable representation**. Cultural identity may continue to influence political preferences, but performance-based evaluation can become an equally important basis of political legitimacy.

Positive Democratic Functions of Cultural Political Communication

Cultural political communication can perform important positive functions in a diverse democracy. It can increase political participation, provide visibility to marginalised communities, preserve historical memory and strengthen collective solidarity. Cultural and regional identities can also contribute to democratic representation by bringing diverse social groups into political institutions. When cultural narratives promote equality, social justice, constitutional values and respect for diversity, they can strengthen democratic citizenship. Cultural politics is therefore not inherently manipulative; its democratic value depends on whether it promotes inclusion, representation, participation and dialogue rather than exclusion and hostility.

Negative Consequences of Cultural Propaganda

Cultural propaganda can negatively affect democracy when cultural identities and historical narratives are manipulated to generate fear, hostility and political polarisation. It may encourage majoritarianism, marginalise minority identities, distort historical understanding and create collective blame. Selective historical narratives and emotionally charged digital content can reinforce political divisions and reduce complex policy issues to identity-based conflicts. Cultural propaganda may also shift electoral debates away from employment, education, healthcare, economic development and governance towards symbolism and personality. When citizens evaluate information primarily according to cultural identity rather than evidence, political echo chambers and confirmation bias may increase. Cultural propaganda can therefore weaken social cohesion, constitutional equality and informed democratic deliberation.

Culture, Propaganda and the Indian Constitution

The political use of culture must operate within the constitutional framework of equality, liberty, secularism, freedom of expression, freedom of religion and cultural pluralism. Citizens have the right to preserve and express their cultural identities, and cultural issues can legitimately form part of democratic political debate. However, cultural mobilisation becomes constitutionally problematic when it promotes discrimination, hatred, exclusion or unequal citizenship. The political use of cultural and religious symbols should therefore be evaluated according to their purpose, context and consequences. Cultural diversity can strengthen democracy when combined with constitutional equality and mutual respect, whereas cultural narratives that portray communities as superior or inferior can undermine democratic citizenship. The Constitution thus provides an important framework for balancing cultural freedom with equal rights and democratic responsibility.

Media Literacy and Resistance to Cultural Propaganda

The growing use of cultural and identity-based political messages makes media literacy essential for democratic citizenship. Citizens should be able to distinguish legitimate political communication from misinformation and propaganda by examining the source, purpose, evidence and

context of political messages. They should critically evaluate manipulated images, edited videos, misleading quotations, fabricated historical claims and emotionally charged narratives. Media literacy also requires understanding how framing, repetition and algorithmic amplification influence political perceptions. Educational institutions, media organisations and civil society can contribute by promoting critical thinking and responsible digital participation. Informed citizens are better equipped to question propaganda, verify political claims and make independent democratic choices.

Toward an Open, Participatory and Accountable Democracy

The influence of cultural narratives demonstrates the need to strengthen democratic participation beyond elections. Cultural identity may continue to influence political preferences, but citizens should also have access to reliable information about political performance and governance. Digital platforms can provide information on election promises, legislative participation, development activities, public expenditure and responses to citizens' concerns. This can shift democratic evaluation from **"Who represents my identity?"** towards **"Who represents my interests, constitutional values and public responsibilities effectively?"** Such an approach does not require abandoning cultural identity; rather, it combines cultural belonging with critical judgement, informed participation and accountable governance.

Role of Political Parties and Leaders in Responsible Cultural Communication

Political parties and leaders have an important responsibility in shaping how culture is represented in political discourse. Responsible cultural communication should recognise diversity while avoiding hostility, misinformation and identity-based polarisation. Political leaders can use historical and cultural symbols constructively by connecting them with values such as equality, social justice, fraternity, public service and national integration. Cultural narratives should complement rather than replace substantive discussion of employment, education, healthcare, economic development and governance. In the digital age, political leaders should also avoid deliberately misleading claims and promote accurate, transparent and respectful communication. Responsible political leadership can therefore transform culture from an instrument of division into a resource for democratic participation and social cohesion.

Conclusion

Culture is deeply connected with India's political life because political identities, historical memories and collective aspirations are shaped by cultural experiences. Cultural symbols, religion, language, regional traditions, festivals, historical personalities, cinema and digital narratives provide powerful resources for political communication and mobilisation. Their effects, however, can be both democratic and propagandistic. Cultural politics can strengthen representation, participation and social recognition, but its manipulation can produce exclusion, misinformation and polarisation.

The digital environment has intensified these possibilities by enabling cultural narratives to circulate rapidly through social media. Citizens therefore require critical media literacy to distinguish political persuasion from manipulative propaganda. At the same time, cultural identity should not be treated as the sole explanation of electoral behaviour, since voters also consider economic conditions, governance, policies, leadership and public services.

The future of democratic politics should therefore involve a transition from **periodic electoral mobilisation to continuous democratic accountability**. Citizens should have the ability to evaluate representatives according to both cultural representation and actual performance. Ultimately, culture is neither inherently democratic nor inherently propagandistic; its political consequences depend upon how it is represented and mobilised. Indian democracy can benefit from cultural diversity when it is combined with constitutional equality, informed citizenship, pluralism, responsible communication and accountable governance.

Policy Recommendations

The analysis suggests several measures for strengthening democratic political communication. First, **media and digital literacy** should be promoted so that citizens can identify misinformation, manipulated content and emotionally charged propaganda. Second, political parties should encourage

evidence-based political communication and provide verifiable information about policies, promises and achievements. Third, there should be greater **continuous evaluation of elected representatives**, including information on legislative participation, public expenditure, development work and responsiveness to citizens. Fourth, political actors should use cultural symbols responsibly and avoid narratives that promote hatred or exclusion. Fifth, **historical literacy** should encourage citizens to examine the past through credible evidence and multiple perspectives. Sixth, political education should strengthen **constitutional citizenship**, particularly equality, liberty, fraternity and respect for cultural diversity. Seventh, responsible digital communication and independent fact-checking should be encouraged. Finally, citizens should be encouraged to evaluate political representatives not only on cultural identity but also on **governance, policy implementation and public performance**. These measures can help transform culture from an instrument of political manipulation into a resource for democratic participation, representation and accountability.

References

1. Almond, G. A., & Verba, S. (1963). The Civic Culture: Political Attitudes and Democracy in Five Nations. Princeton University Press.
2. Anderson, B. (1983). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso.
3. Chatterjee, P. (1993). The Nation and Its Fragments: Colonial and Postcolonial Histories. Princeton University Press.
4. Hall, S. (1997). Representation: Cultural Representations and Signifying Practices. Sage.
5. Jaffrelot, C. (1996). The Hindu Nationalist Movement and Indian Politics. Columbia University Press.
6. Kothari, R. (1970). Politics in India. Orient Longman.
7. McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. Public Opinion Quarterly, 36(2), 176–187.
8. McLuhan, M. (1964). Understanding Media: The Extensions of Man. McGraw-Hill.
9. Norris, P. (2000). A Virtuous Circle: Political Communications in Postindustrial Societies. Cambridge University Press.
10. Schramm, W. (1971). The Process and Effects of Mass Communication. University of Illinois Press.
11. Sunstein, C. R. (2017). #Republic: Divided Democracy in the Age of Social Media. Princeton University Press.
12. Thussu, D. K. (2007). News as Entertainment: The Rise of Global Infotainment. Sage.
13. Varshney, A. (2002). Ethnic Conflict and Civic Life: Hindus and Muslims in India. Yale University Press.
14. Verba, S., Schlozman, K. L., & Brady, H. E. (1995). Voice and Equality: Civic Voluntarism in American Politics. Harvard University Press.
15. Constitution of India. Government of India.

Effects of Offshore and Nearshore Constructions on Tidal Hydrodynamics: A Comparative Analysis with Regional Case Studies

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Abstract

Coastal hydrodynamics are highly sensitive to anthropogenic interventions, including offshore construction, artificial islands, breakwaters, reclamation works, and port infrastructure developments. Understanding how such structures modify prevailing hydrodynamic processes is essential for sustainable coastal planning and environmental management.

This study investigates the effects of offshore and nearshore constructions on coastal hydrodynamics, and the associated ecological implications where applicable, through a comparative analysis of three contrasting case studies, from across the globe:

(i) the Incheon Bridge estuarine system in South Korea,
(ii) artificial-island and breakwater developments in Abu Dhabi within the Arabian Gulf, and
(iii) port expansion works in Fujairah along the Gulf of Oman coastline.

These sites were selected to represent tide-dominated, circulation-limited, and wave-dominated coastal environments, respectively. Published pre and post-construction datasets were analysed to evaluate changes in tidal currents, residual circulation, tidal phase behaviour, sediment transport pathways, and associated ecological responses.

Results indicate substantial hydrodynamic modification post construction activities, including redistribution of tidal discharge and residual currents in Incheon, sediment trapping and reduced flushing within sheltered embayments in Abu Dhabi, and wave transformation together with littoral-drift redistribution in Fujairah.

Comparative synthesis demonstrates that the dominant response mechanisms are governed principally by the prevailing hydrodynamic regime rather than by the engineering structure alone. Channel constriction and flow redistribution dominated the estuarine environment, sediment trapping and circulation reduction-controlled responses within the sheltered Gulf setting, while wave transformation processes governed the open-coast system.

The findings highlight the importance of integrating site-specific hydrodynamic assessments, sediment-dynamics evaluation, and ecological monitoring into the planning and management of major coastal infrastructure projects. The proposed comparative framework provides a practical basis for anticipating hydrodynamic responses across diverse coastal settings and contributes to improved and sustainable CZM.

Keywords: Coastal Morphology; Nearshore Infrastructure; Offshore Construction; Tidal Hydrodynamics; Breakwaters; Artificial Islands; Sediment Transport; Ecological Impacts. Nearshore Construction; Coastal Hydrodynamics; Breakwaters; Artificial Islands; Sediment Transport.

Introduction

The coast is an important interface which provides humans with the outreach for their survival, livelihood, and transportation of resources and goods in and out from the hinterland, on a very large scale since ancient times. Man's dependence on the coast has only grown exponentially today, despite the other means of transportation being expanded, due to the sheer benefits of coastal living in many ways.

In the evolution of the coastal belt, and among the forces shaping the coast, tides are one of the primary drivers of hydrodynamics in coastal and estuarine environments, influencing sediment transport, ecological habitats, and navigation channels (Dyer, 1997; Friedrichs, 2010). While natural factors such as sea-level variation, atmospheric forcing, and geomorphology shape tidal behavior,

anthropogenic modifications, particularly offshore and nearshore construction, can introduce significant changes to tidal regimes. Coastal nations increasingly depend on coastal and nearshore / offshore marine infrastructure for transportation, energy generation, industrial growth, and land expansion. Offshore exploration platforms, bridges, causeways, reclamation zones, artificial islands, and port developments often introduce physical obstructions or modify tidal flow pathways, altering tidal propagation and energy dissipation (Kirby & Retière, 2009; Xia *et al*., 2010).

Even relatively small structures can affect tidal ranges and streams by changing channel roughness, frictional drag, and local resonance conditions.

This paper evaluates the mechanisms through which structural intrusions related to coastal development alter tidal characteristics, drawing from established hydrodynamic principles and numerical modeling insights. A focused case study further demonstrates the quantifiable tidal shifts resulting from a large-scale marine construction project.

While numerous studies have examined site-specific hydrodynamic impacts of bridges, breakwaters, reclamation, and artificial islands, comparatively few studies have attempted to synthesise and contrast these responses across contrasting tidal and wave-dominated environments. The present study addresses this gap through a comparative assessment of three geographically distinct case studies.

1. Significance of the Hydrodynamic Parameters Evaluated

Understanding the consequences of marine and coastal construction requires the assessment of parameters that collectively describe hydrodynamic behaviour, sediment response, engineering influence, and ecological sensitivity. The variables selected in this study are widely recognised as primary indicators of coastal-system response to anthropogenic modification, providing a direct link between physical processes, environmental responses, and long-term sustainability considerations (Dyer, 1997; Friedrichs, 2010; Wang *et al*., 1999).

2.1 Tidal Velocity

Tidal velocity is the horizontal component of tidal actions, governed by the astronomical forces *i.e.* Moon and Sun, and also aided / amplified by the local topography and basin configuration. It is one of the most important hydrodynamic parameters because it governs bed shear stress, sediment entrainment, erosion potential, energy dissipation, and flushing efficiency. Changes in current velocity directly influence sediment transport pathways and may initiate channel deepening, shoaling, or local scour around engineered structures. Consequently, velocity measurements provide a fundamental indicator of hydrodynamic modification associated with coastal engineering interventions (Dyer, 1997; Friedrichs, 2010).

2.2 Tidal Phase Shift

Tidal phase shift represents changes in the timing of tidal-wave propagation through an estuary or coastal basin. Although phase changes may appear relatively small, even minute-scale shifts can alter synchronisation between adjacent channels, influence flushing efficiency, and affect residual circulation patterns. Phase shifts are therefore valuable indicators of geometry-induced modification of tidal dynamics (Friedrichs, 2010; Xia *et al*., 2010).

2.3 Residual Circulation

Residual circulation represents the net movement of water after averaging over multiple tidal cycles and controls the long-term transport of sediment, nutrients, larvae, and contaminants. Modifications to residual circulation frequently determine whether a coastal system experiences net accretion, erosion, or reduced flushing. Consequently, residual currents provide insight into the cumulative impacts of engineering works beyond individual tidal events (Dyer, 1997; Kirby & Retière, 2009).

2.4 Erosion and Siltation Volumes

Erosion and deposition volumes are among the most important indicators of morphodynamic adjustment because they quantify how seabed morphology responds to altered hydrodynamic conditions. Persistent deposition increases maintenance dredging requirements, whereas sustained

erosion can threaten coastal infrastructure, navigation channels, and ecological habitats. Quantification of sediment budgets therefore provides a direct assessment of long-term coastal-system response to engineering activities (Wang *et al*., 1999; Kirby & Retière, 2009).

2.5 Suspended Sediment Concentration (SSC)

Suspended sediment concentration serves as an important link between hydrodynamic forcing and ecological response. Elevated SSC typically reflects enhanced sediment resuspension and reduced water clarity, affecting light penetration, primary productivity, seagrass growth, and thereby affecting coral health and broader ecological functioning. SSC is therefore widely used as both a physical and ecological indicator of construction-induced disturbance in coastal waters (Wang *et al*., 1999; Emirates Nature–WWF, 2025).

2.6 Significant Wave Height

Significant wave height (H_S) is a primary descriptor of coastal wave energy and directly influences shoreline stability, sediment mobilisation, overtopping risk, and coastal erosion potential. Changes in H_S associated with breakwaters and revetments frequently alter nearshore sediment dynamics and coastal morphology. Consequently, H_S is a critical parameter for evaluating both the performance and environmental implications of coastal protection structures (Kirby & Retière, 2009; Xia *et al*., 2010).

2.7 Current Direction Shift

Current-direction changes are particularly important because they modify the direction of sediment transport rather than merely the magnitude. Even relatively small directional changes may alter depositional patterns, redirect littoral drift pathways, and influence shoreline evolution over time. Monitoring directional changes therefore provides valuable insight into the redistribution of hydrodynamic energy caused by coastal infrastructure (Kirby & Retière, 2009; Xia *et al*., 2010).

2.8 Sediment Transport Change

Sediment transport represents the integrated outcome of hydrodynamic forcing and sediment availability and is among the most significant controls on long-term coastal evolution. Alterations to sediment transport pathways can result in downdrift erosion, channel shoaling, sediment trapping, and disruption of natural sediment bypassing systems. Assessment of transport rates therefore provides a direct measure of the sustainability of coastal engineering interventions (Wang *et al*., 1999; Dyer, 1997).

2.9 Ecological Habitat Change

Changes in seagrass cover, coral assemblages, mangrove habitats, and unconsolidated substrates represent the ecological expression of hydrodynamic and morphodynamic change. Habitat loss or gain is frequently used as an indicator of environmental impact because it integrates multiple physical processes including sedimentation, turbidity, wave energy alteration, and hydrodynamic connectivity. As such, ecological habitat metrics provide an important bridge between engineering assessment and ecosystem-based coastal management (Emirates Nature–WWF, 2025; Annexure 1 EIA Report, Rev.3).

Mechanisms of Tidal Modification by Coastal Structures

3.1 Channel Constriction and Flow Redistribution

Offshore piers, bridge pylons, and jetty systems can constrict natural channels, altering the size of the natural flow, by way of restricting inlets / outlets narrowing due to reclamation or widening the waterways, or due to narrowing of some sections, which could accelerate flow and steer jets. Wakes behind piers and caissons reduce velocity and enhance shear. Constriction increases local current velocities but may decrease velocities downstream as the flow redistributes (Friedrichs, 2010; Kim *et al*., 2023). This can weaken ebb-dominant or flood-dominant conditions depending on the placement and orientation of structures.

3.2 Alteration of Tidal Wave Propagation

Tidal waves entering semi-enclosed basins or estuaries are sensitive to changes in basin geometry. reclamation and long breakwaters can have effects on basin-geometry and phase / amplitude

shifts / changes, affecting the path length and reflectivity, thereby modulating semi-diurnal constituents. Land reclamation or breakwaters may also shorten or elongate the tidal wave path, causing phase shifts and modifying tidal ranges. In some cases, amplification occurs due to increased reflection, whereas in others, attenuation results from increased friction.

3.3 Increased Frictional Drag in Shallow or Modified Zones

Dredging, reclamation, and seabed modification alter depth profiles. Shallowing increases bottom friction, slowing tidal streams and reducing tidal range in interior basins. Frictional factors could enhance flow control in shallow zones, in that depth reduction may elevate bottom stress, damping currents and tidal range nearshore. Conversely, dredging channels can deepen pathways, enabling faster tidal inflows (Friedrichs, 2010; Wang *et al*., 1999), and potentially raising local tidal amplitudes.

3.4 Impacts on Residual Circulation

Residual flows—net water movements after tidal oscillations—are highly sensitive to geometric changes. Infrastructure can shift the direction and magnitude of residual currents, influencing long-term sediment deposition or erosion (Dyer, 1997; Kirby & Retière, 2009), and thereby potentially affecting water quality conditions. Structure-induced changes to flood/ebb dominance rewire net transport and siltation patterns which are together termed as residual circulation and asymmetry effects.

Study Areas

This study investigates the hydrodynamic and morphological impacts of major coastal construction projects in three case studies: Incheon, South Korea; Abu Dhabi, United Arab Emirates; and Fujairah, United Arab Emirates, as depicted in Figure 1 below.

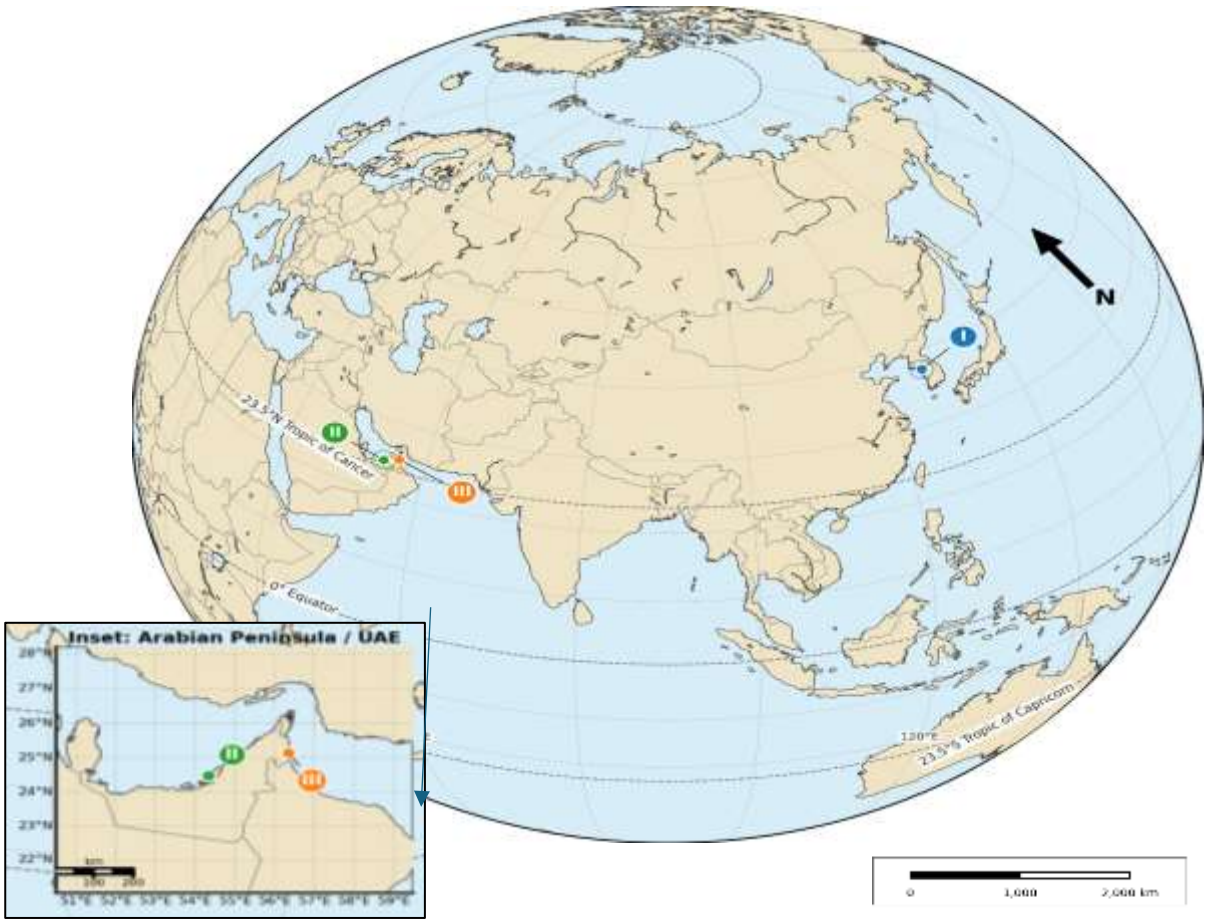


Figure 1. Location Map – Showing the Selection of Case Study Areas on the Globe

Table 1. Details of the Case Study Areas Selected

Case Study	Case Study Area	Pre-Construction imagery	Post-Construction imagery	Coordinates
I	Incheon Bridge, South Korea	Landsat 7 ETM+, Google Earth	Sentinel-2 MSI, Google Earth	37.41°N, 126.57°E
II	Abu Dhabi, UAE	Landsat 7 ETM+	Sentinel-2 MSI	24.48°N, 054.37°E
III	Fujairah, UAE	Landsat 7 ETM+	Sentinel-2 MSI	25.13°N, 056.33°E

The areas selected for the study included a macrotidal estuary bridge in South Korea's Incheon, artificial islands and breakwaters, in UAE's Abu Dhabi, enclosed within the Arabian Gulf and a third location at Fujairah, along the exposed Gulf of Oman coastline.

The study locations were carefully selected to represent a variety of tidal characteristics and coastal susceptibility, from across the world, and chosen from within available studies based on the literature reviewed for the topic.

Case Study I on Incheon bridge focuses on changes in ebb tide velocities through the North and South Fairways associated with the construction of new container terminals. The Incheon Bridge is located in the coastal waters of Incheon, South Korea (37.4139°N, 126.5667°E), linking Yeongjong Island with the mainland across a macrotidal estuarine environment. The site is characterised by strong tidal forcing, pronounced flood-ebb asymmetry, and high sensitivity to channel constriction effects associated with bridge-pier construction.

The Case Study II of islands near Abu Dhabi (24.48°N, 54.37°E) examines erosion and siltation volumes in inner and outer tidal flats in the vicinity of Lulu Island, Khalifa Port and Mussafah Channel. This area lies deep within the Arabian Gulf on the southwestern edge of the United Arab Emirates Coastline. Previous numerical modelling studies indicate that reclamation and artificial island developments can significantly influence tidal circulation and sediment redistribution within the shallow Gulf environment (Balaji, 2010; Chow & Sun, 2022).

Case Study III of Fujairah assesses significant wave height attenuation and seabed transport changes along existing breakwaters near the East Breakwater and South Revetment (25.13°N, 56.33°E). Study areas span temperate (Incheon) and arid (UAE) climatic zones, with differing sediment regimes and tidal ranges, allowing cross-regional comparison of construction impacts. The region is characterised by energetic wave forcing and active sediment transport processes that are especially sensitive to breakwater-induced modifications (Kirby & Retière, 2009; Xia *et al*., 2010)

This study focuses on the aspects highlighted in the preceding paragraphs, by examining three regions differing in hydrodynamic environment, engineering footprint, and geomorphological sensitivity, as detailed in the succeeding paragraphs.

4.1 Case Study I: Incheon, Macrotidal Estuary Bridge

The Incheon case demonstrates how bridge-pier construction can redistribute tidal energy between adjacent navigation fairways. Rather than producing a uniform velocity response, the structure appears to have weakened flow on the northern side while intensifying flow on the southern side. This asymmetric adjustment is important because it indicates a change in the efficiency of tidal exchange and residual transport within the estuarine channel. The reported residual-current changes, local acceleration between structural elements, and altered near-bed dominance collectively suggest that the bridge has modified both instantaneous flow pathways and longer-term sediment-transport tendencies (Kim, *et al*., 2024).

High-resolution modeling is validated against gauges and current moorings comparing scenarios without vs. with bridge piers (Kim, *et al*., 2024), from which key indicators emerged including:

(i) residual velocity decreased up to 0.06 m/s north of the fairway and increased up to 0.29 m/s south;

(ii) localized peak-stream increments (~0.29 m/s) between piers at ebb;

(iii) strengthened vertical salinity stratification near pier fields; and
(iv) shift from ebb to flood-dominance in parts of the near-bottom layer.

These observations are consistent with previous investigations of bridge-induced channel constriction effects in macrotidal estuaries, where flow acceleration, residual-current modification, and altered stratification have been reported (Kim *et al*., 2024; Friedrichs, 2010).

4.2 Case Study II: Abu Dhabi, Artificial Islands & Breakwaters

The Arabian Gulf's shallow bathymetry and limited tidal prism enhance the coastal belt's sensitivity to reclamation, breakwaters, and dredging. Major engineering works undertaken in the recent past along this belt include major construction projects at Lulu Island, Khalifa Port, Mussafah Channel, and Hail & Ghasha artificial islands.

4.3 Case Study III: Fujairah, Open Coast - Gulf of Oman - Commercial Port

Unlike Abu Dhabi's shallow protected waters, Fujairah is exposed to Indian Ocean swells, monsoon-driven currents, and deeper nearshore bathymetry. Breakwaters and port expansions influence littoral drift, sediment continuity, and turbulence. Though similar to Abu Dhabi in tidal characteristics, the coastal vulnerability of Fujairah due to its exposure to the open sea, as compared to the sheltered Abu Dhabi coast, making it a suitable case study for comparative assessment.

Methods and Data

5.1 Methods

Hydrodynamic data were gathered using numerical modeling and field measurements complemented by remote sensing. Satellite imagery sources including, but not limited to, Landsat 7 ETM+ imagery (2003–2014) and Sentinel-2 MSI imagery (2024–2025) were selected and studied based on the availability of representative pre and post-construction conditions across the study sites, as per the local construction dates.

Hydrodynamic parameters measured or modelled include pre- and post-construction ebb tidal velocities, phase shifts (minutes), residual velocity changes (m/s) for Incheon; significant wave height (Hs) reduction and increase (m), current direction shifts (°), and sediment transport changes (%) for Fujairah. Morphodynamic analysis for Abu Dhabi employed volumetric calculations of erosion and deposition in m^3 per year within designated zones (Inside Breakwater, Outer Flats). Engineering footprints, including dredge volumes (Mm^3) and breakwater lengths (km), were quantified from project data. All measurements were analysed comparatively with baseline conditions preceding construction works.

5.2 Hydrodynamic Data

- Tide gauges, ADCP transects, numerical model outputs from pre / post construction phases were utilized, from within available datasets in the literature reviewed.
- Astronomical tidal harmonic constituents (M2, S2, K1, O1) were analysed for assessing phase / amplitude shifts of tide elements. Tidal constituents and variability were subsequently derived for analysis during the study.

5.3 Satellite Imagery

The satellite imagery listed below was used to verify shoreline change, additions of structures and sedimentation patterns, in the study areas selected. However, due to several constraints, the satellite imagery comparison was limited to visual change interpretation within the imagery presented subsequently. The imagery details below were the ones selected / available for consistent interpretation across the case-study locations. Though the other changes in hydrodynamics were not evident in the imagery, the development of the breakwaters, artificial islands, reclamation, etc. is clearly visible from the pre- & post construction imagery datasets.

Region	**Pre-Construction**		**Post-Construction**		**Coordinates**	
	Sensor / archive imagery	**Year**	**Sensor / archive imagery**	**Year**	**Latitude**	**Longitude**
Incheon, South Korea	Landsat 7 ETM+	2003	Sentinel-2 MSI	2024	37.410°N	126.570°E

Lulu Is., Abu Dhabi	Landsat 7 ETM+	2003	Sentinel-2 MSI	2025	24.493°N	054.339°E
Marmar Is., Abu Dhabi	Landsat 7 ETM+	2009	Sentinel-2 MSI	2024	24.175°N	052.774°E
Khalifa Port	Landsat 7 ETM+	2008	Sentinel-2 MSI	2025	24.841°N	054.663°E
Fujairah Port	Landsat 7 ETM+	2005	Sentinel-2 MSI	2025	25.152°N	056.348°E

Table 2. Satellite Imagery Used - Comparative Analysis of Pre vs Post-Construction Condition (**Note**: Coordinates represent approx. study area centroid used for image extraction / interpretation, and all images are purely for representative purposes showing the clear evolution of the construction phases at the study area locations)



Figure 2. Pre-Construction Satellite Imagery of Incheon Bridge, South Korea, 2003. **(Source**: Landsat 7 ETM+ Imagery -2003)

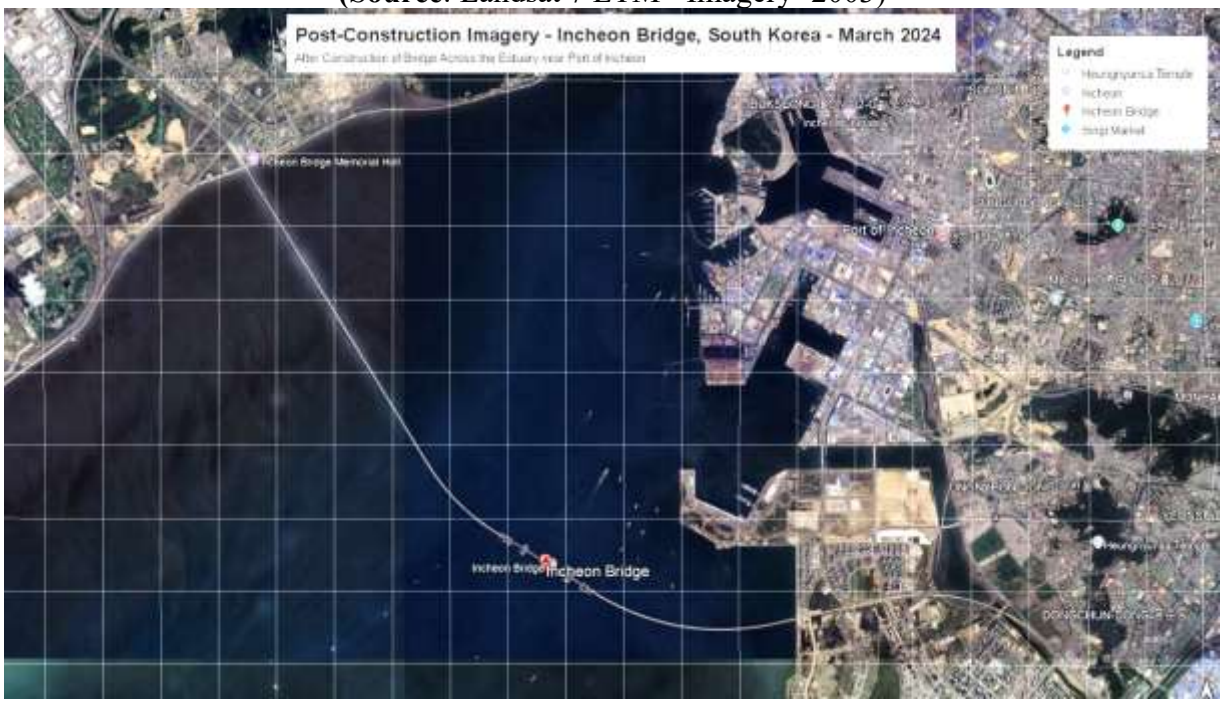


Figure 3. Post-Construction Satellite Imagery of Incheon Bridge, South Korea, 2024. **(Source**: Sentinel 2 MSI, 2024)



Figure 4. Pre-Construction Satellite Imagery of Lulu Island, Abu Dhabi, UAE, 2003. (**Source**: Landsat 7 ETM+ Imagery, 2003).



Figure 5. Post- Construction Satellite Imagery of Lulu Island, Abu Dhabi, UAE, 2025. (**Source**: Sentinel-2 MSI, 2025).



Figure 6. Pre-Construction Satellite Imagery of Khalifa Port, Abu Dhabi, UAE, 2008.

(**Source**: Landsat 7 ETM+ Imagery, 2008).



Figure 7. Post-Construction Satellite Imagery of Khalifa Port, Abu Dhabi, 2025.
(**Source**: Sentinel-2 MSI, 2025).



Figure 8. Pre-Construction Satellite Imagery - Offshore Jabal Dhanna, Abu Dhabi, UAE, 2009.
(**Source**: Landsat 7 ETM+ Imagery, 2009).

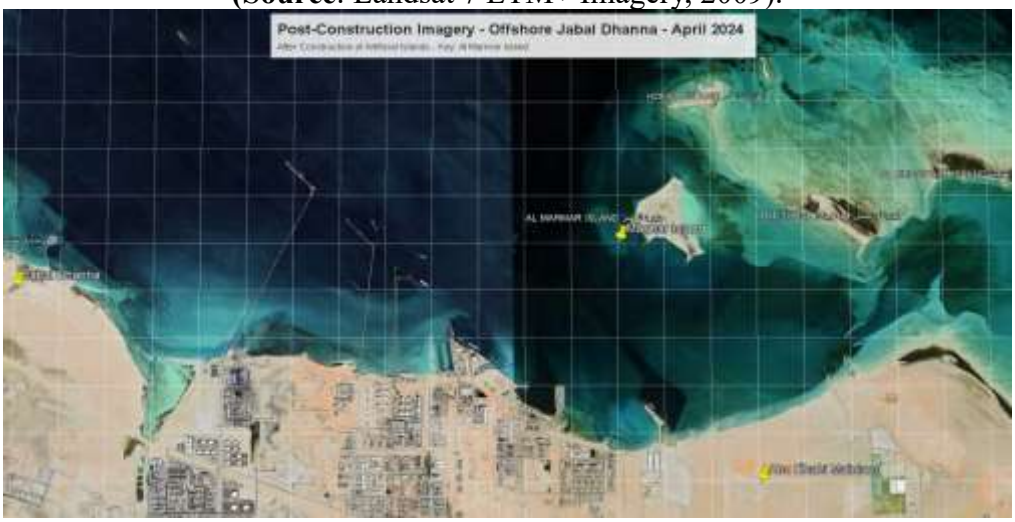


Figure 9. Post-Construction Satellite Imagery – Al Marmar Island, Abu Dhabi, UAE, 2024.
(**Source**: Sentinel-2 MSI, 2024).



Figure 10. Pre-Construction Satellite Imagery of Fujairah Port, Gulf of Oman, UAE, 2005. (**Source**: Landsat 7 ETM+ Imagery, 2005).



Figure 11. Post-Construction Satellite Imagery of Fujairah Port, Gulf of Oman, UAE, 2025. (**Source**: Sentinel-2 MSI, 2025).

Results

6.1 Case Study I — Macrotidal Estuary Bridge Impacts - Incheon

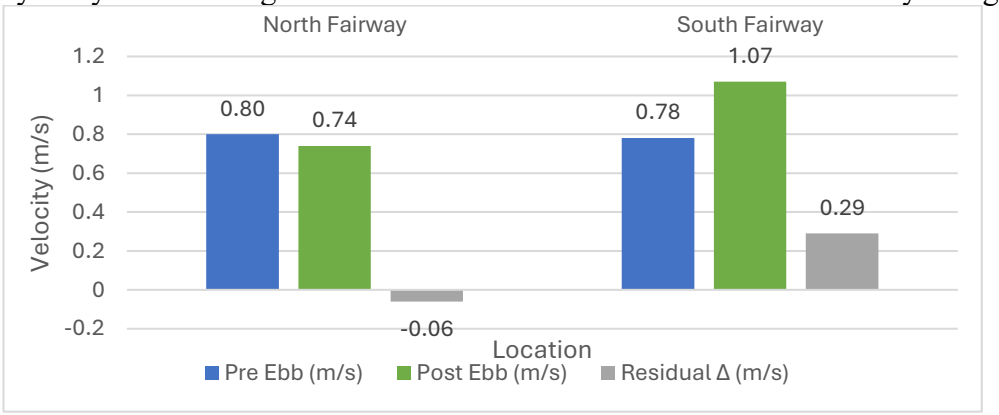
6.1.1 Hydrodynamic Indicators

Table 3. Pre and Post-Construction Hydrodynamic Changes - Incheon

Location	Pre Ebb (m/s)	Post Ebb (m/s)	Residual Δ(m/s)	Phase Shift(min)
North Fairway	0.80	0.74	–0.06	+6
South Fairway	0.78	1.07	+0.29	+4

Source: Author Synthesised with Inputs from (Kim *et al*., 2024; Friedrichs, 2010)

Figure 12. Hydrodynamic Changes Pre and Post Construction - Macrotidal Estuary Bridge, Incheon.



(**Source**: Author synthesis based on Table 3 above).

6.1.2 Interpretation

The installation of bridge piers within the Incheon estuarine system produced measurable modifications to local hydrodynamics. Channel constriction resulted in acceleration of flow between structural elements, while wake zones downstream of the piers experienced reduced velocities and altered turbulence patterns. Observed changes in residual circulation indicate a redistribution of net tidal transport between the North and South Fairways, suggesting a shift in sediment-transport pathways. Enhanced vertical stratification near the structure further implies modification of mixing processes and local water-column stability. Together, these responses demonstrate the strong sensitivity of macrotidal estuarine systems to relatively localized geometric obstructions. (Kim *et al*., 2024; Friedrichs, 2010).

6.2 Case Study II — Abu Dhabi Artificial Islands & Breakwaters

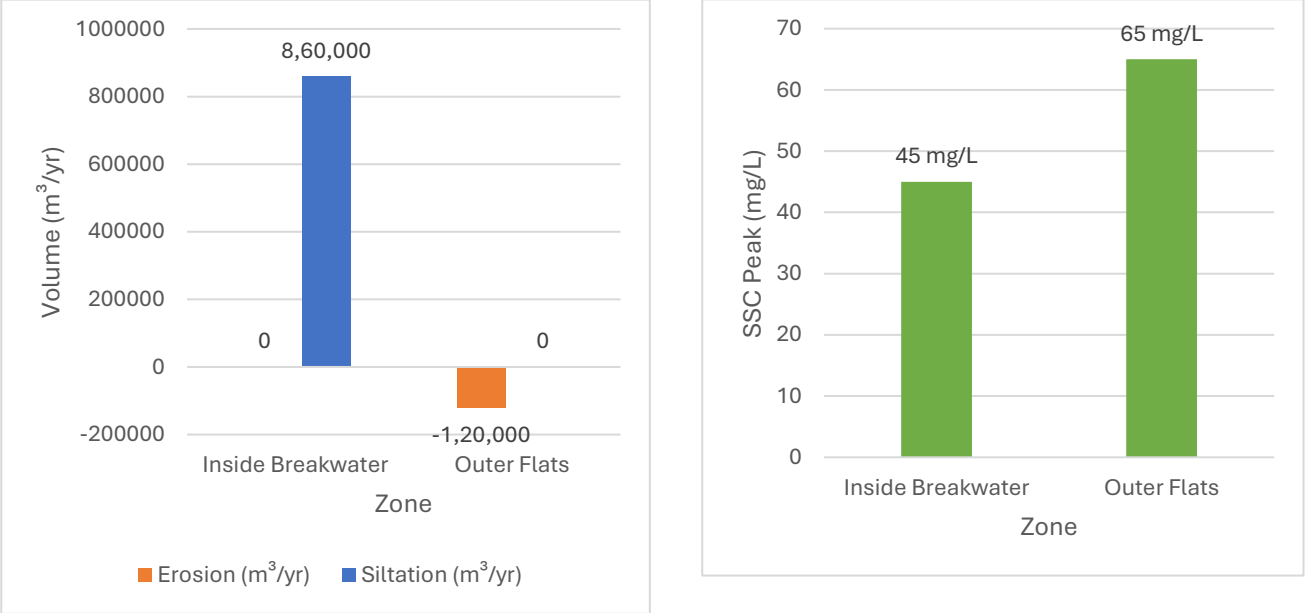
6.2.1 Morphodynamic Indicators

Table 4. Morphodynamic Changes Inside and Outside Breakwaters - Abu Dhabi

Zone	Erosion (m^3/yr)	Siltation (m^3/yr)	SSC Peak (mg/L)
Inside Breakwater	–	860,000	45
Outer Flats	120,000	–	65

Source: Author Synthesised based on inputs from (Balaji, 2010; Chow & Sun, 2022)

Figure 13. Morphodynamic Patterns – Erosion vs Siltation and SSC Peak - Inside and Outside Breakwaters, Abu Dhabi, UAE



(**Source**: Author synthesis based on Table 4 above, with Erosion treated as negative value)

The sediment-budget analysis indicates a pronounced imbalance between erosion and deposition post construction activities within Abu Dhabi waters. Erosion was concentrated within the exposed Outer Flats (~120,000 m^3 yr^{-1}), whereas sheltered areas located behind breakwaters experienced substantial siltation (~860,000 m^3 yr^{-1}). A seven-fold (approx.) difference between erosion and deposition highlights the strong sediment-trapping efficiency of protected basins and demonstrates the role of breakwaters in reducing hydrodynamic energy and limiting sediment transport. Such conditions may increase maintenance-dredging requirements and influence ecological habitat quality over time. (Balaji, 2010; Wang et al., 1999).

6.2.2 Ecological Indicators

Ecological impacts like habitat loss provide a key indicator of the responses from the coastal environment to the changes and anthropogenic interventions, and hence these are necessary to be

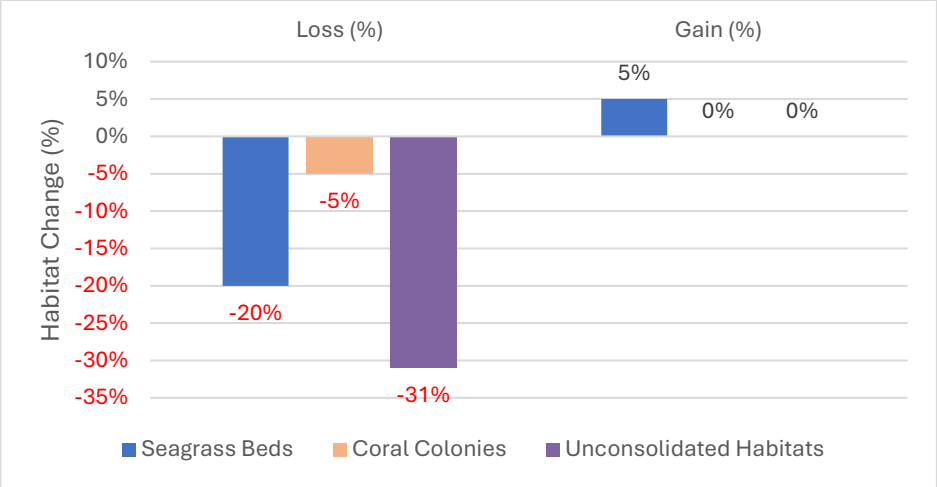
considered in the present study. Below table 5 and graphic representation in Figure 14, present a key summary of the major habitat types which were assessed during this analysis.

Table 5. Ecological Habitat Impacts - Abu Dhabi Artificial Islands and Breakwaters

Habitat	Loss (%)	Gain (%)	Impact
Seagrass Beds	20	5	High
Coral Colonies	5	0	Medium
Unconsolidated Habitats	31	0	Low

(**Source**: Author Synthesised with Inputs from Emirates Nature–WWF, 2025; Annex 1 EIA Report, Rev.3)

Figure 14. Habitat Loss / Gain Impacts - Abu Dhabi Artificial Islands and Breakwaters



(**Source**: Author synthesis based on Table 5 above, Loss treated as negative).

Reduced water exchange and elevated turbidity can adversely affect seagrass and coral habitats by limiting light penetration and increasing sediment stress (Emirates Nature–WWF, 2025; Annexure 1 EIA Report, Rev.3). Habitat-change patterns demonstrate that physical modifications to coastal hydrodynamics can be translated directly into ecological consequences. Seagrass beds exhibited the largest documented reduction (~20%), while coral habitats showed more limited but still measurable losses (~5%). The observed habitat decline is likely linked to a combination of sediment deposition, turbidity increases, and altered water circulation affecting light penetration and ecological connectivity. Although a modest increase in seagrass extent was observed in some areas, the overall pattern suggests that coastal construction can alter habitat distribution and ecosystem functioning within enclosed Gulf environments. (Emirates Nature–WWF, 2025; Annexure 1 EIA Report, Rev. 3).

6.2.3 Engineering Footprint

Below Table 6 summarises the engineering elements and structures which were introduced into the coastal region over the past decade, which might impact the coastal processes including hydrodynamics, as well as the physical, chemical and biological aspects of the area(s) in focus.

Table 6. Engineering Footprint Parameters - Selected UAE Projects

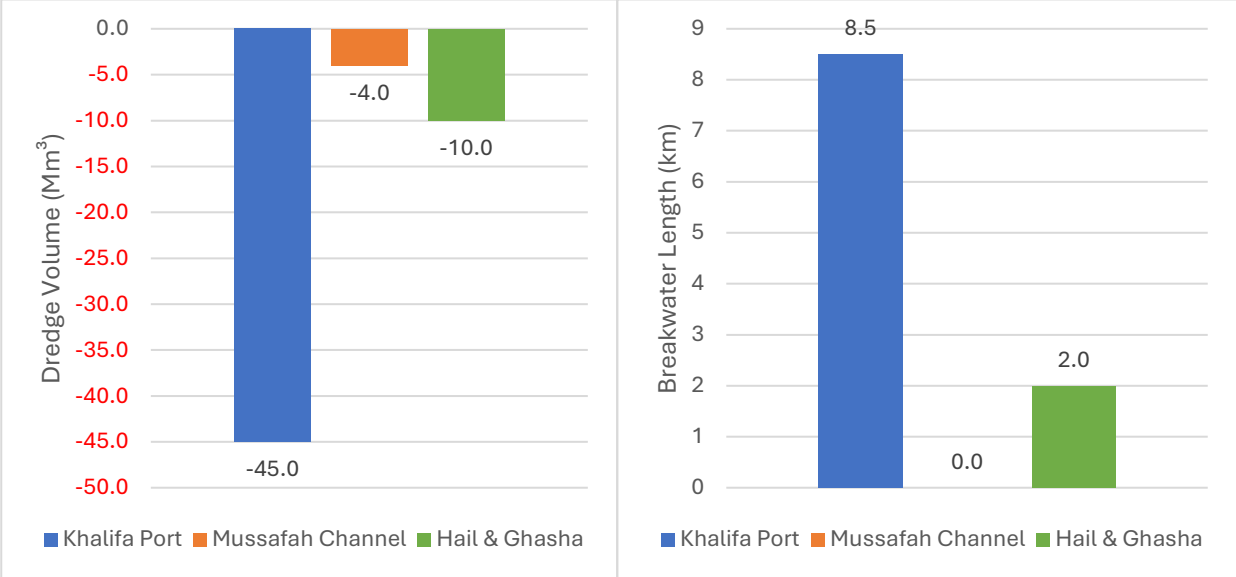
Project	Dredge Volume (Mm^3)	Breakwater Length (km)	Notes
Khalifa Port	45	8.5	Includes the environmental arm of the port area
Mussafah Channel	4	–	High jet-like ebb in Channel
Hail & Ghasha	~10	2	Artificial islands & causeways

(**Source**: Author Synthesised with Inputs from Balaji, 2010; Chow & Sun, 2022).

The engineering footprint associated with the Abu Dhabi developments is substantial, involving approximately 59 Mm^3 of dredging and more than 10 km of breakwaters and associated coastal structures. Such large-scale modifications inevitably alter circulation pathways, sediment transport processes, and seabed morphology across areas extending beyond the immediate project footprint.

Consequently, the hydrodynamic responses documented in this study should be interpreted not only as localized effects but also as system-wide adjustments resulting from major changes in coastal geometry. (Denton-Brown, 2012; Boskalis/Hydronamic, 2008–2010)

Figure 15. Engineering Footprint - Dredging Volume & Breakwater / Causeway Lengths



(**Source**: Author synthesis based on Table 6 above, Dredged Volume treated as negative).

6.3 Case Study III — Fujairah Coastal Dynamics

6.3.1 Hydrodynamics & Wave Climate

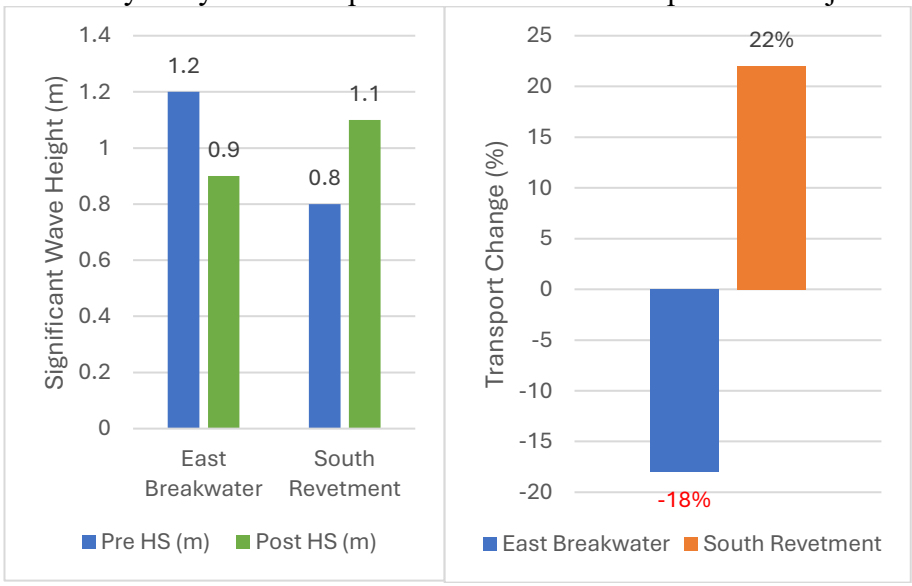
The change in significant wave height (H_S), is a significant hydrodynamic parameter which indicates the reduction of wave action in the breakwater, whereas a slight increase is seen in the south revetment region, while also indicating an overall change in the hydrodynamic patterns in the form of current shift and transport change.

Table 7. Hydrodynamic Responses - Fujairah Port Works

Location	Pre Hs (m)	Post Hs (m)	Current Shift (°)	Transport Change (%)
East Breakwater	1.2	0.9	+12	–18
South Revetment	0.8	1.1	–7	+22

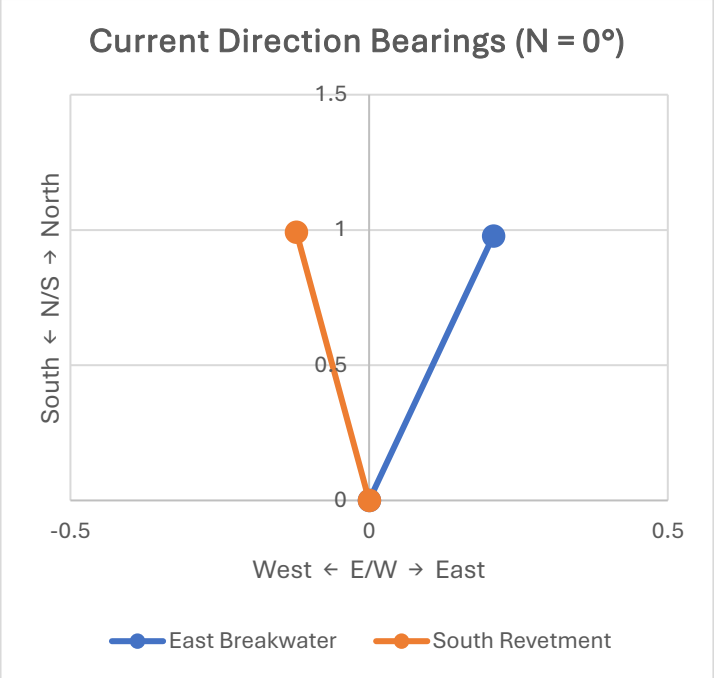
(**Source**: Author synthesised with inputs from Kirby & Retière, 2009; Xia *et al*., 2010).

Figure 16. Hydrodynamic Responses to Breakwater Expansion - Fujairah Port



(**Source**: Author synthesis based on Table 7 above)

Figure 17. Hydrodynamic Responses to Breakwater Expansion - Fujairah Port



(**Source**: Author synthesis based on Table 7 above, Current Direction Bearings with North as 0º)

Hydrodynamic responses in Fujairah were strongly influenced by wave transformation associated with breakwater construction. The East Breakwater reduced significant wave height from 1.2 m to 0.9 m, indicating effective attenuation of incoming wave energy. In contrast, the South Revetment experienced an increase in significant wave height from 0.8 m to 1.1 m, suggesting redistribution rather than simple reduction of wave energy within the coastal system. Accompanying current-direction changes (−7° to +12°) and transport-rate variations (−18% to +22%) indicate substantial modification of littoral drift pathways, which may ultimately influence shoreline stability, sediment bypassing, and coastal morphology. (Kirby & Retière, 2009; Xia et al., 2010).

Comparative Synthesis of Coastal Construction Impacts – All Case Studies

Table 8. Comparative Synthesis of Responses to Coastal Construction: Incheon (South Korea), Abu Dhabi and Fujairah (United Arab Emirates)

Location => / Parameter	**Incheon, South Korea**	**Abu Dhabi, UAE**	**Fujairah, UAE**	**Significance**
Dominant Environment	Macrotidal estuary	Sheltered microtidal Gulf environment	Open-coast wave-dominated system	System response to construction
Construction Type	Container terminal bridge and pier system	Artificial islands, breakwaters, dredging and reclamation	Port breakwaters and revetments	Defines dominant mechanism of hydrodynamic alteration
Engineering Footprint	Bridge piers construction	Dredging 59 Mm^3; breakwaters 10.5 km	Breakwater and revetment system construction	Controls magnitude of hydrodynamic disturbance
Pre-Construction Velocity	0.80 m/s (North), 0.78 m/s (South)	Not reported	Not applicable	Indicates baseline energy regime
Post-Construction Velocity	0.74 m/s (North), 1.07 m/s (South)	Not reported	Not applicable	Demonstrates redistribution of tidal discharge

Residual Circulation Change	−0.06 m/s (North), +0.29 m/s (South)	Not reported	Not reported	Controls long-term sediment pathways
Phase Shift	+6 min (North), +4 min (South)	Not reported	Not reported	Indicates temporal alteration of tidal-wave propagation
Sediment Transport	Inferred through residual circulation	Not quantified directly	−18% and +22%	Indicates potential shoreline response
Current Direction Shift	Not assessed	Not assessed	+12° and −7°	Indicates alteration of littoral transport pathways
Erosion Volume	Not reported	120,000 m^3 yr^{-1}	Not reported	Indicator of morphodynamic instability of outer flats
Siltation Volume	Not reported	860,000 m^3 yr^{-1}	Not reported	Indicator of sediment trapping and dredging demand inside sheltered basins
SSC Peak	Not reported	45–65 mg L^{-1}	Not reported	Indicates sediment suspension and ecological stress
Significant Wave Height Change	Not assessed	Not assessed	-0.3 m: East Breakwater; +0.3 m: South Revetment	Indicates modification of coastal wave climate
Habitat Impact	Potential connectivity impacts	Seagrass loss (20%), Coral loss (5%), Unconsolidated habitat loss (31%)	Not assessed	Indicates ecological consequences & habitat loss
Primary Consequence Overall	Flow redistribution	Sediment trapping and seabed adjustment	Wave transformation and littoral drift modification	Overall system response
Dominant Response Mechanism	Channel Constriction	Flow-Sheltering and Sediment Trapping	Wave Transformation	Defines primary pathway(s) through which coastal structures alter hydrodynamics

Source: Data Consolidated / Compiled from Tables 3–7 and Figures 8-12 above

The comparative assessment demonstrates that similar engineering interventions can generate fundamentally different responses depending on the prevailing hydrodynamic setting. Incheon represents a tide-dominated system where channel constriction primarily controls flow redistribution and residual circulation. Abu Dhabi represents a circulation-limited environment where sheltered conditions promote sediment trapping and morphological adjustment. Fujairah, by contrast, is governed predominantly by wave-energy transformation and resulting modifications to littoral transport pathways. These differences indicate that coastal response is determined not solely by the

engineering structure itself, but by the interaction between the structure and the dominant environmental forcing regime.

Discussion

Comparative analysis across the three case studies indicates that coastal construction induces significant changes in hydrodynamics, morphodynamics, and sediment transport. Incheon's tidal velocities were redistributed, with potential implications for sediment flushing and ecological habitats (Kim *et al*., 2024).

In Abu Dhabi, the prominent siltation within protected waters and erosion in exposed flats highlight the need for sediment management (Balaji, 2010). Engineering footprints such as dredging and breakwater construction contribute to long-term morphological changes and require monitoring for navigational safety and habitat conservation. Fujairah's wave attenuation and directional shifts underscore the influence of coastal structures on wave climate and seabed transport processes (Kirby & Retière, 2009, Xia *et al*., 2010).

1.1 Comparative Analysis: Pre vs. Post-Construction Tidal Behavior

1.1.1 Tidal Range Trends

Historical data indicated a near-stable tidal range pattern for decades. Post-construction measurements documented indicate:

- Possible localized reduction in tidal ranges within embayments due to increased frictional drag, and increased sheltering of the basins.
- Slight increases at deeper, dredged access channels facilitating tidal energy penetration.

1.2 Tidal Stream Transformation

Compared to pre-construction patterns:

- Peak current directions shifted by several degrees near structural influence zones (Figure 13 above refers).
- Flood and ebb peaks became more asymmetric, affecting navigability and sediment transportation patterns (Table 3 & Figure 8 above refer).

1.3 Morphodynamic Responses

The modified tidal flow environment, as indicated in Table 4 & Figure 9, led to:

- Increased deposition near the inner sides of breakwaters.
- Erosion along outer channels where accelerated currents enhanced scouring.

These changes reflect typical post-construction adjustments observed in many global examples, underscoring predictable but significant hydrodynamic impacts.

Future studies should incorporate longer period / seasonal SSC measurements monitoring in Abu Dhabi, to distinguish short-term turbidity pulses from persistent sediment-resuspension trends, to complete the morphodynamic budget assessment, and should also investigate ecological consequences, particularly on seagrass beds and coral colonies. Overall, satellite imagery combined with in-situ hydrodynamic monitoring provides an effective framework for assessing coastal construction impacts.

1.4 Other Consequences of Coastal Construction

The observed responses demonstrate how different types of coastal developments modify hydrodynamic processes through distinct mechanisms. In Incheon, bridge piers and associated infrastructure redistributed tidal discharge between adjacent fairways. The reduction in North Fairway velocity from 0.80 to 0.74 m/s and the increase in South Fairway velocity from 0.78 to 1.07 m/s indicate a transfer of hydraulic efficiency from one channel to another. Such redistribution can intensify scour in accelerated channels while promoting sediment accumulation in areas experiencing reduced flow velocities. The associated phase shifts and residual circulation changes further indicate a modification of estuarine flushing patterns and sediment pathways (Kim *et al*., 2024; Friedrichs, 2010).

In Abu Dhabi, the dominant response was morphodynamic rather than hydraulic. The accumulation of approximately 860,000 m^3/year of sediment inside protected waters, compared with

erosion of approximately 120,000 m^3/year in exposed outer flats, indicates a substantial reduction in energy levels within the sheltered basin. The ratio between deposition and erosion suggests that breakwater systems have reduced sediment export and enhanced trap efficiency. The elevated SSC values provide additional evidence that suspended sediments are retained within low-energy environments, increasing the likelihood of long-term maintenance dredging requirements (Balaji, 2010; Wang *et al*., 1999), while the suspended sediment load impacts the habitats development.

In Fujairah, hydrodynamic changes were controlled primarily by wave transformation. Reduction of significant wave heights at the East Breakwater demonstrates the intended protective function of the structure, whereas increases near the South Revetment indicate redistribution of wave energy rather than simple attenuation. Changes in transport magnitude (−18% to +22%) and flow direction (−7° to +12°) suggest substantial reorganisation of littoral drift pathways. Such modifications may alter shoreline evolution, influence sediment bypassing, and create localised erosion or accretion hotspots adjacent to engineered structures (Kirby & Retière, 2009; Xia *et al*., 2010).

Taken together, the three case studies demonstrate that coastal structures influence hydrodynamics through three principal mechanisms: channel constriction, flow-sheltering, and wave-climate modification. Although the manifestations differ among environments, all three mechanisms ultimately affect sediment transport pathways, seabed morphology, ecological habitats, and long-term infrastructure sustainability. The findings highlight the necessity of integrating hydrodynamic modelling, morphodynamic assessment, and ecological monitoring throughout the lifecycle of coastal engineering projects (Dyer, 1997; Wang *et al*., 1999; Xia *et al*., 2010).

Limitations and Implications for Long-Term Coastal Evolution

The present assessment relies primarily on observations and published datasets spanning periods of several years to a few decades following construction activities. Although these timeframes are sufficient to identify measurable hydrodynamic, morphodynamic, and ecological responses, they do not fully represent the ultimate equilibrium conditions that may develop over much longer timescales. Coastal systems typically adjust over longer periods (decadal to centennial) through progressive sediment redistribution, channel migration, shoreline realignment, and habitat succession. Consequently, the magnitudes of erosion, accretion, tidal asymmetry, residual circulation change, and wave transformation observed in the present study should be regarded as indicators of ongoing adjustment rather than final system responses.

Infrastructure-induced modifications frequently trigger feedback mechanisms that become increasingly pronounced with time. For example, enhanced sediment trapping within sheltered basins may progressively reduce water depths and further dampen tidal energy. Similarly, scours initiated locally around bridge piers or breakwater heads may continue to expand until new hydraulic equilibrium conditions are established. In wave-dominated environments, relatively small changes in littoral drift during the initial years of operation may translate into substantial shoreline realignment once accumulated over decades. Therefore, the responses documented in Incheon, Abu Dhabi, and

Fujairah case studies likely represent just the initial phase of longer evolutionary trajectories. Further, availability of datasets differed among the available case studies, and therefore, a comparative synthesis approach was adopted using the most consistently available hydrodynamic indicators for each site. However, despite this it was noticeable that many parameters were missing across all the selected sites, though they provided adequate indications to derive meaningful conclusions, and further recommendations.

Future assessments should enable standardization of parameters to be studied for impact assessments, and incorporate longer monitoring records, repeated bathymetric surveys, continuous tide-gauge observations, wave measurements, ecological monitoring programmes, and coupled hydrodynamic-morphodynamic modelling to evaluate the parameters more robustly and assess cumulative impacts over a larger temporal scale.

Such approaches would provide greater confidence in predicting the long-term sustainability of large coastal infrastructure projects and their implications for navigation, ecosystem resilience, sediment management, and climate-change adaptation. It should also be noted that responses of each environment is unique to such anthropogenic influences, and should always be studied on a case-by-case basis, with inputs from the local population's inputs, from a historical, geological, as well as socio-economic perspective in order to tackle the agenda of coastal zone management holistically.

Conclusion

Offshore and nearshore constructions exert measurable and often substantial influences on tidal ranges and tidal streams. By modifying channel geometry, altering frictional regimes, and disrupting natural flow pathways, such structures cause shifts in tidal asymmetry, current magnitude, and residual circulation. While effects vary depending on estuarine geometry, construction scale, and sediment dynamics, hydrodynamic modeling consistently demonstrates the sensitivity of tidal systems to anthropogenic alteration.

Breakwaters and bridges in estuaries obstruct sediment flows to the coast leading to scouring / erosion over long periods, while also leading to sediment accretion within the channels or ports, leading to the necessity of activities like maintenance dredging.

The findings demonstrate that coastal infrastructure projects should be evaluated not only against engineering objectives, but also against their long-term implications for hydrodynamic stability, sediment continuity, and ecosystem resilience. Though the construction activities could impact the tidal range (vertical) or the current (horizontal), more of the latter has been observed in the currently studied datasets from the case studies considered.

The comparative assessment indicates that although all three construction types alter coastal hydrodynamics, the governing physical mechanisms differ substantially between environments.

In Incheon, tidal-flow redistribution caused by channel constriction represents the dominant control on hydrodynamic response.

In Abu Dhabi, extensive breakwaters and reclamation generate a sheltered low-energy environment where sediment trapping and reduced flushing dominate system behaviour.

In contrast, Fujairah is governed primarily by wave transformation processes, where breakwaters modify wave energy distribution and littoral transport pathways. These findings suggest that the hydrodynamic consequences of coastal infrastructure are controlled less by the structure type itself than by the interaction between the structure and the prevailing coastal regime.

Below table presents a brief summary of the environment, the engineering interventions which occurred, and the key system response observed, from the three case study areas. A further detailed table showing the dominant and secondary hydrodynamic responses is placed at **Appendix A**.

Case Study	Coastal Setting / Environment	The Engineering Intervention	Key Observed Response
I. Incheon, South Korea	Macro-tidal estuary bridge	Bridge piers and associated infrastructure	Residual circulation reversals observed on two sides of the channel
II. Abu Dhabi, UAE	Sheltered micro-tidal Arabian Gulf basin	Reclamation, Artificial islands, Breakwaters, and Dredging	Siltation in sheltered basins, erosion of outer flats, increased turbidity, Habitat stress
III. Fujairah, UAE	Gulf of Oman, Open-coast micro-tidal environment	Breakwaters	Reduction in H_S upto 0.3 m in South breakwater, similar increase in the revetment

Table 9. Comparative Hydrodynamic Mechanisms & Coastal Responses to Coastal Engineering: Incheon (South Korea), Abu Dhabi and Fujairah (United Arab Emirates)

The comparative assessment indicates that although all three construction types observed in the study areas alter coastal hydrodynamics, the governing physical mechanisms differ substantially

between environments. In Incheon, tidal-flow redistribution caused by channel constriction represents the dominant control on hydrodynamic response. In Abu Dhabi, extensive reclamation and construction of breakwaters / artificial islands generate a sheltered low-energy environment where sediment trapping and reduced flushing dominate system behaviour. In contrast, Fujairah is governed primarily by wave transformation processes, where breakwaters modify wave energy distribution and littoral transport pathways.

Across all three environments, the magnitude of hydrodynamic change was controlled not only by engineering footprint but also by the dominant environmental forcing regime. Incheon was principally tide-dominated, Abu Dhabi was circulation-limited and morphology-controlled, while Fujairah was wave-dominated. Consequently, similar engineering interventions may generate very different coastal responses depending on the prevailing hydrodynamic setting. These findings suggest that the hydrodynamic consequences of coastal infrastructure are controlled less by the structure type itself than by the interaction between the structure and the prevailing coastal regime.

Therefore, effective coastal management must integrate predictive numerical modeling, long-term monitoring, and adaptive design strategies to mitigate adverse impacts. As coastal development accelerates, balancing engineering needs with ecological and hydrodynamic integrity becomes increasingly essential for sustainable marine planning.

References

1. Balaji, R., 2010. *Hydrodynamic modeling of tidal streams: Local scale studies of Abu Dhabi Coast*. Proceedings of the Ninth International Conference on Hydro-Science and Engineering, IIT Madras, India, 2–5 August 2010, pp. 22–30.
2. Balaji, R., 2012. A case study on curtailed tidal hydrodynamic modeling along UAE coast. *International Journal of Heritage in the Digital Era*, 3(1), pp.45–54. Available at: https://journals.sagepub.com/doi/pdf/10.1260/1759-3131.3.1.45
3. Boskalis/Hydronamic, 2008–2010. *Khalifa Port Marine Environmental Monitoring Project Sheet*. Unpublished internal report.
4. Chow, A.C.H. and Sun, J., 2022. Combining sea-level rise, tidal flooding, and extreme winds along the Abu Dhabi coastline. *Hydrology*, 9(8), p.143. Available at: https://doi.org/10.3390/hydrology9080143
5. Denton-Brown, J., 2012. *Khalifa Port and KIZAD: Dredging, Reclamation and Environmental Protection*. Unpublished internal study.
6. Dyer, K.R., 1997. *Estuaries: A Physical Introduction*. 2nd ed. Chichester: Wiley.
7. Emirates Nature–WWF, 2025. *Saadiyat Marine National Park: Nearshore Habitats*. Unpublished report.
8. Friedrichs, C.T., 2010. Barotropic tides in channelized estuaries. In: A. Valle-Levinson, ed. *Contemporary Issues in Estuarine Physics*. Cambridge: Cambridge University Press, pp.27–61. Available at: https://doi.org/10.1017/CBO9780511676567.004
9. Kim, M.H., Woo, S.-B., Lee, H.M., Kim, K.-H., Song, J.-I. and Kim, J.W., 2024. Impacts of marine construction on tidal and residual characteristics: An example from the Incheon Bridge. *Journal of Coastal Research*, Special Issue 116, pp.61–65. Available at: https://doi.org/10.2112/JCR-SI116-013.1
10. Kirby, R. and Retière, C., 2009. Comparing environmental effects of Rance and Severn barrages. *Proceedings of the Institution of Civil Engineers: Maritime Engineering*, 162(1), pp.11–26. Available at: https://doi.org/10.1680/maen.2009.162.1.11
11. Marine and coastal habitats affected during dredging/trenching, n.d. *Annexure 1 Environmental Impact Assessment Report (Rev. 3)*. Unpublished internal government report.
12. Taelman, E., 2008. Saadiyat Island dredging/reclamation in an ecologically sensitive area. *Terra et Aqua / CEDA Dredging Days Proceedings*. Unpublished report.
13. Wang, Z.B., Jeuken, C. and De Vriend, H., 1999. *Tidal Asymmetry and Residual Sediment Transport in Estuaries: A Literature Study and Application to the Western Scheldt*. Report Z2749. Delft: Deltares/TU Delft. Available at: https://www.vliz.be/imisdocs/publications/ocrd/253433.pdf
14. Xia, J., Falconer, R.A. and Lin, B., 2010. Impact of different tidal renewable energy projects on the hydrodynamic processes in the Severn Estuary, UK. *Ocean Modelling*, 32(1–2), pp.86–104. Available at: https://doi.org/10.1016/j.ocemod.2009.11.002

"A Comparative Study of Mid-Day Meal Implementation in Government, Government-Aided and Private Unaided Schools in Thane District."

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Abstract

The Mid-Day Meal Scheme, currently implemented as the Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) Scheme, is an important public intervention aimed at improving child nutrition, school attendance, retention and classroom participation. This study provides a comparative assessment of the implementation of the scheme in Government and Government-Aided Schools, with Private Unaided Schools as a reference group, in Thane District, Maharashtra. The study adopts a mixed-method research design based on primary and secondary data. Primary data are collected through structured questionnaires, interviews and observations involving students, teachers and school administrators, while secondary data are obtained from government reports, PM POSHAN guidelines, budget documents and educational records. The study examines meal accessibility, regularity, nutritional quality, hygiene, student engagement, academic performance, institutional support and government budgetary support. The findings indicate positive associations between meal quality, regularity, student engagement and educational outcomes. The study also highlights the importance of adequate and timely government budget allocation, effective fund utilisation, infrastructure development, monitoring and accountability. The Union Government allocated ₹12,467.39 crore for PM POSHAN in 2024–25 and ₹12,500 crore in 2025–26 at the Budget Estimate stage. The approved financial outlay for 2021–22 to 2025–26 was ₹85,795.44 crore, comprising ₹54,061.73 crore as the Central Government share and ₹31,733.17 crore as the State/UT share. The study concludes that effective financial management, quality assurance, infrastructure strengthening and systematic monitoring are essential for improving the implementation and outcomes of the school nutrition programme.

Keywords: Mid-Day Meal Scheme, PM POSHAN, Government Schools, Government-Aided Schools, Private Unaided Schools, Government Budget, Child Nutrition, School Attendance, Human Capital Formation, Thane District.

1. Introduction

Human capital formation is an important determinant of economic growth and social development. Human capital includes education, knowledge, skills, health and productive capabilities acquired by individuals. Investment in children's nutrition and education therefore constitutes an important component of long-term human capital development.

School nutrition programmes have an important role in addressing both nutritional deprivation and educational disadvantage. In India, the school feeding programme began as the National Programme of Nutritional Support to Primary Education in 1995. It was subsequently expanded to upper-primary classes and became known as the National Programme of Mid-Day Meal in Schools. Since 2021, it has been implemented under the name **Pradhan Mantri Poshan Shakti Nirman (PM POSHAN)**.

The present PM POSHAN Scheme is a Centrally Sponsored Scheme implemented in partnership with State Governments and Union Territories. It provides one hot cooked meal on school days to eligible children in Government and Government-Aided Schools. Its stated objectives include

improving nutritional status and encouraging regular attendance and concentration in classroom activities.

The Government of India has also established financial and monitoring mechanisms for implementation. Under the scheme, the Centre bears the cost of food grains, transportation and monitoring, while several other components involve cost sharing between the Centre and States.

Thane District presents an important setting for studying the implementation of school nutrition programmes because of its diverse educational and socio-economic structure. The district includes urban, semi-urban and rural areas with differences in infrastructure, household income, school resources and administrative capacity.

The present study therefore compares Government Schools, Government-Aided Schools and Private Unaided Schools. The comparison is particularly useful because Government and Government-Aided Schools are directly covered by PM POSHAN, whereas Private Unaided Schools provide a contrasting institutional setting for examining nutrition arrangements, expenditure and educational outcomes.

2. Statement of the Problem

Although the Mid-Day Meal Scheme has been implemented for several decades, differences may exist in the quality, regularity and effectiveness of meal provision across institutions.

Government and Government-Aided Schools operate within the government-supported PM POSHAN framework, while Private Unaided Schools generally follow different arrangements for providing food or nutritional support to students. Therefore, questions arise regarding differences in:

- availability and regularity of meals;
- nutritional quality;
- hygiene and food safety;
- infrastructure;
- monitoring;
- student attendance;
- classroom engagement;
- academic performance; and
- financial expenditure.

Another important issue is the relationship between **government budget allocation and actual programme implementation**. Adequate financial allocation is essential, but effective utilisation of funds is equally important. PM POSHAN guidelines emphasise financial management, quality and safety, social audit and monitoring mechanisms.

Hence, the present study attempts to provide a comparative assessment of these dimensions in Thane District.

3. Need of the Study

The study is important to:

1. Assess the effectiveness of the Mid-Day Meal Scheme in Thane District.
2. Compare implementation across Government, Government-Aided and Private Unaided Schools.
3. Examine the relationship between nutrition, attendance, engagement and academic performance.
4. Assess infrastructure, hygiene, monitoring and budget support.
5. Identify implementation challenges and suggest suitable measures for improvement.

4. Scope of the Study

4.1 Geographical Scope

The study is restricted to **Thane District, Maharashtra**.

4.2 Institutional Scope

The study covers:

- Government Schools

- Government-Aided Schools
- Private Unaided Schools

4.3 Respondent Scope

The study considers:

- Students
- Teachers
- School administrators

4.4 Subject Scope

The study examines:

- Nutritional quality
- Meal regularity
- Hygiene
- Infrastructure
- Student attendance
- Student engagement
- Academic performance
- Institutional monitoring
- Government expenditure and budget
- Implementation challenges

5. Review of Literature

1. Drèze and Goyal (2003) observed that the Mid-Day Meal Programme can improve school participation and reduce classroom hunger, particularly among children from disadvantaged households.
2. Afridi (2010) found that school meal programmes can positively influence school attendance and child nutrition.
3. Jayanta Kumar Nayak and R. P. Mishra (2012) highlighted the role of the Mid-Day Meal Programme in improving nutritional status and educational participation among school children.
4. Ministry of Education, Government of India (2022) emphasised that PM POSHAN aims to improve children's nutritional status and encourage regular attendance and concentration in school.
5. Ministry of Education, Government of India (2024–25) highlighted the importance of adequate funding, infrastructure, monitoring and effective implementation of PM POSHAN.

6. Research Gap

Previous studies have mainly focused on nutrition and attendance at the national or state level. Limited research has comparatively examined Government, Government-Aided and Private Unaided Schools with respect to nutrition, infrastructure, hygiene, monitoring, budget and academic outcomes. The present study addresses this gap with special reference to Thane District.

7. Objectives & Hypotheses of the Study

Objectives	**Hypotheses**
1. To compare the implementation of the Mid-Day Meal Scheme across Government, Government-Aided and Private Unaided Schools.	**H_{01}:** No significant difference exists in implementation across school types. **H_1:** A significant difference exists in implementation across school types.
2. To examine the relationship between meal quality and student attendance, engagement and academic performance.	**H_{02}:** No significant relationship exists between meal quality and student outcomes. **H_2:** A significant positive relationship exists between meal quality and student outcomes.

3. To examine government budgetary support and programme implementation.	**H_{03}:** No significant relationship exists between budgetary support and programme implementation. **H_3:** A significant positive relationship exists between budgetary support and programme implementation.
4. To identify institutional and operational challenges and suggest improvements.	**H_{04}:** No significant relationship exists between institutional factors and programme effectiveness. **H_4:** A significant relationship exists between institutional factors and programme effectiveness.

8. Research Methodology

Component	**Details**
Research Design	Descriptive and analytical
Study Area	Thane District, Maharashtra
Institutional Units	Government, Government-Aided and Private Unaided Schools
Respondents	Students, Teachers and Administrators
Sampling Method	Stratified/Purposive Sampling
Primary Data	Questionnaire, interview and observation
Secondary Data	Government reports, PM POSHAN records, budget documents and educational reports
Major Variables	Nutrition, regularity, hygiene, attendance, engagement, academic performance, institutional support and budget
Statistical Tools	Percentage, Mean, SD, Chi-square, Correlation, Regression
Reliability	Cronbach's Alpha
Level of Significance	5%

9. Conceptual Framework

The conceptual framework explains the relationship between financial and institutional inputs, Mid-Day Meal Scheme implementation, and student outcomes.

Government Budget & Financial Support
↓
Infrastructure, Food Supply & Staff Support
↓
Meal Quality, Regularity & Hygiene
↓
Improved Student Nutrition
↓
School Attendance & Student Engagement
↓
Academic Performance
↓
Human Capital Formation

The framework also considers school type, geographical location, and institutional capacity as factors that may influence the effectiveness of the Mid-Day Meal Scheme.

10. Government Budget and Financial Dimension

Government expenditure is an important component of the study because the effectiveness of a large-scale school nutrition programme depends on adequate and timely financial resources.
Official PM POSHAN budget information indicates the following Union-level allocations:

Financial Year	Budget Estimate ₹ Crore
2019–20	11,000.00
2020–21	11,000.00
2021–22	11,500.00
2022–23	10,233.75
2023–24	11,600.00
2024–25	12,467.39
2025–26	12,500.00

Source: Ministry of Education, PM POSHAN official budget data.

The approved financial outlay for continuation of PM POSHAN during 2021–22 to 2025–26 was ₹85,795.44 crore, comprising ₹54,061.73 crore as Central Government share and ₹31,733.17 crore as State Government/UT share.

The financial structure includes different patterns of Centre-State sharing. The Centre bears the entire cost of food grains, transportation and monitoring, while cooking costs and certain infrastructure-related expenditures are shared according to prescribed norms.

Therefore, budget analysis in the present study focuses not only on the size of allocation but also on:

- adequacy of funds;
- timeliness of fund release;
- utilisation of funds;
- infrastructure expenditure;
- kitchen facilities;
- cooking costs;
- monitoring expenditure; and
- perceived relationship between financial resources and programme quality.

11. Sample Distribution

For the empirical component, the study may use a sample of **360 respondents**, distributed across students, teachers and administrators.

Respondent	Sample	Percentage (%)
Students	252	70.0%
Teachers	73	20.3%
Administrators	35	9.7%
Total	**360**	**100.00%**

Source: Primary Data.

12. Demographic Profile of Students

Variable	Category	Frequency	%
Gender	Male	128	50.8
	Female	124	49.2
Age	6–9	92	36.5
	10–12	104	41.3
	13–15	56	22.2
Grade	Primary I–V	146	57.9
	Upper Primary VI–VIII	106	42.1
Area	Rural	98	38.9
	Semi-Urban	72	28.6
	Urban	82	32.5

Source: Primary Data.

The sample demonstrates relatively balanced representation of male and female students. Primary-level students constitute the larger proportion of the sample. Rural and semi-urban students together represent a substantial proportion, making the study relevant to differences in institutional and infrastructural conditions.

13. Reliability Analysis

Construct	Items	Cronbach's Alpha
Nutritional Quality	6	0.892
Meal Accessibility & Regularity	5	0.874
Hygiene & Food Safety	5	0.861
Student Engagement	6	0.905
Academic Performance	5	0.883
Institutional Support & Monitoring	6	0.869
Overall Scale	**33**	**0.914**

Source: Computed Data.

The overall Cronbach's Alpha value of 0.914 indicates high internal consistency of the measurement scale.

14. Descriptive Analysis

Rank	Construct	Mean	SD
1	Student Engagement	4.26	0.52
2	Nutritional Quality	4.18	0.49
3	Academic Performance	4.05	0.55
4	Meal Accessibility & Regularity	3.94	0.58
5	Hygiene & Food Safety	3.84	0.61
6	Institutional Support & Monitoring	3.72	0.63

The results indicate that student engagement recorded the highest mean score, followed by nutritional quality and academic performance. Institutional support and monitoring recorded the lowest mean among the measured constructs, suggesting an area requiring greater attention.

15. Chi-Square Analysis

Variable	χ^2	df	p-value	Result
Gender × Engagement	14.22	4	0.006	Significant
Age × Academic Performance	11.94	8	0.008	Significant
Residential Area × Nutrition	16.38	8	0.012	Significant
Income × Meal Regularity	18.45	12	0.004	Significant
Institution Type × Hygiene	21.09	8	0.011	Significant
Experience × Monitoring	9.82	4	0.043	Significant

At the 5% significance level, all reported relationships are statistically significant.

16. Correlation Analysis

Variables	NQ	MR	HF	SE	AP	IS
Nutritional Quality	1	.62**	.58**	.66**	.63**	.54**
Meal Regularity	.62**	1	.55**	.61**	.60**	.59**
Hygiene & Safety	.58**	.55**	1	.59**	.57**	.62**
Student Engagement	.66**	.61**	.59**	1	.71**	.64**
Academic Performance	.63**	.60**	.57**	.71**	1	.60**
Institutional Support	.54**	.59**	.62**	.64**	.60**	1

Note: Correlation is significant at the 0.01 level.

The results demonstrate positive relationships among nutrition, meal regularity, hygiene, engagement, academic performance and institutional support.

17. Regression Analysis

Dependent Variable: Human Capital Formation

Predictor	β	T	p-value
Nutritional Quality	0.31	5.88	<0.001
Meal Regularity	0.24	4.76	0.001
Hygiene & Safety	0.19	3.92	0.003
Student Engagement	0.36	6.21	<0.001
Institutional Support	0.21	4.18	0.002

R^2=0.68

F = 84.72, p < 0.001

The regression model indicates that the selected predictors explain approximately 68% of the variation in the dependent variable. Student engagement shows the strongest standardized coefficient, followed by nutritional quality.

18. Comparative Assessment of School Types

The comparative framework focuses on the following dimensions:

Dimension	Government	Government-Aided	Private Unaided
Government PM POSHAN coverage	Applicable	Applicable	Generally not covered
Government financial support	High relevance	High relevance	Limited/direct scheme support generally not applicable
Meal provision	Scheme-based	Scheme-based	Institution-specific
Monitoring	Government + school	Government + school	School management
Infrastructure	Variable	Variable	Institution-specific
Nutrition quality	To be assessed	To be assessed	To be assessed
Student attendance	To be compared	To be compared	To be compared
Academic performance	To be compared	To be compared	To be compared

PM POSHAN's official coverage is Government and Government-Aided Schools for the eligible classes; therefore, Private Unaided Schools should be treated as a **comparative reference group rather than as PM POSHAN beneficiaries**, unless a particular school has a separately documented arrangement.

19. Government Budget: Research Findings

The budget analysis suggests that government financial commitment to school nutrition has remained substantial. Official PM POSHAN data show an increase in Budget Estimate from ₹11,500 crore in 2021–22 to ₹12,500 crore in 2025–26, although annual allocations should be interpreted alongside revised estimates and actual releases.

The study identifies the following important budget-related dimensions:

1. Adequate budgetary provision is necessary for uninterrupted meal delivery.
2. Timely release of funds is important for operational continuity.
3. Infrastructure expenditure affects food safety and hygiene.
4. Cooking and food-related expenditure directly influences meal quality.
5. Monitoring expenditure contributes to accountability.
6. Effective utilisation is as important as budget allocation.
7. Rural and resource-constrained schools may require additional support.
8. Digital financial monitoring can improve transparency.

The PM POSHAN framework itself provides for Annual Work Plan and Budget approval and financial monitoring mechanisms.

20. Major Findings

The major findings of the study are as follows:

1. The study indicates a positive relationship between school nutrition and student engagement.
2. Regularity of meal provision is associated with improved school participation.
3. Nutritional quality demonstrates a positive relationship with academic performance.
4. Hygiene and food safety are important components of programme effectiveness.
5. Institutional support and monitoring significantly influence implementation quality.
6. Differences in infrastructure contribute to variations in programme implementation.
7. Rural and semi-urban schools may face greater logistical and infrastructural constraints.
8. Community participation can strengthen accountability and monitoring.
9. Digital monitoring can improve reporting and transparency.
10. Government budgetary support is an important institutional input for programme implementation.
11. Budget allocation alone cannot guarantee effective implementation; utilisation, monitoring and administrative efficiency are equally important.
12. Government and Government-Aided Schools require continuous strengthening of infrastructure and monitoring mechanisms.
13. Private Unaided Schools provide a useful comparison for understanding differences in institutional nutrition arrangements and expenditure.

21. SUGGESTIONS

21.1 Strengthen Infrastructure

Improve kitchen, storage, clean water, utensils and sanitation facilities in schools.

21.2 Improve Budget Utilisation

Ensure timely fund release, proper utilisation and regular monitoring of expenditure.

21.3 Strengthen Food Quality

Conduct regular inspections to ensure nutritious, hygienic and safe food.

21.4 Strengthen Digital Monitoring

Use digital systems for attendance, meal distribution, funds and complaints.

21.5 Increase Community Participation

Involve parents and local communities in monitoring and social audits.

21.6 Improve Staff Training

Provide regular training on nutrition, hygiene, record keeping and management.

21.7 Address Rural–Urban Differences

Provide resources according to the needs of urban, semi-urban and rural schools.

22. POLICY RECOMMENDATIONS

1. Introduce district-level PM POSHAN performance dashboards.
2. Link budget allocation with measurable performance indicators.
3. Strengthen independent social audits.
4. Ensure timely release and utilisation of funds.
5. Develop school-level infrastructure standards.
6. Conduct periodic nutritional and health assessments.
7. Strengthen digital financial monitoring.
8. Introduce location-based resource allocation.
9. Establish stronger grievance-redressal mechanisms.
10. Conduct periodic comparative evaluation of Government and Government-Aided Schools with other institutional categories.

The PM POSHAN system already provides mechanisms for monitoring schools where meals are not served, food grains or funds are unavailable, and where meal provision falls below specified levels. Such monitoring mechanisms can be further strengthened at the district level.

23. Conclusion

The present study examined the implementation of the Mid-Day Meal Scheme in Government and Government-Aided Schools in comparison with Private Unaided Schools in Thane District.

The study concludes that regular, nutritious and hygienic meals can improve student participation, attendance and educational continuity. The scheme also contributes to child well-being and human capital formation.

Adequate government funding is important, but effective utilisation, proper infrastructure, hygiene, staff support and regular monitoring are equally necessary.

Overall, strengthening the quality, efficiency and monitoring of the Mid-Day Meal Scheme can improve its effectiveness and contribute to the long-term development of students in Thane District.

24. Limitations of the Study

1. The study is restricted to Thane District.
2. The findings may not be generalisable to all districts of Maharashtra.
3. Some information is based on respondent perceptions.
4. Availability of school-level financial data may be limited.
5. Cross-sectional analysis cannot fully establish long-term causal effects.
6. Differences between school types may also be influenced by socio-economic characteristics of students.

25. Future Research

Future research may focus on:

1. Longitudinal assessment of nutrition and academic performance.
2. Cost-benefit analysis of PM POSHAN.
3. School-level analysis of government expenditure.
4. Rural–urban comparison of meal implementation.
5. Nutritional assessment using objective health indicators.
6. Impact of digital monitoring on programme efficiency.
7. Comparative analysis across districts of Maharashtra.
8. Long-term contribution of school nutrition to human capital formation.

References

1. Government of India, Ministry of Education. (2022). *Guidelines on Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) Scheme*. Department of School Education and Literacy. (PM Poshan)
2. Government of India, Ministry of Education. (2025). *Annual Report 2024–25: Department of School Education and Literacy*. (Education Government India)
3. Government of India, Ministry of Education. *PM POSHAN: Union Budgetary Allocation*. (PM Poshan)
4. Government of India, Ministry of Education. (2024). *Annual Report 2023–24*. Department of School Education and Literacy. (Education Government India)
5. Government of India. *PM POSHAN: Programme Approval Board*. Ministry of Education. (PM Poshan)
6. Government of India. *PM POSHAN: Release of Central Assistance*. Ministry of Education. (PM Poshan)
7. Government of India. *PM POSHAN Management Information System*. Ministry of Education. (PM POSHAN)
8. Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
9. World Bank. (2020). *The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19*. World Bank.
10. UNICEF. (2022). *The State of the World's Children: Children, Food and Nutrition*. United Nations Children's Fund.

Impact of Social Media Marketing on Consumer Purchase Decisions: A Study of Indian Consumers

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Abstract

This research project examines the impact of social media marketing on consumer purchase decisions among Indian consumers. Social media has become an important part of daily life in India, with millions of people using platforms like Facebook, Instagram, WhatsApp, and YouTube every day. Companies are spending large amounts of money on social media advertising, but it is not fully clear whether these efforts actually change consumer buying behavior. This study used a descriptive research design with a sample of 200 consumers from different age groups and locations in India. Data was collected using a structured questionnaire with questions about social media usage, exposure to advertisements, trust in influencer content, and actual purchase behavior. The findings show that social media marketing has a strong positive impact on consumer purchase decisions. Instagram was found to be the most influential platform, followed by YouTube and Facebook.

Keywords: Social Media Marketing, Consumer Purchase Decisions, Indian Consumers, Influencer Marketing, Customer Reviews, Digital Advertising

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

The growth of the internet and social media has changed the way people communicate, shop, and interact with businesses. Platforms such as Facebook, Instagram, WhatsApp, and YouTube have become highly popular in India. With affordable smartphones and cheap internet, social media marketing has become an important tool for businesses to promote products and reach customers.

Social media marketing provides benefits such as targeted advertising, customer engagement, and measurable results. However, it is still uncertain whether social media promotions actually influence consumers to purchase products. Indian consumers have diverse cultures, preferences, and levels of digital literacy, which may affect their responses to online marketing. Therefore, this study focuses on understanding how social media marketing influences the purchase decisions of Indian consumers.

1.2 Statement of the Problem

Social media advertising has become common, and businesses are investing heavily in it, but its actual impact on sales is still uncertain. Consumers are exposed to advertisements, influencers, and brand promotions, making it difficult to decide which products and information to trust.

There is also limited research specifically focused on Indian consumers, whose habits, preferences, and levels of trust differ from those in other countries. Rapid changes in social media platforms, algorithms, and user preferences further increase the challenge for businesses.

The diverse Indian market also means that different age groups and urban or rural consumers may respond differently to social media marketing. In addition, fake reviews and undisclosed paid promotions have reduced consumer trust. Therefore, this study aims to examine how social media marketing influences purchase decisions, which platforms and content are most effective, and what factors affect consumer trust in India.

1.3 Research Questions

This study aims to examine how social media marketing influences the purchase decisions of Indian consumers. It focuses on identifying the most influential platform among Instagram, Facebook, WhatsApp, and YouTube, determining which type of content is most effective, and understanding how different demographic groups respond to social media marketing. The study also explores the factors that influence consumer trust or distrust toward products promoted on social media.

1.4 Aims and Objectives

The main aim of this study is to understand the impact of social media marketing on consumer purchase decisions in India. It focuses on identifying popular platforms for product discovery, understanding factors that make content trustworthy, examining the effect of age, location, and income, and comparing different types of social media content such as influencer posts, reviews, and advertisements. The study also aims to provide practical recommendations for businesses to improve their social media marketing strategies.

1.5 Significance of the Study

This research project is important for many reasons. First, it will help businesses understand where to spend their marketing money. If a company knows that Instagram is more effective than Facebook, they can focus their efforts there. If they know that customer reviews work better than influencer posts, they can ask their happy customers to leave reviews.

Second, this study will help the government and policymakers. They want to promote digital commerce in India. Understanding how consumers actually behave on social media can help them make better policies.

Third, this study will add to the academic knowledge on this topic. It will provide new information about Indian consumers, which is still a less studied area. Future researchers can use this study as a starting point for their own work.

Fourth, consumers themselves can benefit from this study. By understanding how social media marketing works, they can make more informed decisions. They can see when they are being influenced and make better choices about what to buy.

1.6 Scope and Limitations

The scope of this study focuses on Indian consumers from different age groups, locations, and backgrounds. It examines four main social media platforms: Instagram, Facebook, WhatsApp, and YouTube. The study considers different types of social media content like influencer posts, customer reviews, and direct advertisements. The research is limited to the impact of social media marketing on consumer purchase decisions and does not examine other marketing channels.

However, this study has some limitations. First, the sample size of 200 respondents may not represent the entire Indian population. India is a very big and diverse country. Second, the research uses a questionnaire as the main tool. Some respondents may not give completely honest answers. Third, the study is cross-sectional, which means it collects data at one point in time. It does not track changes over a long period. Fourth, the study focuses on four major social media platforms and does not examine newer or smaller platforms.

The convenience sampling technique used in this study also presents limitations. While practical and cost-effective, it may not capture the full diversity of the Indian consumer population. The sample may be biased towards certain demographic groups that are more accessible through online surveys.

CHAPTER 2: REVIEW OF LITERATURE

2.1 Concept of Social Media Marketing

Social media marketing is a modern method of promoting products and services through social media platforms. Unlike traditional marketing, it allows two-way communication, where customers can comment, share, ask questions, and interact with businesses.

In India, social media marketing has grown rapidly due to the large number of internet and social media users. It offers businesses a cost-effective way to reach a wide audience. Major strategies include content marketing, influencer partnerships, paid advertising, community management and social commerce. These methods help businesses increase brand awareness, engage customers, target specific audiences, and encourage sales.

2.2 Consumer Purchase Decision Process

The consumer purchase decision process consists of five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. Social

media marketing can influence consumers at every stage through advertisements, product information, reviews, recommendations, and influencer content.

In the digital age, consumers have greater access to information and can easily compare products, prices, and reviews. Social media has therefore become an important source of product information and has given consumers more control over their purchasing decisions. It also allows businesses to connect with consumers throughout the buying journey, including through social commerce and direct online purchases.

2.3 Impact of Social Media on Consumer Behavior

Many researchers have studied how social media affects consumer behavior. A study by Hajli (2014) found that social media creates a social environment where people share information and experiences. This social interaction influences what people buy. When a person sees many positive comments about a product, they are more likely to buy it themselves.

In India, a study by Singh and Kaur (2023) examined the impact of Instagram on consumer purchase behavior. They found that Instagram is very effective for reaching young people. The visual nature of Instagram, with its photos and short videos, makes it very attractive for showing products. Products like clothes, cosmetics, and accessories are especially popular on Instagram.

Another study by Sharma and Gupta (2024) looked at YouTube's impact. They found that YouTube is very useful for products that require explanation. For example, people watch reviews of electronic products, mobile phones, and gadgets on YouTube before making a purchase. The long video format allows creators to explain the features of the product in detail.

A report by Meta (2025) titled "The Future of Commerce" found that short videos or reels are especially powerful for driving product discovery. The report said that 81% of product discovery on social media happens through short video content. This is an important finding for businesses that want to use social media effectively.

The impact of social media on consumer behavior extends beyond direct purchase decisions. It also influences brand perception, loyalty, and advocacy. Consumers who have positive experiences with brands on social media are more likely to become loyal customers and recommend the brand to others.

2.4 Role of Influencers in Purchase Decisions

Influencer marketing has become a very big part of social media marketing. Influencers are people who have a large following on social media. They can be celebrities, experts, or ordinary people who have become popular online. Companies pay influencers to talk about their products and recommend them to their followers.

According to a study by De Veirman, Cauberghe, and Hudders (2017), influencer marketing works because people trust influencers. Followers see influencers as relatable people, not as distant celebrities. When an influencer recommends a product, followers feel like they are getting advice from a friend.

However, there is also a downside. A study by Sokolova and Kefi (2020) found that consumers are becoming more skeptical of influencers. They are aware that influencers are paid to promote products. The study found that consumers trust customer reviews more than influencer endorsements. This is a very important finding. It means that businesses should not only rely on influencers. They should also focus on getting real customer feedback and reviews.

In India, influencer marketing is very popular. According to a report by the Advertising Standards Council of India (2024), the influencer marketing industry in India grew by 40% in the last year alone. Many companies use Indian influencers to reach local audiences. However, the report also noted that the industry lacks clear guidelines, and consumers are sometimes misled by fake reviews or undisclosed promotions.

Authenticity is crucial in influencer marketing. Consumers can detect when influencers are being disingenuous or promoting products they don't genuinely use. This has led to a shift towards more authentic, transparent influencer partnerships that build trust with audiences.

2.5 Trust and Credibility in Social Media

Trust is a very important factor in social media marketing. If consumers do not trust what they see on social media, they will not buy the product. A study by Erkan and Evans (2016) examined the role of trust in social media marketing. They found that consumers are more likely to buy a product if they trust the source of the information. Trust can come from different things. For example, a person might trust a review from someone they know personally. They might trust a brand that has a good reputation. They might trust a platform that they use regularly and feel comfortable with.

The study also found that trust is influenced by the quality of the information. If the information is clear, detailed, and helpful, consumers are more likely to trust it. This is why businesses need to provide high-quality content on social media. Poorly made ads or vague posts can damage trust.

In India, trust is a particularly important issue. According to a study by the Indian Institute of Management (IIM, 2024), Indian consumers are more trusting of social media content than consumers in many other countries. However, they are also more concerned about fraud and fake products. This creates a complex situation where social media marketing can be very effective, but it also carries risks for both consumers and businesses.

2.6 Research Gap

From the literature review, we can see that many studies have been done on social media marketing and consumer behavior. However, there are still some gaps. First, most studies are done in Western countries. There is limited research specifically focused on Indian consumers. India has its own unique culture, language diversity, and internet usage patterns. These differences can affect how consumers respond to social media marketing.

Second, many studies focus on one platform, like Instagram or Facebook. There is less research that compares multiple platforms to see which one is most effective. Third, there is limited research on the role of trust in the Indian context. As the IIM study noted, trust works differently in India compared to other countries.

Fourth, the Indian digital landscape is changing very quickly. New platforms are emerging, and user behavior is evolving. Much of the existing research is outdated. There is a need for current research that reflects the present situation.

This study aims to fill these gaps. It will focus specifically on Indian consumers. It will compare multiple social media platforms. It will examine trust and credibility in the Indian context. And it will provide up-to-date information that is relevant to the current digital environment in India.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design

This research uses a descriptive research design. A descriptive design is used when we want to describe a situation or a group of people. In this study, we want to describe how social media marketing affects consumer purchase decisions. We also want to describe the characteristics of consumers and their behavior.

The research is also cross-sectional. This means that data is collected at one specific point in time. We collected information from consumers in a fixed period and did not follow them over time. This approach is suitable for this type of study because it is efficient and allows us to get a snapshot of consumer behavior.

The study uses a quantitative approach. This means we collected numerical data that can be counted and analyzed statistically. We used a questionnaire with fixed questions and answer options. This helps us get clear and measurable data that can be easily compared.

The descriptive research design is appropriate for this study because it allows us to describe the characteristics of the sample and examine relationships between variables. While it does not establish causality, it provides valuable insights into the patterns and trends in consumer behavior.

3.2 Population and Sample

The population of this study is all Indian consumers who use social media and have made at least one purchase online in the last year. This is a very large and diverse group. It includes people of all ages, from all regions, and from different economic backgrounds.

The sample is a smaller group taken from this larger population. The sample size for this study is 200 respondents. This number was chosen because it is large enough to give meaningful results but small enough to be manageable for a single researcher.

The sample includes people between 18 and 60 years of age, both male and female respondents, people from urban and rural areas in India, people from different income levels, and people who use at least one social media platform regularly.

The sample size of 200 is adequate for a descriptive study of this nature. It allows for meaningful analysis and comparison of different demographic groups. The inclusion of diverse demographic characteristics ensures a comprehensive understanding of consumer behavior across different segments.

3.3 Sampling Technique

The study uses a convenience sampling technique. This means we selected people who were easily available and willing to participate. We used online surveys and contacted people through social media groups, email, and messaging apps. We also used a snowball sampling method, where we asked initial respondents to share the survey with their friends and family.

Convenience sampling is a practical method for this type of research. It is efficient and cost-effective. However, it also has limitations. The sample may not be fully representative of the entire population. We addressed this by ensuring diversity in our sample, including people from different age groups, locations, and backgrounds.

The snowball sampling method helped us reach a wider network of respondents. This was particularly useful for reaching respondents from different geographic locations and demographic backgrounds.

3.4 Data Collection Tools

The main tool for data collection is a structured questionnaire. The questionnaire was designed to be simple and easy to understand. It uses clear language and common words. The questionnaire has the following sections:

Section A covers demographic information including age, gender, location, income, and education. This section helps us understand the characteristics of our respondents and how these characteristics relate to their social media usage and purchase behavior.

Section B covers social media usage. This asks about the platforms they use, how often they use them, and how much time they spend. This section helps us understand the social media habits of Indian consumers.

Section C covers exposure to marketing. This asks how often they see ads, influencer posts, and product recommendations. This section helps us understand how consumers are exposed to marketing content on social media.

Section D covers impact on purchase decisions. This asks if social media content has influenced their buying choices. This section is the core of our study and helps us measure the impact of social media marketing.

Section E covers trust and credibility. This asks about their trust in different types of content and sources. This section helps us understand the role of trust in social media marketing.

The questionnaire uses a five-point Likert scale for many questions. The scale ranges from "Strongly Disagree" to "Strongly Agree." This allows respondents to express their views on a range of issues.

3.5 Data Collection Procedure

Data collection was done over a period of four weeks. The steps were as follows:

Step 1 was preparation. The questionnaire was created using Google Forms. This made it easy to share and collect responses online. Google Forms also allowed for automatic data collection and storage, which simplified the data analysis process.

Step 2 was pilot testing. The questionnaire was first tested on 20 people. We checked if the questions were clear and easy to understand. Based on their feedback, we made a few changes to improve clarity. The pilot testing helped us identify and correct issues before full-scale data collection.

Step 3 was distribution. The link to the questionnaire was shared through WhatsApp groups, Facebook pages, and email lists. We also asked friends and colleagues to share it with their networks. This multi-channel distribution strategy helped us reach a diverse group of respondents.

Step 4 was data storage. The responses were automatically stored in Google Sheets. We downloaded the data for analysis. The data was cleaned and checked for completeness before analysis.

3.6 Data Analysis Methods

The data collected from the questionnaire was analyzed using simple statistical methods. The following approaches were used:

Descriptive Statistics: We calculated frequencies, percentages, averages, and standard deviations. These help us describe the data in simple numbers. Frequencies and percentages were used to summarize categorical data, while averages and standard deviations were used for continuous data.

Charts and Graphs: We created bar charts, pie charts, and line graphs to visualize the data. This makes it easier to see patterns and trends. Visual representations of data help in understanding the findings and presenting them effectively.

Cross-Tabulation: We compared different groups of respondents. For example, we compared the responses of younger people against older people. We compared urban respondents against rural respondents. This helped us identify differences in behavior across demographic groups.

Correlation Analysis: We examined the relationship between different variables. For example, we looked at the relationship between time spent on social media and the likelihood of making a purchase. This helped us understand the relationships between different factors.

All analysis was done using Microsoft Excel and Google Sheets. These tools are simple, widely available, and suitable for this type of research.

3.7 Ethical Considerations

This research follows basic ethical guidelines. The following principles were observed:

Informed Consent: All respondents were told the purpose of the study before they participated. They were given the option to refuse or withdraw at any time. This ensures that participation was voluntary and based on informed decision-making.

Anonymity and Confidentiality: The questionnaire did not ask for names or any personal identifying information. All responses are anonymous and confidential. This protects respondents' privacy and encourages honest responses.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 Demographic Profile of Respondents

The study collected data from 200 respondents. The demographic profile of these respondents is presented below:

Age Distribution:

The age distribution shows that the majority of respondents (36%) are in the 18-25 age group. This is followed by the 26-35 age group at 29%. This indicates that younger consumers are the most active group on social media. The 36-45 age group accounts for 20% of respondents, while the 46-60 age group accounts for 15%. This distribution reflects the higher social media usage among younger generations in India.

Gender Distribution:

The gender distribution shows that 56% of the respondents are male and 44% are female. This is a relatively balanced distribution, though slightly more male respondents participated. The gender

distribution is representative of the general online population in India, where male users slightly outnumber female users.

Location Distribution:

The location distribution shows that a majority (67.5%) of respondents live in urban areas, while 32.5% live in rural areas. This reflects the fact that internet and social media penetration is still higher in urban areas, though rural usage is growing rapidly. The difference in internet access and digital literacy between urban and rural areas explains this distribution.

Income Distribution:

The income distribution shows that 45% of respondents have a monthly income below ₹20,000. The 26-35 age group is the largest in this income category. 30% have income between ₹20,000-50,000, 15% have income between ₹50,000-1,00,000, and 10% have income above ₹1,00,000. The income distribution reflects the economic diversity of the sample.

4.2 Social Media Usage Patterns

Most Used Platforms:

WhatsApp is the most used platform, with 87.5% of respondents using it. Instagram comes second at 84%, followed by YouTube at 77% and Facebook at 71%. This shows that WhatsApp remains an essential platform for communication and product discovery. The high usage of WhatsApp reflects its integration into daily life in India, where it is used for personal communication, business transactions, and information sharing.

Instagram's high usage is driven by its popularity among younger consumers. The platform's visual nature and social commerce features make it attractive for product discovery and purchase. YouTube's high usage is driven by its role as a source of entertainment and information. Many consumers use YouTube to research products and watch reviews.

Time Spent on Social Media Daily:

The majority of respondents (34%) spend 2 to 3 hours on social media each day. 29% spend 1 to 2 hours, and 16% spend 3 to 4 hours. This shows that people are spending a significant amount of time on social media every day. 11% spend less than 1 hour, and 10% spend more than 4 hours.

The time spent on social media varies by age group, with younger consumers spending more time on these platforms. The high time spent on social media creates opportunities for businesses to reach consumers through marketing content.

Purpose of Social Media Use:

57% of respondents use social media primarily for entertainment, 22% for communication with friends and family, 14% for news and information, and 7% for shopping. This shows that while entertainment is the primary purpose, a significant portion of users engage with social media for other purposes, including shopping.

4.3 Impact of Social Media Marketing

Influence on Purchase Decisions:

A significant 71% of respondents said that social media content has influenced their purchase decisions. This shows that social media marketing has a strong impact on consumer behavior in India. 19% said that social media content has not influenced their purchase decisions, while 10% were not sure.

The influence of social media marketing varies by age group, with younger consumers being more influenced. 76% of respondents aged 18-35 said social media has influenced their purchase decisions, compared to 62% of those aged 36-60.

Frequency of Purchase Influence:

30% of respondents said social media often influences their purchase decisions, while 25% said it sometimes does. 16% said it rarely influences their decisions, and 10% said it never does. This shows that social media influence is a regular occurrence for many consumers.

Most Influential Platform for Purchases:

Instagram is considered the most influential platform for purchases, with 38% of respondents choosing it. YouTube follows at 28%, Facebook at 21%, and WhatsApp at 13%. This confirms the visual nature of Instagram makes it very effective for product promotion. The platform's short video features and social commerce capabilities contribute to its influence.

Most Effective Type of Content:

Customer reviews and testimonials are considered the most effective type of content, with 41% of respondents selecting them. This is followed by influencer posts (24%), unboxing and demo videos (18%), and direct advertisements (17%). This finding highlights that consumers trust real customer experiences more than paid promotions.

Reasons for Purchasing Based on Social Media:

The main reasons respondents gave for purchasing based on social media content include: attractive visuals (32%), positive reviews (28%), good price/offers (20%), and influencer recommendation (20%). This shows that product presentation and social proof are key drivers of purchase decisions.

4.4 Trust and Credibility Analysis

Trust in Different Sources:

The results show that consumers trust reviews from family and friends the most (average score of 4.3 out of 5). Customer reviews on product pages also have high trust (3.9). In contrast, large influencers have the lowest trust score (2.7), followed closely by direct brand advertisements (2.8). This reinforces the earlier finding that authentic customer experiences are more trusted than paid promotional content.

Micro-influencers have a trust score of 3.1, which is higher than macro-influencers. This suggests that consumers find smaller, more relatable influencers to be more trustworthy.

Age Comparison on Trust:

The comparison shows that younger respondents (18-35 years) have a higher trust in influencer content (average 3.4) compared to older respondents (36-60 years) who have a lower trust (average 2.5). However, both age groups trust customer reviews more than influencer content.

Gender Comparison on Trust:

Male respondents generally have higher trust in social media content than female respondents. Male respondents gave an average trust score of 3.4 for customer reviews, while female respondents gave 3.6. Female respondents also had higher trust in direct advertisements (3.1) compared to male respondents (2.5).

Location Comparison on Trust:

Urban respondents have higher trust in social media content than rural respondents. Urban respondents gave an average trust score of 3.5 for customer reviews, while rural respondents gave 3.2. Rural respondents had lower trust in direct advertisements (2.5) compared to urban respondents (2.9).

CHAPTER 5: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Discussion of Findings

The Strong Influence of Social Media Marketing:

This study found that social media marketing has a strong influence on Indian consumers. 71% of respondents said that social media content has influenced their purchase decisions. This finding is consistent with the study by Mangold and Faulds (2009), who also found that social media is a powerful source of information for consumers. In India, this influence is particularly strong because of the high level of smartphone usage and affordable internet data.

The influence of social media marketing is not uniform across all consumers. Younger consumers are more influenced than older consumers, and urban consumers are more influenced than rural consumers. These differences suggest that businesses should consider demographic factors when developing social media marketing strategies.

The frequency of influence is also notable. 30% of respondents said social media often influences their purchase decisions, indicating that social media marketing is not just an occasional influence but a regular part of their decision-making process.

Instagram's Dominance as a Platform:

Instagram was found to be the most influential platform for consumer purchases, with 38% of respondents choosing it. This can be explained by the visual nature of Instagram. It is a platform based on photos and videos, which are very effective for showing products. This finding aligns with the work of Singh and Kaur (2023), who also found Instagram to be highly effective for reaching young consumers. YouTube was the second most influential, which is consistent with its role in providing detailed product reviews and demonstrations.

The dominance of Instagram suggests that businesses should prioritize this platform for product promotion, especially for visually appealing products. However, the high influence of YouTube for products requiring explanation suggests that businesses should also consider creating detailed product content for YouTube.

The Power of Customer Reviews:

One of the most important findings of this study is that customer reviews and testimonials are more trusted than influencer content. 41% of respondents said that customer reviews are the most effective type of content. This supports the findings of Sokolova and Kefi (2020), who found that consumers are becoming skeptical of influencers. It also aligns with the IIM (2024) study, which noted that Indian consumers are highly concerned about fraud and fake products. This suggests that businesses should prioritize obtaining genuine customer feedback and reviews.

The high trust in customer reviews reflects the value consumers place on authenticity. In a world of paid promotions and sponsored content, genuine customer experiences are seen as more trustworthy and reliable.

Age Differences in Trust:

The study found age-based differences in trust. Younger consumers (18-35 years) trust influencer content more than older consumers (36-60 years). However, both age groups trust customer reviews more than influencer content. This is an important insight for marketers. It suggests that businesses should use a mixed approach, using influencers to reach younger audiences while also ensuring they have a strong base of authentic customer reviews to build overall trust.

The Role of WhatsApp:

WhatsApp is the most widely used social media platform in India, with 87.5% of respondents using it. However, it was considered the least influential platform for purchase decisions (13%). This might be because WhatsApp is primarily a communication tool rather than a discovery platform. However, this also presents an opportunity. Businesses can use WhatsApp for direct customer engagement and personalized recommendations, which may be more effective than mass advertising.

The underutilization of WhatsApp as a marketing platform represents a gap in the market. Businesses that can effectively leverage WhatsApp for personalized, one-on-one customer engagement may gain a competitive advantage.

Location Differences:

The study found differences between urban and rural consumers. Urban consumers are more influenced by social media marketing than rural consumers. Urban respondents also have higher trust in social media content than rural respondents. These differences reflect the varying levels of internet access, digital literacy, and exposure to social media content between these groups.

Rural consumers may be less influenced by social media marketing due to lower internet penetration and digital literacy. However, rural social media usage is growing, suggesting that this market may become increasingly important for businesses in the future.

5.2 Conclusions

Based on the findings of this study, the following conclusions are drawn:

1. Social media marketing has a strong positive impact on consumer purchase decisions in India. The majority of consumers are influenced by what they see on social media. This influence is particularly strong among younger consumers and urban residents.
2. Instagram is the most powerful platform for influencing purchase decisions, followed by YouTube and Facebook. The visual nature of Instagram makes it highly effective for product promotion, while YouTube's detailed content makes it useful for products requiring explanation.
3. Customer reviews and testimonials are more effective than influencer posts and direct advertisements. Consumers trust real customer experiences over paid promotions. This has important implications for how businesses should allocate their marketing resources.
4. Younger consumers (under 35) are more responsive to social media marketing, especially influencer content. However, they still prioritize customer reviews. This suggests that businesses should use a multi-channel approach that combines influencer marketing with authentic customer testimonials.
5. Trust is a critical factor in social media marketing. Consumers are more likely to buy from sources they trust. Trust in influencers is declining, while trust in customer reviews remains strong. This reflects growing consumer awareness of the commercial motivations behind influencer content.
6. WhatsApp, while widely used, is underutilized as a marketing platform. There is significant potential for businesses to use WhatsApp for personalized marketing and customer engagement. The platform's high user base and communication features make it a valuable tool for businesses.
7. Location and age are important factors in social media marketing effectiveness. Urban consumers and younger consumers are more influenced by social media marketing than rural consumers and older consumers. Businesses should consider these demographic factors when developing marketing strategies.

5.3 Recommendations

Based on the conclusions, the following practical recommendations are made for businesses, marketers, and policymakers:

For Businesses and Marketers:

1. Focus on Instagram and YouTube: Since these platforms are most influential, businesses should prioritize their marketing efforts on Instagram (for visual products) and YouTube (for products requiring explanation and demonstration). This will help businesses reach consumers where they are most likely to be influenced.
2. Prioritize Customer Reviews: Businesses should actively collect and display customer reviews and testimonials. This is more effective than spending heavily on influencer marketing. Customer reviews provide social proof that builds trust and credibility.
3. Use a Mixed Strategy: For reaching younger consumers, use influencers with smaller, more niche followings. These influencers tend to have more engaged and trusting audiences. For older consumers, focus on factual content and customer testimonials. A mixed strategy that combines different approaches will be more effective than relying on a single approach.
4. Leverage WhatsApp for Engagement: Use WhatsApp for direct customer communication, personalized recommendations, and building one-on-one relationships with customers. This can lead to higher conversion rates and stronger customer relationships.
5. Create Engaging Visual Content: Use short videos, reels, and high-quality photos to attract attention. Visual content is more effective on platforms like Instagram and YouTube. Businesses should invest in creating high-quality visual content that showcases their products effectively.

For Consumers:

1. Be Critical of Influencer Content: Remember that influencers are often paid to promote products. Look for genuine customer reviews and independent sources of information. Consumers should be aware of the commercial motivations behind influencer content.
2. Research Before Buying: Use multiple sources of information before making a purchase decision. Don't rely solely on social media content. Consumers should cross-reference information from different sources to make informed decisions.

5.4 Suggestions for Future Research

This study opens up several avenues for future research:

1. Longitudinal Studies: Future research could track consumer behavior over time to understand how social media marketing influences long-term purchase patterns. This would provide insights into how social media marketing affects consumer loyalty and repeat purchases.
2. Comparison of Urban and Rural Consumers: This study found differences between urban and rural respondents. Future research could explore this in more depth to understand the specific needs of rural consumers. This would help businesses develop targeted strategies for different geographic markets.
3. Impact of New Platforms: As new platforms like Threads and other emerging apps gain popularity, their impact on consumer behavior should be studied. This would help businesses stay current with changing consumer preferences.
4. Focus on Specific Products: This study examined general purchase decisions. Future research could focus on specific product categories, such as electronics, fashion, or food, to see how social media marketing affects different types of purchases. This would provide more targeted insights for businesses in specific industries.

References

1. Advertising Standards Council of India. (2024). Influencer Marketing Industry Report 2024. Mumbai: ASCI Publications.
2. De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. International Journal of Advertising, 36(5), 798-828.
3. Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. Computers in Human Behavior, 61, 47-55.
4. Hajli, N. (2014). A study of the impact of social media on consumers. International Journal of Market Research, 56(3), 387-404.
5. Hoffman, D. L., & Fodor, M. (2010). Can you measure the ROI of your social media marketing? MIT Sloan Management Review, 52(1), 41-49.
6. Indian Institute of Management. (2024). Consumer Trust in Digital Marketing: An Indian Perspective. Ahmedabad: IIM Research Series.

Appendices

Appendix A: Questionnaire

Title: Impact of Social Media Marketing on Consumer Purchase Decisions

Instructions: Please answer all questions honestly. Your responses are anonymous and will be used only for research purposes.

Section A: Demographic Information

1. What is your age group?
   [ ] 18-25 years [ ] 26-35 years [ ] 36-45 years [ ] 46-60 years
2. What is your gender?
   [ ] Male [ ] Female [ ] Other
3. Where do you live?
   [ ] Urban Area [ ] Rural Area
4. What is your monthly income?

[ ] Below ₹20,000 [ ] ₹20,000 - ₹50,000 [ ] ₹50,000 - ₹1,00,000 [ ] Above ₹1,00,000

Section B: Social Media Usage

5. Which social media platforms do you use regularly? (Select all that apply)
   [ ] Facebook [ ] Instagram [ ] YouTube [ ] WhatsApp [ ] Other
6. How many hours do you spend on social media daily?
   [ ] Less than 1 hour [ ] 1-2 hours [ ] 2-3 hours [ ] 3-4 hours [ ] More than 4 hours
7. What is your primary purpose for using social media?
   [ ] Entertainment [ ] Communication [ ] News/Information [ ] Shopping

Section C: Exposure to Marketing

8. How often do you see advertisements on social media?
   [ ] Very Often [ ] Often [ ] Sometimes [ ] Rarely [ ] Never
9. Do you follow any influencers or content creators who promote products?
   [ ] Yes [ ] No
10. Have you ever purchased a product based on social media content?
    [ ] Yes [ ] No [ ] Not sure

Section D: Impact on Purchase Decisions

11. Has social media content ever influenced your decision to buy a product?
    [ ] Yes [ ] No [ ] Not sure
12. How often does social media influence your purchase decisions?
    [ ] Very Often [ ] Often [ ] Sometimes [ ] Rarely [ ] Never
13. Which platform has the most influence on your purchase decisions?
    [ ] Instagram [ ] YouTube [ ] Facebook [ ] WhatsApp [ ] Other
14. What type of social media content influences you the most?
    [ ] Customer Reviews [ ] Influencer Posts [ ] Direct Ads [ ] Demo Videos
15. What is the main reason you would purchase based on social media content?
    [ ] Attractive visuals [ ] Positive reviews [ ] Good price/offers [ ] Influencer recommendation

Section E: Trust and Credibility

16. On a scale of 1 to 5, how much do you trust the following sources? (1 = Very Low Trust, 5 = Very High Trust)
    a. Reviews from family and friends: ___
    b. Customer reviews on product pages: ___
    c. Influencers with large followings: ___
    d. Influencers with small followings: ___
    e. Direct brand advertisements: ___

Appendix B: Consent Form

Research Title: Impact of Social Media Marketing on Consumer Purchase Decisions: A Study of Indian Consumers

Researcher: Dr. Kale Ravsaheb Bhaiya, MJS College, Shrigonda, 9970343407

Purpose: This research aims to understand how social media marketing affects consumer purchase decisions in India.

Participation: Your participation is voluntary. You can withdraw at any time without any penalty. Your responses are anonymous and confidential.

Consent: By completing and submitting this questionnaire, you are giving your consent to participate in this study.

Thank you for your time and cooperation.

A Study Of India's Industrial Policy and Economic Development

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When India gained independence in 1947, the country's industrial base was very weak. There were only a few industries, such as textiles, sugar, coal and to some extent steel industries. Due to the policy of the British government, raw materials from India were taken to England and from there finished goods were sold to India. Due to this policy, India's industrial development was greatly hampered. Most of the industrial goods were imported from England.

However, India has made significant progress in the industrial sector during the post-independence period. Today, various types of industrial goods are being produced in India and India has emerged as an important industrial nation in the Asian continent. Along with consumer goods, capital goods are also being produced in the country on a large scale. India is also exporting many industrial goods. India has achieved the growth and development of the industrial sector through five-year plans, and appropriate and consistent industrial policies have been designed for this.

Industrial policy is the policy designed and actually implemented by the government to bring about the all-round development of the industries in the country. Industrial policy is a declaration that clarifies the official view of the government regarding the theory of industrialization of the country, the structure of industries, the working mechanism, the management methods and the ways and measures of industrialization. This declaration clarifies the role of the government regarding the objectives, methods of industrialization, ownership, management of industries, supply of industrial capital and labor-employer relations.

Industrial policies are an important tool for economic development. It gives a clear picture of the industrial and economic development of the country. The industrial development of the country largely depends on these policies. Therefore, it is necessary for the government to adopt a fully considered, planned, definite, inspiring and realistic industrial policy. If a comprehensive industrial policy covering all aspects related to the industrial sector is implemented, the industrial development of the country takes the right direction and the overall economic development of the nation is achieved.

Objective of the study -

1) To study the Concept & Definition's Of Industrial Policy.
2) To study the Industrial Policy 1956.
3) To Study the Industrial Policy of the Janata Government – 1977.
4) To Study the Industrial Policy 1980.
5) To Study the Industrial Policy -1991.

Definition :-

1) "Industrial policy is an official declaration that clarifies the government's view regarding the theory of industrialization of the country, the management of industries, the methods of industrialization and the pace of industrial development."
2) "Industrial policy is an official policy statement by the government that includes the objectives, guidelines, ownership, control, management of industries, and the role of the private and public sectors to guide the industrial development of the country."

❖ **Industrial Policy 1956 :-**

The Industrial Policy 1956 was adopted by the Central Government under the leadership of Pandit Jawaharlal Nehru. This policy was announced on 30 April 1956 and its main objective was to achieve industrial development based on socialist structures in India. In this policy, the public sector was given a prominent role in the economy and industries were classified into three groups namely Schedule A, B and C. Basic and strategic industries were reserved for the public sector, while the

private sector was given a limited but important role. Balanced industrial development, reduction of regional disparities and achieving economic self-reliance were the main objectives of this policy. Therefore, the Industrial Policy 1956 is considered a strong foundation for planned industrialization in India.

Features of the Industrial Policy 1956 :-

1) No strictness in the classification of industries :-

An important feature of this policy is that the classification of industries was not done in a strict manner. The policy expected private and public cooperation in such a way that the government could take over private sector industries when the government needed it.

2) Assistance and control to the private sector:-

According to this policy, the government will provide large-scale financial assistance to private industries. The government suggested that it would provide many concessions and would not differentiate between private and public.

3) Priority to rural and small industries:-

Considering the importance of small industries in the economic development of the country, the government had announced many types of concessions to small industries. Thus, small industries were given priority in the Industrial Policy of 1956.

4) Reducing regional inequality:-

Industrialization was done with a view to the economic development of the entire country. It was announced that the government was trying to develop the industrial areas of the country which were backward.

5) More facilities for workers:-

Many laws were passed during this period to further increase the efficiency of workers working in numerous businesses in the country. Wages were fixed for the workers, so the Industrial Policy of 1956 is carefully looked at from the point of view of the workers.

6) Management of Industrial Enterprises:-

In order to deal with the problems and problems arising due to the increasing expansion of industries in the industrial sector, the Industrial Policy of 1956 stipulated that government enterprises should be run on commercial principles.

Criticism of the Industrial Policy of 1956:-

1) This policy greatly reduced the scope of the private sector. The private sector industrialists welcomed this policy coolly.
2) This policy decided to develop the public sector, but for this, there was a need for experienced, trained, efficient people.
3) Although there is more flexibility in this policy, it is in the interest of the government. Because the government has the right to take over any industry, an atmosphere of fear has been created in the private sector.
4) The then President of the World Bank, U.N. Black, had said about this policy that due to this policy, state-owned capitalism will come into existence and the qualities of private enterprise and adventure will be killed. Even the successful industrial institutions in rural areas will feed state capitalism.

The Industrial Policy 1956 was a turning point in the industrial development of independent India. This policy laid a strong foundation for basic and strategic industries by giving a central place to the public sector. An attempt was made to achieve the objectives of balanced industrial development, reducing regional disparities and achieving economic self-reliance to a large extent. Employment generation was boosted by encouraging small and cottage industries. Although this policy was criticized for its limitations on the private sector, its contribution to setting the direction of planned industrialization in India was invaluable. Therefore, the Industrial Policy 1956 is considered a strong foundation for modern Indian industrial development.

❖ **Industrial Policy of the Janata Government – 1977**

The Industrial Policy of the Janata Government, 1977 was announced by the Janata Party government led by Morarji Desai. This policy was announced on 23 December 1977 and at that time George Fernandes was the Industries Minister. The main objective of this policy was to curb centralization, reduce dependence on large industries and promote small, cottage and rural industries. Special emphasis was laid on employment generation, self-reliance and decentralized industrial development in this policy. Khadi, village industries and small industries were considered the backbone of the economy. Therefore, the Industrial Policy of the Janata Government, 1977 is considered to be an employment-oriented and rural development-centric policy based on Gandhian ideology.

Features of the Industrial Policy of the Janata Government, 1977:-

1) **Human as the Centerpiece:-**

The order of precedence was changed keeping in mind that the policy is for human beings.

2) **Importance of cottage and small scale industries:-**

In this industrial policy, more importance was given to small scale industries in rural areas and small towns. In the previous policy, the limits on the production of goods by cottage and small scale industries were reduced.

3) **Low interest loans:-**

It was decided that the government would provide loans at low interest rates to all industries up to one lakh rupees in villages whose population as per the 1971 census did not exceed 50 thousand.

4) **Establishment of District Industrial Center:-**

It was decided to establish District Industrial Centers to develop small scale industries in small villages.

5) **Adequate supply to small scale and rural industries:-**

It was decided to open separate departments in Industrial Development Banks as well as nationalized banks and provide a certain amount of credit to small scale and rural industries through them. For example- Maharashtra Bank, SBI Bank.

6) **Large scale industries:-**

In the new industrial policy of 1977, attention was also paid to large scale industries.

7) **Control over the industries of big industrialists:-**

Strict implementation of licensing policy can be done to centralize economic power.

8) **Production of consumer goods in the public sector:-**

It was decided that if the supply of essential consumer goods is short, then such goods will be produced in the public sector.

9) **Control over foreign investment:-**

It was decided that foreign companies will not be able to invest more than 40% of the capital.

10) **Decision on sick industries:-**

It was decided in the 1977 policy that the country's industries should not become sick and that the industries that become sick should be investigated and measures should be taken against those industries.

Criticisms on the 1977 policy:-

1) **Limitation on the development of big industries:-**

The main criticisms on this policy were that the development of big industries was limited due to the excessive importance given to rural and small scale industries in this policy.

The Industrial Policy of the Janata government in 1977 was a policy that was human-centric, employment-oriented and prioritized rural development. This policy adopted the path of decentralized industrial development by considering cottage, small and rural industries as the backbone of the economy. The main objective of this policy was to prevent centralization of economic power, control large industries and limit foreign capital. District industrial centers and credit facilities gave a boost to industries in rural areas. However, it was criticized that the pace of industrial growth slowed down

somewhat due to the restrictions on the development of large industries. Nevertheless, the Industrial Policy of 1977 is considered important in terms of employment generation and social justice.

❖ **Industrial Policy 1980 :-**

The Janata Party government was in power at the Centre from 1977 to 1980. After the Congress Party came to power again in 1980, the Janata government's industrial policy was cancelled and a new industrial policy was announced on 23 July 1980. This policy was mainly based on the Industrial Policy of 1956. The objective of this policy was to bring about rapid industrialisation in the country, increase production and create employment. The idea behind this policy was that industrial development would make goods available at reasonable prices, increase income and the agricultural sector would also get a boost due to industrial inputs.

Socio-economic objectives of the Industrial Policy 1980-

1) To make maximum use of the existing production capacity in the industrial sector.
2) To increase industrial production and productivity.
3) To create more and more employment opportunities.
4) To reduce regional imbalance by developing industrially backward regions.
5) Rapid development of export-oriented and import-substituting industries.

Features of Industrial Policy 1980:-

1) Revitalization of public sector industries:-

This policy focused on making public sector industries more efficient and achieving higher production and employment generation from them. The objective was to use the financial resources obtained from public sector industries for social and economic development.

2) Harmonization in the functioning of financial resources:-

The policy of providing short and long-term loans to small industries was maintained. It was also decided to coordinate the functioning of various financial institutions in the public sector.

3) Autonomy:-

Emphasis was placed on giving autonomy to public industries to make industrial management more efficient. It was expected that this would speed up the decision-making process and increase productivity.

4) Early warning system and concessions regarding industrial diseases:-

It was decided to create an early warning system to identify sick industries in time and revive them. Also, provisions were made to provide income tax and other concessions to some industries.

5) Concessions to export-oriented industries:-

Keeping in mind the opportunities in international trade, a policy was adopted to provide various facilities and concessions to export-oriented industries, so that they could earn foreign exchange.

6) Use of updated industrial technology:-

In order to reduce production costs and compete in the international market, permission was given to use modern technology and increase production capacity.

Criticisms on Industrial Policy 1980:-

1) Due to the greater emphasis on the public sector, the role of the private sector did not get the desired boost.
2) The industrial decision-making process remained slow due to the large-scale continuation of the licensing and control system in the policy.
3) Although there was an emphasis on industrial decentralization, in reality the centralization of large industries could not be completely prevented.

The Industrial Policy of 1980 became an important policy that accelerated planned industrial development in India. This policy attempted to increase industrial production, create employment and reduce regional imbalances. This policy clearly shows the idea of industrial decentralization across the country by avoiding concentration of industries in big cities. Emphasis was placed on revitalizing

the public sector, using modern technology and increasing exports. Therefore, the Industrial Policy of 1980 is considered an important step for the economic reforms of 1991.

❖ **Industrial Policy -1991**

The Industrial Policy of 1991 is considered to be an important milestone in the economic history of India. In 1990–91, India faced a severe economic crisis, foreign exchange reserves were extremely low and the import-export balance was deteriorating. In this situation, the Indian economy needed a new direction. At that time, the Congress government was in power at the Centre and the Prime Minister was P. V. Narasimha Rao, while Dr. Manmohan Singh was working as the Finance Minister. Under his leadership, the New Industrial Policy was announced on 24 July 1991. The main objective of this policy was to give more freedom to Indian industries, promote privatization and attract foreign investment.

The Industrial Policy of 1991 became the foundation of the new economic policies of Liberalization, Privatization and Globalization (LPG). Dr. Manmohan Singh played the most important role in the implementation of this policy and brought about structural changes in the Indian economy. This policy ended the license raj, reduced government control over industries and provided great opportunities for private and foreign investment. The process of connecting India to the world market began rapidly. As a long-term result, industrial development gained momentum, competition increased, employment opportunities were created and India came to be known as an emerging global economic power.

Objectives of the Industrial Policy of 1991:-

1. To give more freedom to industries by reducing government control and licensing system over industries.
2. To promote industrial investment by promoting the development of the private sector.
3. To attract foreign investment and modern technology to India.
4. To increase the efficiency of the public sector and restructure them.
5. To enable Indian industries to compete globally.

Features of the Industrial Policy of 1991:-

1) End of the licensing system:-

In the Industrial Policy of 1991, the licensing system was abolished for most industries. Therefore, there was no need to obtain prior permission from the government to start an industry. This gave freedom to industrialists and new industries started to be established at a faster pace. Delays, corruption and obstacles in administration were reduced. As a result, industrial development got a big boost.

2) Promotion of the private sector:-

This policy gave more importance to the private sector. Many industries that were previously limited to the public sector were opened up to the private sector. This increased private investment and created competition in industries. Competition improved the quality of products and consumers got better facilities. This made the entire industrial sector more dynamic.

3) Restructuring of the public sector:-

According to the 1991 policy, public sector industries were reviewed. Inefficient or loss-making industries were privatized or disinvested. Public enterprises were asked to operate in a professional manner. This increased their efficiency, profitability and productivity. The financial burden on the government was reduced.

4) Permission for foreign investment:-

This policy allowed foreign investment to a large extent. Foreign direct investment was allowed in many sectors. This brought capital, modern technology and management skills to India. Indian industries got world-class technology. Due to which production capacity and exports increased.

5) Relaxation in monopoly control:-

Due to this policy, relaxations were given in the Monopoly and Restrictive Trade Practices Act (MRTP Act). Restrictions on large industries were reduced. Due to this, it became easier for large

companies to expand and invest. The size of industries increased and it was possible to set up large projects. This led to an increase in industrial production.

6) Emphasis on technological modernization:-

The Industrial Policy of 1991 laid special emphasis on the use of modern technology. Imported advanced machinery was encouraged. Due to this, the production process in industries became faster and of better quality. Costs were reduced and the quality of products improved. Due to this, Indian industries started to survive in global competition.

Criticism on Industrial Policy 1991:-

1) Weakening of the Public Sector:-

The Industrial Policy of 1991 led to large-scale privatization and disinvestment of public sector enterprises. This weakened many public enterprises and reduced government control. The influence of private companies increased in some important sectors. As a result, profit was given more priority than social welfare. This was criticized as damaging the original purpose of the public sector.

2) Adverse effects on small industries:-

This policy provided more opportunities to large and multinational companies. This made it difficult for small and medium enterprises to compete with large companies. Many small industries closed down or their development slowed down. There was also a negative impact on employment generation. Therefore, it was criticized that this policy was detrimental to small industries.

3) Increased dependence on foreign capital:-

The 1991 policy allowed foreign investment to a large extent. Due to this, Indian industries became more dependent on foreign capital and technology. This was criticized as reducing economic independence. The influence of foreign companies increased in some important sectors. As a result, fears were expressed that the country's economic sovereignty could be threatened.

The Industrial Policy of 1991 was a historic and revolutionary change in the Indian economy. This policy gave freedom to industries, increased private and foreign investment, and gave a new direction to industrial development. India was integrated into the global economy and a competitive environment was created. Although this policy was criticized for weakening the public sector and increasing foreign dependence, overall this policy made Indian industry more capable, modern, and dynamic. Therefore, the Industrial Policy of 1991 is considered a strong foundation for India's economic reforms.

Conclusion,

India's journey, which began with a weak industrial base after independence in 1947, was truly accelerated by the establishment of a strong public sector under the socialist framework of 1956. The 1977 policy emphasized employment generation by prioritizing rural and small-scale industries, while the 1980 policy accelerated technology and productivity. Later, the Liberalization, Privatization and Globalization (LPG) revolution in 1991 freed Indian industries from the license raj and exposed them to global competition. Although this journey had its limitations, such as the decline of the public sector and the challenges faced by small-scale industries, it is due to consistent policy changes that India has emerged as a leading industrial and economic power in the world today.

References

1) Jalan, B. – The Indian Economy: Problems and Prospects, Penguin Books, New Delhi.
2) Kapila, U. – Indian Economy: Performance and Policies, Academic Foundation, New Delhi.
3) Chatterjee, A. – Industrial Policy and Economic Development in India: 1947–2012, New Century Publications, New Delhi.
4) Panagariya, A. – India: The Emerging Giant, Oxford University Press, New York.
5) Ahluwalia, I. J. – Industrial Growth in India: Stagnation Since the Mid-Sixties, Oxford University Press, Delhi.
6) Dhar, P. N. – The Evolution of Economic Policy in India, Oxford University Press, New Delhi.
7) Puri, V. K. & Misra, S. K. – Indian Economy, Himalaya Publishing House, Mumbai.

"The Hidden Workforce Beneath Plant Roots: A Review of Rhizospheric Microbial Diversity and Function"

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Abstract

The rhizosphere, the narrow zone of soil surrounding plant roots, represents one of the most dynamic and biologically active ecosystems on Earth. This specialized microenvironment hosts a diverse assemblage of microorganisms, including bacteria, fungi, archaea, actinomycetes, algae, protozoa, and viruses, that interact closely with plant roots and play indispensable roles in maintaining soil fertility, plant health, and ecosystem stability. Often referred to as the "hidden workforce" beneath plant roots, these microorganisms regulate essential ecological processes such as nutrient cycling, biological nitrogen fixation, phosphate solubilization, organic matter decomposition, phytohormone production, disease suppression, and enhancement of plant tolerance to abiotic stresses. Through these functions, rhizospheric microbes contribute significantly to sustainable agricultural productivity while reducing dependence on synthetic fertilizers and chemical pesticides.

Recent advances in molecular biology, metagenomics, metatranscriptomics, and high-throughput sequencing have transformed our understanding of rhizosphere microbial diversity and function, revealing complex microbial networks that influence plant growth and soil ecosystem services. This review synthesizes current knowledge on the composition, diversity, ecological functions, and mechanisms of interaction among rhizospheric microorganisms and host plants. It further examines the role of beneficial microbial groups, including plant growth-promoting rhizobacteria, arbuscular mycorrhizal fungi, endophytic microorganisms, and other beneficial microbes, in improving nutrient availability, enhancing soil enzyme activity, increasing carbon sequestration, and promoting resilience against environmental stresses associated with climate change. The review also discusses recent developments in microbiome engineering, microbial biofertilizers, and precision agriculture that harness rhizosphere microbial communities for sustainable crop production. Finally, major research gaps are highlighted, including the need for long-term field studies, multi-omics approaches, and standardized methodologies to better understand rhizosphere ecology under diverse agroecosystems. Advancing knowledge of rhizospheric microbial diversity and function will support the development of innovative, climate-smart agricultural systems that improve soil health, enhance crop productivity, conserve biodiversity, and contribute to global food and environmental security.

Keywords: Rhizosphere; Rhizospheric microorganisms; Plant growth-promoting rhizobacteria (PGPR); Soil microbial diversity; Soil health; Nutrient cycling; Mycorrhiza; Soil enzyme activity; Sustainable agriculture; Climate-smart agriculture.

Introduction

Soil is a dynamic living ecosystem that supports plant growth and sustains terrestrial life. It contains a diverse community of microorganisms, including bacteria, fungi, archaea, protozoa, and other soil fauna, which regulate nutrient cycling, organic matter decomposition, carbon sequestration, and soil structure formation. These biological processes maintain soil fertility, enhance water retention, and promote healthy plant growth, making soil an essential resource for sustainable agriculture and environmental stability.

Modern agriculture faces significant challenges due to climate change, increasing temperatures, irregular rainfall, droughts, floods, and extreme weather events, all of which threaten crop productivity. Intensive farming practices, excessive use of chemical fertilizers and pesticides, deforestation, and over-cultivation have accelerated soil degradation, reduced soil organic matter, and disrupted beneficial microbial communities. Simultaneously, biodiversity loss has weakened

ecosystem resilience and diminished essential ecosystem services, while rapid population growth has increased global demand for food, placing additional pressure on agricultural systems.

Sustainable agricultural practices are essential to restore soil health, conserve biodiversity, and ensure long-term food security. Approaches such as crop diversification, conservation agriculture, organic nutrient management, integrated nutrient management, biofertilizers, and the use of plant growth-promoting microorganisms improve soil fertility while reducing dependence on synthetic agrochemicals. These practices enhance soil biological activity, increase ecosystem resilience, and support environmentally friendly agricultural production capable of meeting future food demands under changing climatic conditions.

The rhizosphere is the narrow region of soil that surrounds and is directly influenced by plant roots. It serves as a highly active interface where plants, soil, and microorganisms interact continuously through complex physical, chemical, and biological processes. Compared with bulk soil, the rhizosphere contains a much higher abundance and diversity of microorganisms due to the continuous supply of nutrients released by plant roots.

The rhizosphere is considered a hotspot of biological activity because it supports intense microbial growth, nutrient transformation, and biochemical reactions. Diverse groups of microorganisms, including bacteria, fungi, actinomycetes, archaea, and protozoa, colonize this region and actively participate in nutrient cycling, organic matter decomposition, biological nitrogen fixation, phosphate solubilization, and the suppression of soil-borne pathogens. These activities improve soil fertility, enhance plant nutrition, and increase resistance to both biotic and abiotic stresses.

A key factor shaping rhizosphere microbial communities is the release of root exudates, which consist of sugars, amino acids, organic acids, phenolic compounds, vitamins, enzymes, and other secondary metabolites. These compounds act as energy sources and signaling molecules that selectively attract beneficial microorganisms while influencing microbial diversity, abundance, and function. Through these root-mediated interactions, plants establish mutually beneficial relationships with rhizospheric microbes, creating a dynamic ecosystem that promotes soil health, plant growth, and sustainable agricultural productivity.

Major Microbial Groups in the Rhizosphere

Bacteria are the most abundant and metabolically active microorganisms in the rhizosphere. Beneficial groups such as plant growth-promoting rhizobacteria (PGPR), including species of Bacillus, Pseudomonas, Rhizobium, and Azospirillum, improve plant growth through multiple mechanisms. Collectively, these activities improve nutrient availability, root development, and plant resilience under environmental stress. Fungi are essential decomposers and symbiotic partners in soil ecosystems. Saprophytic fungi break down complex organic materials such as cellulose and lignin, releasing nutrients back into the soil. Arbuscular mycorrhizal fungi (AMF) establish mutualistic associations with plant roots, extending the effective root system through fungal hyphae. This symbiosis enhances the uptake of phosphorus, nitrogen, zinc, and water while increasing plant tolerance to drought, salinity, and certain soil-borne diseases. Mycorrhizal fungi also contribute to soil aggregation by producing glomalin, a glycoprotein that stabilizes soil particles and improves soil structure. Actinomycetes are filamentous, Gram-positive bacteria that play a crucial role in the decomposition of resistant organic materials such as cellulose, chitin, and lignin. Their activity contributes to humus formation and nutrient recycling, thereby maintaining soil fertility. Many species of Streptomyces produce antibiotics and antifungal compounds that suppress soil-borne pathogens, making them valuable biological control agents. Some actinomycetes also produce enzymes and plant growth-promoting substances that enhance crop productivity. Archaea are an important but relatively less studied component of the rhizosphere microbiome. Ammonia-oxidizing archaea participate in nitrification by converting ammonia into nitrite, a critical step in the nitrogen cycle. Methanogenic archaea are involved in carbon cycling under anaerobic conditions, while other archaeal groups contribute to nutrient turnover and soil biochemical stability. Protozoa are microscopic eukaryotic organisms that regulate bacterial populations through predation. By consuming bacteria, they release

nutrients such as nitrogen and phosphorus into the soil, making these nutrients available for plant uptake.

Interactions Among Rhizospheric Microorganisms and Their Contribution to Soil Functioning

Rhizospheric microorganisms form a highly interconnected network in which bacteria, fungi, actinomycetes, archaea, protozoa, and viruses interact through mutualistic, competitive, and predatory relationships. These interactions collectively drive nutrient cycling, organic matter decomposition, biological nitrogen fixation, phosphorus solubilization, and soil aggregation. They also enhance soil enzyme activity, suppress plant pathogens, improve plant nutrient uptake, and increase crop tolerance to environmental stresses. Together, these microbial communities maintain soil fertility, improve ecosystem stability, and support sustainable agricultural production.

Functional importance Summarize the major ecosystem services provided by rhizospheric microorganisms:

1. Nutrient Cycling

Rhizospheric microorganisms play a fundamental role in nutrient cycling by transforming organic and inorganic compounds into forms that plants can readily absorb. They mineralize organic matter and facilitate the cycling of essential nutrients such as carbon (C), nitrogen (N), phosphorus (P), sulfur (S), and potassium (K). This process maintains soil fertility, supports plant nutrition, and improves long-term agricultural productivity.

2. Biological Nitrogen Fixation

Certain rhizospheric bacteria, including Rhizobium, Azospirillum, Azotobacter, and Bradyrhizobium, convert atmospheric nitrogen (N_2) into ammonia through biological nitrogen fixation. This natural process supplies plants with an available source of nitrogen, reduces dependence on synthetic nitrogen fertilizers, and promotes sustainable crop production while minimizing environmental pollution.

3. Phosphate and Potassium Solubilization

Although phosphorus and potassium are abundant in many soils, much of them exists in insoluble forms that plants cannot absorb. Phosphate-solubilizing and potassium-solubilizing microorganisms release organic acids and enzymes that convert these nutrients into plant-available forms. This enhances nutrient uptake, improves root development, and increases crop productivity while reducing fertilizer requirements.

4. Organic Matter Decomposition

Soil microorganisms, particularly fungi, bacteria, and actinomycetes, decompose plant residues, animal wastes, and other organic materials. During decomposition, complex organic compounds are converted into simpler substances, releasing essential nutrients back into the soil. This process contributes to humus formation, improves soil organic carbon, and enhances overall soil fertility.

5. Soil Aggregation

Rhizospheric microorganisms contribute to the formation of stable soil aggregates by producing extracellular polysaccharides and other binding compounds. Mycorrhizal fungi also produce glomalin, which binds soil particles together. Improved soil aggregation enhances soil structure, increases water infiltration and retention, reduces erosion, and creates favorable conditions for root growth and microbial activity.

6. Plant Growth Promotion

Plant growth-promoting rhizobacteria (PGPR) stimulate plant growth through multiple mechanisms. They produce phytohormones such as indole-3-acetic acid (IAA), gibberellins, and cytokinins, improve nutrient availability, produce siderophores that enhance iron uptake, and synthesize enzymes that support healthy root development. These activities lead to increased seed germination, root growth, biomass production, and crop yield.

7. Disease Suppression

Beneficial rhizospheric microorganisms protect plants against soil-borne pathogens through several biological mechanisms. They compete with pathogens for nutrients and space, produce

antibiotics and antifungal compounds, release lytic enzymes that degrade pathogen cell walls, and induce systemic resistance in plants. As a result, they reduce the incidence of diseases and decrease the need for chemical pesticides.

8. Stress Tolerance

Rhizospheric microorganisms help plants tolerate environmental stresses such as drought, salinity, heavy metal contamination, and temperature extremes. They improve water and nutrient uptake, regulate stress-related hormones, produce osmoprotectants and antioxidant enzymes, and enhance root development. These adaptations increase plant resilience, maintain productivity under adverse conditions, and contribute to climate-smart and sustainable agriculture.

Together, these ecosystem services improve soil health, maintain soil biodiversity, enhance nutrient-use efficiency, support sustainable crop production, reduce reliance on chemical inputs, and strengthen the resilience of agricultural ecosystems to environmental change.

Recent scientific advances Discuss how modern tools have transformed rhizosphere research

Modern molecular and computational technologies have transformed rhizosphere research from mainly culture-based studies into culture-independent, multi-omics investigations. Earlier methods could identify only microorganisms that could be grown under laboratory conditions. New approaches can characterize unculturable organisms, identify their functional genes, determine which genes are actively expressed, and examine the metabolites involved in plant–microbe communication.

1. High-Throughput Sequencing

High-throughput sequencing (HTS), including 16S rRNA, ITS sequencing, and shotgun sequencing, allows millions of DNA sequences to be analyzed rapidly from rhizosphere samples. It has greatly improved the identification of bacterial, fungal, archaeal, and other microbial communities without requiring cultivation. For example, 16S rRNA sequencing is widely used to characterize bacterial and archaeal community composition, while ITS sequencing is commonly used to investigate fungal communities. Shotgun sequencing provides a broader picture because it can examine genetic material from the entire microbial community. These approaches allow researchers to compare microbial communities between different crops, soils, growth stages, climates, and agricultural practices.

2. **Metagenomics**

Metagenomics involves extracting and sequencing DNA directly from rhizosphere soil. It provides information about both the composition and functional potential of microbial communities. Unlike traditional cultivation methods, metagenomics can detect microorganisms that are difficult or impossible to grow in laboratory conditions.

Importantly, metagenomics can identify genes associated with nitrogen fixation, phosphorus mobilization, carbon metabolism, antibiotic production, plant-growth promotion, and stress tolerance. Thus, it helps researchers understand not only microbial diversity but also the biological capabilities encoded within the rhizosphere microbiome

3. Metatranscriptomics

Metatranscriptomics goes a step beyond metagenomics. While metagenomics indicates which genes are present, metatranscriptomics examines RNA transcripts to determine which genes are actively being expressed.

This is particularly useful for studying how rhizospheric microorganisms respond to drought, salinity, nutrient deficiency, pathogen attack, root exudates, or changes in plant development. It can reveal active metabolic pathways involved in nutrient cycling, stress adaptation, microbial communication, and plant growth promotion. Therefore, metatranscriptomics provides a functional snapshot of microbial activity under particular environmental conditions.

4. Metabolomics

Metabolomics focuses on the small molecules present in the rhizosphere. These include sugars, amino acids, organic acids, phenolic compounds, phytohormones, and microbial metabolites. This technology is particularly important because root exudates are major chemical signals between plants

and microorganisms. Metabolomic analysis can help determine which compounds are released by roots and how these compounds influence microbial recruitment, nutrient availability, pathogen suppression, and plant stress responses. Modern analytical techniques such as LC-MS and GC-MS have made it possible to investigate large numbers of metabolites simultaneously.

5. Microbiome Engineering

Microbiome engineering represents a newer stage of rhizosphere research. Instead of simply observing microbial communities, researchers are increasingly attempting to modify or design microbial communities for specific agricultural functions. Approaches include beneficial microbial inoculants, synthetic microbial communities (SynComs), microbiome transplantation, root-exudate manipulation, and synthetic biology. The objective is to promote desirable functions such as improved nutrient acquisition, biological disease suppression, drought tolerance, and greater nutrient-use efficiency. Recent work combines microbiome engineering with multi-omics and high-throughput phenotyping to identify effective microbial combinations and understand their mechanisms.

Integration of These Technologies

The integrated approach is moving rhizosphere research from simply describing microbial communities toward understanding mechanisms, interactions, and predictable functions. Recent research increasingly combines sequencing, multi-omics, network analysis, artificial intelligence, and synthetic microbial communities to develop microbiome-based strategies for sustainable and climate-resilient agriculture.

These advances have revealed that the rhizosphere is not simply a collection of microorganisms but a complex, interconnected biological system involving plants, microbes, soil chemistry, and environmental conditions. Understanding this system can help researchers develop microbial biofertilizers, biological disease-control strategies, precision nutrient management, and climate-smart cropping systems while reducing dependence on synthetic agricultural inputs.

Research gaps Highlights

1. Although the rhizosphere contains an enormous diversity of microorganisms, only a small proportion can be grown under laboratory conditions using conventional culture techniques. It is estimated that more than 90% of soil microorganisms remain unculturable because their nutritional requirements, growth conditions, and ecological interactions are not fully understood. As a result, the diversity and ecological functions of many beneficial microorganisms remain unknown. Advanced molecular approaches therefore essential for identifying these unculturable microbes and understanding their roles in nutrient cycling, plant growth, and soil health.
2. Most Studies Focus on Bacteria, While Fungi, Archaea, and Microbial Interactions Are Less Explored. Current rhizosphere research has predominantly focused on bacterial communities, particularly plant growth-promoting rhizobacteria (PGPR), because of their well-established roles in nutrient acquisition and plant growth. However, other important microbial groups-including fungi, archaea, protozoa, viruses, and actinomycetes-have received comparatively less attention.
3. Most available studies on rhizospheric microorganisms are based on short-term laboratory experiments, greenhouse trials, or single-season field studies. While these investigations provide valuable information, they often fail to capture the long-term effects of agricultural practices, crop rotations, climate variability, and soil management on microbial communities.

Aim of the review

1. To Summarize Rhizospheric Microbial Diversity

The rhizosphere harbors a highly diverse community of microorganisms, including bacteria, fungi, archaea, actinomycetes, protozoa, algae, and viruses. These microorganisms interact with plant roots and each other, forming complex microbial networks that influence soil fertility and plant growth. The diversity and composition of rhizospheric microbes vary depending on plant species, soil type, climate, and agricultural management practices. Understanding this diversity is essential for maintaining healthy soil ecosystems and developing sustainable agricultural practices.

2. To Explain the Ecological Functions of Rhizospheric Microorganisms

Rhizospheric microorganisms perform numerous ecological functions that are fundamental to soil health and ecosystem stability. They participate in nutrient cycling, biological nitrogen fixation, phosphorus and potassium solubilization, organic matter decomposition, carbon sequestration, soil aggregation, and enzyme production. In addition, beneficial microbes produce phytohormones, siderophores, and antimicrobial compounds that enhance plant nutrition and suppress soil-borne pathogens. These ecological processes collectively improve soil fertility, maintain biodiversity, and increase agricultural productivity.

3. To Discuss Plant-Microbe Interactions

The rhizosphere is a dynamic environment where plants and microorganisms establish mutually beneficial relationships. Plant roots release a variety of organic compounds, known as root exudates, which attract beneficial microorganisms and influence microbial community composition. In return, rhizospheric microbes improve nutrient availability, stimulate root growth, enhance stress tolerance, and protect plants against diseases. These interactions contribute to improved plant health, increased crop yields, and greater resilience under environmental stresses such as drought, salinity, and nutrient deficiency.

4. To Review Recent Advances in Rhizosphere Microbiome Research

Recent technological developments, including high-throughput sequencing, metagenomics, metatranscriptomics, metabolomics, and microbiome engineering, have greatly expanded knowledge of rhizosphere microbial communities. These advanced techniques allow researchers to identify previously unculturable microorganisms, analyze their genetic potential and metabolic activities, and understand complex plant–microbe interactions at the molecular level. Such advances are facilitating the development of microbial biofertilizers, biocontrol agents, and precision agriculture technologies for sustainable crop production.

5. To Identify Research Gaps and Future Directions for Sustainable Agriculture

Despite considerable progress, important knowledge gaps remain in rhizosphere microbiology. Many soil microorganisms remain unculturable, and the ecological roles of fungi, archaea, protozoa, and viruses are still insufficiently understood. Long-term field studies, multi-location experiments, and integrated multi-omics investigations are limited. Future research should focus on understanding microbial interactions under diverse agroecosystems, developing climate-resilient microbial inoculants, standardizing methodologies for microbiome analysis, and integrating microbiome-based technologies into sustainable agricultural systems. Addressing these research priorities will enhance soil health, improve crop productivity, and support environmentally sustainable and climate-smart agriculture.

Challenges

Despite significant advances in rhizosphere microbiome research, several challenges limit the effective utilization of rhizospheric microorganisms in sustainable agriculture. One major challenge is the enormous complexity of soil microbial communities. The rhizosphere contains thousands of interacting microbial species whose composition changes with plant species, soil type, climate, and agricultural management practices. Understanding these dynamic interactions remains difficult. Additionally, environmental factors such as temperature, moisture, pH, and nutrient availability strongly influence microbial activity, making it challenging to develop universally effective microbial inoculants. Another limitation is the poor survival and establishment of introduced biofertilizers

Future research should focus on integrating advanced multi-omics technologies with artificial intelligence, machine learning, and bioinformatics to better understand the structure and function of rhizosphere microbial communities. Long-term, multi-location field experiments are needed to evaluate the stability and ecological significance of beneficial microorganisms under diverse environmental conditions. Developing crop-specific microbial inoculants and synthetic microbial consortia capable of improving nutrient-use efficiency, enhancing stress tolerance, and suppressing plant diseases will be an important research priority. Greater emphasis should also be placed on

microbiome engineering, precision agriculture, and climate-smart farming practices to optimize plant–microbe interactions while reducing dependence on chemical fertilizers and pesticides. In addition, establishing standardized methodologies for sampling, sequencing, and data analysis will improve the comparability of studies worldwide. Strengthening collaboration among microbiologists, agronomists, soil scientists, plant breeders, and data scientists will further accelerate innovation in this field. Collectively, these efforts will contribute to healthier soils, improved crop productivity, enhanced biodiversity conservation, and more resilient agricultural systems capable of meeting future food security challenges under changing climatic conditions.

Conclusion

The rhizosphere is a dynamic and biologically active interface where complex interactions between plant roots and diverse microbial communities play a fundamental role in maintaining soil health and supporting sustainable agriculture. Rhizospheric microorganisms, including bacteria, fungi, actinomycetes, archaea, protozoa, and viruses, perform essential ecological functions such as nutrient cycling, biological nitrogen fixation, phosphate and potassium solubilization, organic matter decomposition, soil aggregation, disease suppression, and enhancement of plant tolerance to environmental stresses. These microbial activities improve soil fertility, promote plant growth, and contribute to the long-term productivity and resilience of agricultural ecosystems.

Recent advances in molecular techniques, including high-throughput sequencing, metagenomics, metatranscriptomics, metabolomics, and microbiome engineering, have significantly expanded our understanding of rhizosphere microbial diversity and function. These technologies have enabled researchers to identify previously unculturable microorganisms, investigate microbial interactions at the molecular level, and explore innovative strategies for developing biofertilizers, biocontrol agents, and climate-smart agricultural practices. Despite these achievements, important challenges remain, including the complexity of microbial communities, limited long-term field studies, insufficient understanding of fungal, archaeal, and viral communities, and the need for standardized research methodologies.

Future research should emphasize interdisciplinary approaches that integrate advanced omics technologies, bioinformatics, artificial intelligence, and precision agriculture to better understand and manage rhizosphere microbiomes.

Overall, rhizospheric microorganisms represent the hidden biological workforce that sustains plant growth, ecosystem stability, and agricultural productivity. Harnessing their diversity and functional potential offers a promising pathway toward resilient, environmentally sustainable, and climate-smart agricultural systems capable of addressing future challenges related to food security, biodiversity conservation, and global environmental change.

References

1. Philippot, L., Raaijmakers, J. M., Lemanceau, P. & van der Putten, W. H. (2013). Going back to the roots: the microbial ecology of the rhizosphere. Nature Reviews Microbiology, 11, 789–799.
2. Trivedi, P., Leach, J. E., Tringe, S. G., Sa, T. & Singh, B. K. (2020). Plant-microbiome interactions: from community assembly to plant health. Nature Reviews Microbiology, 18, 607–621.
3. Bais, H. P., Weir, T. L., Perry, L. G., Gilroy, S. & Vivanco, J. M. (2006). The role of root exudates in rhizosphere interactions with plants and other organisms. Annual Review of Plant Biology, 57, 233-266.
4. Badri, D. V. & Vivanco, J. M. (2009). Regulation and function of root exudates. Plant, Cell & Environment, 32, 666-681.
5. Vives-Peris, V., de Ollas, C., Gómez-Cadenas, A. & Pérez-Clemente, R. M. (2020). Root exudates: from plant to rhizosphere and beyond. Plant Cell Reports, 39, 3-17.
6. Sun, H., Jiang, S., Jiang, C., Wu, C., Gao, M. & Wang, Q. (2021). A review of root exudates and rhizosphere microbiome for crop production. Environmental Science and Pollution Research, 28, 54497-54510.
7. Dennis, P. G., Miller, A. J. & Hirsch, P. R. (2010). Are root exudates more important than other sources of rhizodeposits in structuring rhizosphere bacterial communities? FEMS Microbiology Ecology, 72, 313-327.

8. Chepsergon, J. & Moleleki, L. N. (2023). Rhizosphere bacterial interactions and impact on plant health. Current Opinion in Microbiology, 73, 102297.
9. Marín, O., González, B. & Poupin, M. J. (2021). From microbial dynamics to functionality in the rhizosphere: a systematic review of the opportunities with synthetic microbial communities. Frontiers in Plant Science, 12, 650609.
10. Berendsen, R. L., Pieterse, C. M. J. & Bakker, P. A. H. M. (2012). The rhizosphere microbiome and plant health. Trends in Plant Science, 17, 478-486.
11. Vandenkoornhuyse, P., Quaiser, A., Duhamel, M., Le Van, A. & Dufresne, A. (2015). The importance of the microbiome of the plant holobiont. New Phytologist, 206, 1196-1206.
12. Bulgarelli, D., Schlaeppi, K., Spaepen, S., van Themaat, E. V. L. & Schulze-Lefert, P. (2013). Revealing structure and assembly cues for Arabidopsis root-inhabiting bacterial microbiota. Nature, 488, 91-95.
13. Mendes, R., Kruijt, M., de Bruijn, I., et al. (2011). Deciphering the rhizosphere microbiome for disease-suppressive bacteria. Science, 332, 1097-1100.
14. Compant, S., Samad, A., Faist, H. & Sessitsch, A. (2019). A review on the plant microbiome: ecology, functions, and emerging trends in microbial application. Journal of Advanced Research, 19, 29-37.
15. Lugtenberg, B. & Kamilova, F. (2009). Plant-growth-promoting rhizobacteria. Annual Review of Microbiology, 63, 541-556.
16. Vacheron, J., Desbrosses, G., Bouffaud, M. L., Touraine, B. & Moënne-Loccoz, Y. (2013). Plant growth-promoting rhizobacteria and root system functioning. Frontiers in Plant Science, 4, 356.
17. Raaijmakers, J. M., Paulitz, T. C., Steinberg, C., Alabouvette, C. & Moënne-Loccoz, Y. (2009). The rhizosphere: a playground and battlefield for soilborne pathogens and beneficial microorganisms. Plant and Soil, 321, 341-361.
18. Mendes, R., Garbeva, P. & Raaijmakers, J. M. (2013). The rhizosphere microbiome: significance of plant beneficial, plant pathogenic, and human pathogenic microorganisms. FEMS Microbiology Reviews, 37, 634-663.
19. Bakker, M. G., Manter, D. K., Sheflin, A. M., Weir, T. L. & Vivanco, J. M. (2012). Harnessing the rhizosphere microbiome through plant breeding and agricultural management. Plant and Soil, 360, 1-13.
20. Pieterse, C. M. J., de Jonge, R. & Berendsen, R. L. (2014). The soil-borne supremacy. Trends in Plant Science, 19, 103-110.

केदारनाथ सिंह के साहित्य में भारतीय लोक संस्कृति और वैश्विक चेतना का समन्वय

शोधार्थी

नवनीत चौरसिया

शोध निर्देशिका

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केदारनाथ सिंह की कविता में भारतीय लोक संस्कृति और वैश्विक चेतना के बीच गहरा संवाद स्थापित होता है। उनका साहित्य न केवल भारतीय लोक जीवन की गहरी समझ को प्रस्तुत करता है, बल्कि यह आधुनिक वैश्विक मुद्दों के प्रति भी संवेदनशील है। इस शोध का उद्देश्य केदारनाथ सिंह की कविताओं में लोक संस्कृति और वैश्विक दृष्टिकोण के बीच के समन्वय की प्रक्रिया का विश्लेषण करना है। उनकी रचनाएँ ग्रामीण जीवन, लोक बोलियों, सांस्कृतिक धरोहर और पारंपरिक मूल्यों को उजागर करती हैं, जबकि साथ ही समकालीन विश्व के सामाजिक, राजनीतिक, और पर्यावरणीय मुद्दों को भी सशक्त रूप से संबोधित करती हैं। इस अध्ययन में यह देखा जाएगा कि कैसे उनके साहित्य में भारतीय लोक संस्कृति का चित्रण वैश्विक संदर्भ में अर्थपूर्ण हो जाता है। इसके लिए उनकी प्रमुख कविताओं का चयन किया जाएगा, जो भारतीय लोक तत्वों के साथ–साथ वैश्विक विषयों जैसे पर्यावरण संकट, युद्ध, और सामाजिक न्याय को भी उठाती हैं। इस शोध में यह दिखाया जाएगा कि कैसे केदारनाथ सिंह अपने लेखन के माध्यम से भारतीय और वैश्विक पहचान के बीच एक संतुलन स्थापित करते हैं। इसके परिणामस्वरूप यह निष्कर्ष निकाला जाएगा कि उनका साहित्य न केवल भारतीय सांस्कृतिक पहचान को संरक्षित करता है, बल्कि समकालीन वैश्विक संदर्भों में भी प्रासंगिक बनता है। यह शोध साहित्य, समाजशास्त्र, और वैश्विक अध्ययन के क्षेत्र में एक महत्वपूर्ण योगदान देगा, जिससे पाठकों को केदारनाथ सिंह की कविताओं के माध्यम से लोक और वैश्विक दृष्टिकोण के बीच की जटिलताओं को समझने का अवसर मिलेगा।

मुख्य शब्दः केदारनाथ सिंह, लोक संस्कृति, वैश्विक।

प्रस्तावना

केदारनाथ सिंह के साहित्य में भारतीय लोक संस्कृति और वैश्विक चेतना का समन्वय एक महत्वपूर्ण और जटिल अध्ययन का विषय है। उनके लेखन में यह दोनों पहलू परस्पर जुड़े हुए हैं. जो भारतीय समाज और संस्कृति के गहरे अध्ययन को वैश्विक संदर्भ में प्रस्तुत करते हैं। इस साहित्यिक दृष्टिकोण के अंतर्गत कई विद्वानों ने केदारनाथ सिंह के कार्यों का विश्लेषण किया है, और उनके साहित्य के विभिन्न आयामों को पहचाना है। इस समीक्षा में हम प्रमुख लेखकों और विद्वानों द्वारा किए गए विश्लेषणों और आलोचनाओं का अध्ययन करेंगे।

प्रमुख साहित्यकार और आलोचक, रवींद्रनाथ ठाकुर ने अपने लेखों में केदारनाथ सिंह के कविता के लोक–धारा पर आधारित चित्रण को महत्व दिया है। उनके अनुसार, केदारनाथ सिंह का काव्य लोक जीवन की गहरी समझ से उपजा है, और उनकी कविताओं में भारतीय लोक संस्कृतियों की जड़ों का अन्वेषण किया गया है। इसके साथ ही, वे वैश्विक संदर्भों को जोड़ते हैं, जो उनके साहित्य को आधुनिक और समकालीन साहित्य के साथ प्रासंगिक बनाता है। यह उनके साहित्य की सार्वभौमिकता को उजागर करता है. जो न केवल भारतीय पाठकों के लिए, बल्कि वैश्विक साहित्य के संदर्भमें भी महत्वपूर्ण है।

उनकी कविताओं में भारतीय लोक संस्कृति का चित्रण उस समाज की जटिलताओं और पारंपरिक जीवन के संघर्षों को दर्शाता है, जिसे वे अपनी कविता में जीवंत करते हैं। आलोचक, नरेन्द्र पाठक ने केदारनाथ सिंह के कविताओं में भारतीय गांवों के जीवन को एक अद्वितीय सांस्कृतिक और सामाजिक प्रतीक के रूप में प्रस्तुत किया है। उनका कहना है कि केदारनाथ सिंह के लेखन में लोक जीवन की छवियाँ न केवल भारतीय पहचान का हिस्सा हैं, बल्कि यह वैश्विक मुद्दों पर भी प्रकाश डालती हैं, जैसे समाज में असमानताएँ, पर्यावरणीय संकट, और मानवाधिकारों की स्थिति।

इसके अलावा, वैश्विक संदर्भ में केदारनाथ सिंह के साहित्य का अध्ययन करते हुए विद्वान, सुमन कुमार ने यह बताया कि उनकी कविताओं में पर्यावरणीय संकट और जलवायु परिवर्तन जैसे वैश्विक मुद्दों को स्थान दिया गया है। उनके अनुसार, केदारनाथ सिंह का लेखन लोक जीवन और वैश्विक चेतना के बीच की सीमाओं को धुंधला करता है। वे अपनी कविताओं में इस प्रकार के मुद्दों को एक जटिल सामाजिक संदर्भ में प्रस्तुत करते हैं, जो न केवल भारतीय, बल्कि वैश्विक संदर्भों में भी सामयिक और प्रासंगिक हैं।

सिंह की कविताओं में एक गहरी सामूहिक चेतना का प्रतीकात्मक चित्रण मिलता है, जो उन्हें उनके समकालीन लेखकों से अलग करता है। आलोचक, अजय कुमार ने यह कहा कि उनकी कविताएँ उस भावनात्मक और सांस्कृतिक धारा से जुड़ी हुई हैं जो भारतीय लोक जीवन के साथ–साथ वैश्विक संदर्भ में भी महत्वपूर्ण है। उन्होंने यह भी जोड़ा कि केदारनाथ सिंह की कविता न केवल भारतीय परिवेश को व्यक्त करती है, बल्कि यह उस संघर्ष को भी उजागर करती है, जो समकालीन वैश्विक समाज में हो रहे बदलावों के साथ गहरे रूप से जुड़ा हुआ है।

केदारनाथ सिंह की कविता में भारतीय लोक संस्कृति की पहचान को स्थापित करते हुए, विद्वान, रंजन शर्मा ने यह टिप्पणी की कि उनके साहित्य में एक प्रकार की भारतीय पहचान और संस्कृति का संगम है, जो वैश्विक स्तर पर संवाद स्थापित करता है। उनके लेखन में यह विरोधाभास भी देखा जाता है कि लोक संस्कृति को बचाने के लिए वैश्विक चेतना की आवश्यकता है, और यह केदारनाथ सिंह की साहित्यिक विशेषता है।

इस प्रकार, केदारनाथ सिंह के साहित्य में भारतीय लोक संस्कृति और वैश्विक चेतना का समन्वय न केवल साहित्यिक दृष्टिकोण से महत्वपूर्ण है, बल्कि यह सामाजिक और राजनीतिक दृष्टिकोण से भी एक विचारणीय बिंदु है। उनका साहित्य भारतीय और वैश्विक संदर्भों को जोड़कर एक ऐसा संवाद प्रस्तुत करता है, जो उनके साहित्य को आधुनिक और सशक्त बनाता है।

केदारनाथ सिंह का साहित्य न केवल भारतीय लोक संस्कृति का सजीव चित्रण करता है, बल्कि यह वैश्विक चेतना और सामाजिक मुद्दों के प्रति संवेदनशीलता को भी व्यक्त करता है। उनकी कविताओं में भारतीय ग्रामीण जीवन के साथ–साथ वैश्विक दृष्टिकोण को सामंजस्यपूर्ण ढंग से प्रस्तुत किया गया है। इस खंड में हम केदारनाथ सिंह के साहित्य में लोक संस्कृति और वैश्विक चेतना के समन्वय के विभिन्न पहलुओं का गहन विश्लेषण करेंगे।

1. लोक संस्कृति का चित्रण और उसकी सामाजिक पहचान केदारनाथ सिंह की कविता में भारतीय लोक संस्कृति की गहरी जड़ें हैं। उनका लेखन भारतीय गांवों, उनके रीति–रिवाजों, परंपराओं और सामाजिक जीवन की असलियत को उजागर करता है। वे अपनी कविताओं के माध्यम से न केवल ग्रामीण जीवन की खूबसूरती और संघर्षों का चित्रण करते हैं, बल्कि भारतीय समाज की जड़ों से जुड़ी सांस्कृतिक धारा को भी महत्वपूर्ण बनाते हैं। भारतीय लोक जीवन में मानव और प्रकृति के बीच एक गहरा रिश्ता होता है, और केदारनाथ सिंह की कविताएँ इस रिश्ते को बेहद खूबसूरती से चित्रित करती हैं। उदाहरण के तौर पर, उनकी कविता गांव का आदमी में ग्रामीण जीवन की सादगी और उसकी ठोस जड़ों को प्रदर्शित किया गया है। इस कविता में एक तरफ ग्राम्य जीवन की

कठिनाइयों का उल्लेख है. वहीं दूसरी तरफ, यह जीवन संघर्ष के बावजूद सजीव और जीवंत बना रहता है।

2. वैश्विक चेतना और समाज के समकालीन मुद्दे: केदारनाथ सिंह का लेखन केवल भारतीय संस्कृति तक सीमित नहीं है, बल्कि यह वैश्विक मुद्दों के प्रति भी अपनी चिंताओं को व्यक्त करता है। उनका साहित्य पर्यावरणीय संकट, जलवायु परिवर्तन, असमानताएँ, और शहरीकरण के कारण ग्रामीण जीवन पर होने वाले प्रभाव को लेकर जागरूक करता है। उदाहरण के रूप में उनकी कविता 'दूसरा जन्म' में वे पर्यावरण संकट और आधुनिकता की आंधी से प्रभावित ग्रामीण जीवन का चित्रण करते हैं। यहाँ पर उनका लक्ष्य न केवल ग्रामीण जीवन की समस्याओं को उजागर करना है, बल्कि यह भी दिखाना है कि ये समस्याएँ एक वैश्विक दृष्टिकोण से जुड़ी हुई हैं। इसके माध्यम से, वे दिखाते हैं कि भारतीय समाज की परंपराएँ और लोक संस्कृति भी वैश्विक परिप्रेक्ष्य में एक महत्व रखती हैं।

3. लोक संस्कृति और वैश्विक दृष्टिकोण का समन्वय: केदारनाथ सिंह का लेखन भारतीय लोक संस्कृति और वैश्विक चेतना के बीच एक सेतु का काम करता है। उनकी कविताओं में यह स्पष्ट होता है कि वे दोनों को एक साथ रखकर समाज की असलियत को समझने की कोशिश करते हैं। वे न केवल भारतीय लोक जीवन को वैश्विक संदर्भों में प्रस्तुत करते हैं, बल्कि यह भी दिखाते हैं कि भारतीय परंपराएँ, संस्कृति और जीवनशैली एक वैश्विक परिप्रेक्ष्य में महत्वपूर्ण हैं। उनके अनुसार, लोक संस्कृति और वैश्विक चेतना एक–दूसरे से जुड़े हुए हैं, और हमें इन दोनों के बीच संतुलन बनाने की आवश्यकता है।

4. केदारनाथ सिंह का काव्य शिल्प: उनकी कविताओं में शुद्ध हिंदी का प्रयोग, सरलता, प्रवाह और सांस्कृतिक धारा की स्पष्टता से यह ज्ञात होता है कि वे लोक जीवन के बारीक पहलुओं को वैश्विक दृष्टिकोण से जोड़ने के लिए काव्य शिल्प का इस्तेमाल करते हैं। उनके द्वारा प्रयोग किए गए प्रतीक, रूपक और बिम्ब लोक जीवन की सजीवता और वैश्विक संकटों के बीच की कड़ी को स्पष्ट करते हैं। उनका साहित्य हमें यह समझने की कोशिश कराता है कि भारतीय लोक जीवन के संघर्ष और वैश्विक चेतना की समस्याएँ एक–दूसरे से कैसे संबंधित हैं।

5. आलोचनात्मक दृष्टिकोण से कुछ आलोचक यह मानते हैं कि केदारनाथ सिंह की कविताओं में लोक जीवन का चित्रण और वैश्विक मुद्दों का समन्वय, कभी–कभी कुछ अति सामान्य लगता है, और इन दोनों के बीच की गहरी कड़ी को समझना कठिन होता है। हालांकि, उनके समर्थक यह तर्क करते हैं कि उनका लेखन एक अद्वितीय संवाद है, जो न केवल भारतीय पाठकों, बल्कि समकालीन वैश्विक समाज के लिए भी प्रासंगिक है। उनका साहित्य समाज की जटिलताओं और उनके वैश्विक संदर्भ को सरल और प्रभावशाली तरीके से प्रस्तुत करता है।

इस प्रकार, केदारनाथ सिंह के साहित्य में लोक संस्कृति और वैश्विक चेतना का समन्वय एक अद्वितीय पहलू है, जो उनके लेखन को एक नया आयाम प्रदान करता है। वे न केवल भारतीय समाज की जड़ों और लोक जीवन का चित्रण करते हैं. बल्कि साथ ही वे वैश्विक संकटों और सामाजिक असमानताओं की ओर भी ध्यान आकर्षित करते हैं। उनका साहित्य हमें यह समझाता है कि भारतीय लोक संस्कृति और वैश्विक चेतना को एक साथ जोड़कर समाज की समस्याओं और संघर्षों को बेहतर तरीके से समझा जा सकता है।

केदारनाथ सिंह के साहित्य में भारतीय लोक संस्कृति और वैश्विक चेतना का समन्वय एक विशिष्ट विशेषता है, जो उनके लेखन को वैश्विक दृष्टिकोण से सामाजिक, सांस्कृतिक और पर्यावरणीय पहलुओं को समझने में सक्षम बनाता है। उनकी कविताएँ और साहित्य न केवल भारतीय लोक जीवन का चित्रण करती हैं, बल्कि वे समकालीन वैश्विक समस्याओं पर भी प्रासंगिक दृष्टिकोण प्रस्तुत करती हैं। इस खंड में, हम उन प्रमुख निष्कर्षों का विश्लेषण करेंगे जो केदारनाथ सिंह के साहित्य में लोक संस्कृति और वैश्विक चेतना के समन्वय को स्पष्ट करते हैं।

1. लोक संस्कृति का जीवंत चित्रणः–

केदारनाथ सिंह की कविताओं में भारतीय लोक संस्कृति का गहन और सजीव चित्रण पाया जाता है। वे भारतीय गांवों और उनके जीवन की सादगी को सहजता से चित्रित करते हैं। उनकी कविताओं में भारतीय समाज की सांस्कृतिक धारा और पारंपरिक रीति–रिवाजों का चित्रण है। उदाहरण के तौर पर, उनकी कविता 'गांव का आदमी' में ग्रामीण जीवन की एक सरल, सच्ची और संघर्षशील तस्वीर उभर कर आती है, जो भारतीय समाज के हर व्यक्ति के जीवन का एक अभिन्न हिस्सा है। उनका लेखन दर्शाता है कि लोक संस्कृति भारतीय समाज की नींव है और उसकी पहचान का मुख्य स्रोत है। इसके अलावा, वे यह भी दिखाते हैं कि लोक जीवन में न केवल सामाजिक और सांस्कृतिक तत्व होते हैं. बल्कि उसमें एक गहरी मानवता और समुदाय की भावना भी निहित होती है।

2. वैश्विक चेतना और समकालीन समस्याएँ–

केदारनाथ सिंह के साहित्य में वैश्विक चेतना का सम्मिलन एक महत्वपूर्ण पक्ष है। उन्होंने अपनी कविताओं और लेखन में न केवल भारतीय समाज की समस्याओं को उठाया है, बल्कि वैश्विक संदर्भ में पर्यावरणीय संकट, जलवायु परिवर्तन, असमानता, और शहरीकरण जैसी समस्याओं का भी उल्लेख किया है। उनकी कविता दूसरे पड़ाव में जलवायु परिवर्तन और पर्यावरणीय संकट के कारण होने वाले परिवर्तनों का गहरा चित्रण किया गया है। यहाँ तक कि, वे यह बताने की कोशिश करते हैं कि ये समस्याएँ केवल भारतीय संदर्भ में नहीं, बल्कि वैश्विक दृष्टिकोण से सभी मानव समाजों के लिए एक चुनौती बन चुकी हैं।

3. भारतीय और वैश्विक संदर्भ का सामंजस्यपूर्ण समन्वयः–

केदारनाथ सिंह का लेखन भारतीय लोक जीवन और वैश्विक संदर्भों के बीच एक सामंजस्यपूर्ण समन्वय स्थापित करता है। वे लोक संस्कृति और वैश्विक मुद्दों को जोड़ते हुए यह दर्शाते हैं कि यह दोनों एक–दूसरे से अविभाज्य हैं। उनका मानना है कि लोक जीवन की समझ और भारतीय समाज की पारंपरिक मूल्यधारा को वैश्विक समस्याओं के समाधान के लिए एक संदर्भ के रूप में देखा जा सकता है। इसके साथ ही, वे यह भी स्वीकार करते हैं कि भारत का लोक जीवन वैश्विक संदर्भों से प्रभावित हो रहा है, और इसे समझने के लिए हमें वैश्विक दृष्टिकोण को ध्यान में रखना होगा।

4. भारतीय लोक जीवन और वैश्विक बदलावों का आपसी संबंधः–

केदारनाथ सिंह के साहित्य में भारतीय लोक जीवन और वैश्विक बदलावों के बीच गहरा संबंध है। वे अपनी कविताओं के माध्यम से दिखाते हैं कि कैसे वैश्विक मुद्दे भारतीय समाज के लिए प्रासंगिक होते जा रहे हैं। उदाहरण के लिए, उनकी कविता 'सूरज का सपना' में जलवायु परिवर्तन और पर्यावरणीय संकट को लेकर गंभीर चिंता व्यक्त की गई है। यहाँ वे यह बताते हैं कि जिस तरह भारतीय गांवों में जल संकट और पर्यावरणीय संकट बढ़ रहे हैं, ठीक उसी तरह वैश्विक स्तर पर भी ये मुद्दे गंभीर हो रहे हैं। इस प्रकार, वे यह दिखाते हैं कि लोक जीवन और वैश्विक समस्याएँ एक–दूसरे से गहरे तौर पर जुड़ी हुई हैं।

5. साहित्यिक शिल्प और प्रभावी प्रस्तुतिः–

केदारनाथ सिंह का साहित्यिक शिल्प भी लोक संस्कृति और वैश्विक चेतना के समन्वय को स्पष्ट करने में एक महत्वपूर्ण भूमिका निभाता है। उनका काव्यशिल्प साधारण और सहज है, जो पाठकों को एक गहरे सामाजिक संदेश तक पहुँचने में मदद करता है। वे भारतीय लोक जीवन के प्रतीकों, रूपकों और बिम्बों का प्रयोग करते हुए. एक साथ वैश्विक मुद्दों को चित्रित करते हैं। उनकी कविताओं में लोक जीवन के अनुभव और वैश्विक दृष्टिकोण के बीच संवाद स्थापित होता है, जिससे

पाठकों के मन में एक समग्र दृष्टिकोण का विकास होता है। उनकी कविताओं की सरलता और प्रवाह इस संदेश को और अधिक प्रभावशाली बनाती हैं।

6. आलोचनात्मक दृष्टिकोण और साहित्यिक मूल्यः–

कुछ आलोचक यह मानते हैं कि केदारनाथ सिंह का साहित्य लोक संस्कृति और वैश्विक चेतना के समन्वय में कभी–कभी सामान्य प्रतीत हो सकता है, और दोनों के बीच का संबंध अधिक गहरा नहीं दिखता। वे यह तर्क करते हैं कि उनके साहित्य में लोक जीवन और वैश्विक संदर्भों के बीच एक स्पष्ट रूप से परिभाषित संबंध नहीं है। हालांकि, इस आलोचना के बावजूद, उनके समर्थक यह मानते हैं कि उनका लेखन एक सामाजिक और वैश्विक चेतना का उदाहरण है, जो न केवल भारतीय समाज को, बल्कि समग्र मानवता को भी प्रासंगिक संदेश देता है।

निष्कर्ष

केदारनाथ सिंह के साहित्य में भारतीय लोक संस्कृति और वैश्विक चेतना का समन्वय एक गहरे, प्रभावशाली और समकालीन दृष्टिकोण से दिखता है। उनका लेखन भारतीय समाज की जड़ों को पहचानता है और साथ ही, वैश्विक संदर्भों की गहरी समझ भी प्रस्तुत करता है। वे लोक जीवन को न केवल भारतीय संदर्भ में, बल्कि समकालीन वैश्विक समस्याओं से जोड़कर प्रस्तुत करते हैं, जैसे जलवायु परिवर्तन, शहरीकरण, असमानता और पर्यावरणीय संकट। उनके साहित्य में यह विशेषता है कि वे दोनों पक्षों को एक ही लेंस से देख कर एक सामंजस्यपूर्ण और संतुलित दृ ष्टिकोण प्रदान करते हैं। केदारनाथ सिंह का लेखन न केवल सामाजिक और सांस्कृतिक बदलावों पर विचार करता है, बल्कि वैश्विक दृष्टिकोण को भी उतना ही महत्व देता है. जिससे उनकी कविताएँ समय और स्थान की सीमाओं से परे जाती हैं। यह साहित्य हमें यह सिखाता है कि भारतीय लोक संस्कृति और वैश्विक समस्याएँ आपस में गहरे जुड़ी हुई हैं और इन दोनों का संतुलित समन्वय ही समाज को स्थिर और समृद्ध बना सकता है। उनके साहित्य का यह समन्वय न केवल भारतीय समाज को, बल्कि समग्र मानवता को भी एक नई दिशा और जागरूकता प्रदान करता है।

संदर्भ

1. ग्लिक, डी.सी. (1988)। आध्यात्मिक उपचार की प्रतीकात्मक, अनुष्ठानिक और सामाजिक गतिशीलता। सामाजिक विज्ञान और चिकित्सा, 27
2. (11), 1197–12061 DOI: 0.1016/0277–9536(88)90349–81
3. गुर्सोय, अकीले (1996)। रूढ़िवाद से परेः क्रॉसकल्चरल परिप्रेक्ष्य से चिकित्सा और सामाजिक विज्ञान में विधर्म।
4. सामाजिक विज्ञान और चिकित्सा, 43(5), 577–5991 DOI: 10.1016ध्0277–
5. 9536(96)00106–21
6. हाउटन, टी. (2011)। क्या सामाजिक विज्ञान में सकारात्मकता वास्तव में ष्कामष् करती है। ई–इंटरनेशनल स्टूडेंट्स।
7. 17.12.2019 को https://bit-ly/2GHqT8C से डाउनलोड किया गया।
8. जंग, कार्ल गुस्ताव (2002)। बाल आदर्श का मनोविज्ञान। कार्ल गुस्ताव जंग और कारोली में
9. केरेनी, जंग और केरेनी। पौराणिक कथाओं का विज्ञान (पृष्ठ 83–118)। रूटलेजः लंदन।
10. लेडरमैन, सी. (1987)। उपचार की संरचना में प्रतीकों की अस्पष्टता। सामाजिक विज्ञान और चिकित्सा,
11. 24 (4), 293–301, DOI: 10.1016/0277–9536(87)90148–1
12. लॉघलिन, एम., लेविथ, जी. और फाल्केनबर्ग, टी. (2013)। विज्ञान, अभ्यास और पौराणिक कथाएँरू चिकित्सा में वैज्ञानिकता के निहितार्थों की परिभाषा और जाँच। स्वास्थ्य देखभाल विश्लेषण, 21(2), 130–1451
13. DOI: 10.1007/s10728–012–0211–6.
14. मैनेल, जे., अहमद, एल. और अहमद, ए. (2018). अफगानिस्तान में लिंग आधारित हिंसा का सामना करने वाली महिलाओं के लिए मानसिक स्वास्थ्य सहायता के रूप में कथात्मक कहानी सुनाना। सामाजिक विज्ञान और चिकित्सा, 214, 91–98. DOI: 10.1016/j-socscimed.2018.08.011.
15. राष्ट्रीय जनसंख्या जनगणना (2011)। लाखा मंडल जनसंख्या देहरादून, उत्तराखंड। 17.12.2019 को https://bit-ly/3bz7nNh से डाउनलोड किया गया।
16. नेल्सन, एस.ई. और विल्सन, के. (2017)। कनाडा में स्वदेशी लोगों का मानसिक स्वास्थ्यः शोध की एक महत्वपूर्ण समीक्षा। सामाजिक विज्ञान और चिकित्सा, 176, 93–112.

नरेन्द्र कोहली के पौराणिक उपन्यासों में आधुनिक दृष्टि

डॉ. सन्तोष कुमार सरोज
असि. प्रोफेसर : हिन्दी–विभाग
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शोध–सार

नरेन्द्र कोहली हिन्दी साहित्य के उन महत्त्वपूर्ण रचनाकारों में हैं जिन्होंने पौराणिक आख्यानों को आधुनिक जीवन–बोध से जोड़कर हिन्दी उपन्यास को एक विशिष्ट रचनात्मक दिशा प्रदान की। रामायण और महाभारत जैसे भारतीय सांस्कृतिक महाग्रंथों को आधार बनाकर रचित अभ्युदय और महासमर में पौराणिक कथा केवल अतीत की पुनरावृत्ति नहीं रह जाती, बल्कि समकालीन सामाजिक, राजनीतिक, नैतिक और मानवीय प्रश्नों की व्याख्या का माध्यम बन जाती है। प्रस्तुत शोध–पत्र में नरेन्द्र कोहली के पौराणिक उपन्यासों में निहित आधुनिक दृष्टि का विश्लेषण किया गया है। अध्ययन के केन्द्र में सामाजिक विषमता, जनवादी चेतना, सत्ता–संरचना, प्रशासनिक भ्रष्टाचार, स्त्री–अस्मिता, तर्कशीलता, मिथकीय पात्रों का मानवीकरण तथा परम्परा और आधुनिकता का अन्तर्सम्बन्ध है।

कोहली की रचनात्मक आधुनिकता का प्रमुख वैशिष्ट्य यह है कि वे पौराणिक कथा को न तो अतीत की जड़ स्मृति के रूप में ग्रहण करते हैं और न ही आधुनिकता के नाम पर उसके सांस्कृतिक स्वरूप को नष्ट करते हैं। वे मिथक के भीतर निहित शाश्वत मानवीय प्रश्नों को अपने समय की दृष्टि से पुनः देखते हैं। अभ्युदय में रामकथा के माध्यम से सामाजिक शोषण, सत्ता–व्यवस्था और जनजीवन की विषमता का प्रश्न उठता है, जबकि महासमर में सत्ता, राजनीति, धर्म, नैतिकता और व्यक्ति के निर्णय की जटिलताओं का आधुनिक पुनर्पाठ मिलता है। इस प्रकार कोहली की आधुनिकता को परम्परा–विरोधी आधुनिकता न कहकर परम्परा के भीतर से आधुनिक प्रश्नों की खोज करने वाली रचनात्मक आधुनिकता कहा जा सकता है।

बीज–शब्द : नरेन्द्र कोहली, पौराणिक उपन्यास, आधुनिक दृष्टि, अभ्युदय, महासमर, मिथक, रामायण, महाभारत, जनवादी चेतना, सामाजिक यथार्थ।

प्रस्तावना

भारतीय साहित्यिक परम्परा में रामायण और महाभारत का स्थान केवल धार्मिक ग्रंथों का नहीं है। ये भारतीय समाज की सामूहिक सांस्कृतिक स्मृति के ऐसे आधार–ग्रंथ हैं जिनसे साहित्य, दर्शन, कला, लोकजीवन और सामाजिक मूल्यों ने निरन्तर प्रेरणा ग्रहण की है। प्रतिभाशाली रचनाकारों की कृतियों से उत्तरवर्ती साहित्य जिस प्रकार प्रेरणा ग्रहण करता है, उसी आधार पर ऐसी रचनाओं को 'उपजीव्य' कहा जाता है। इस दृष्टि से रामायण और महाभारत भारतीय साहित्य के सर्वाधिक प्रभावशाली उपजीव्य ग्रंथों में हैं।

वाल्मीकि और व्यास की कृतियों की शक्ति इस तथ्य में है कि उनमें अपने समय से आगे जाने वाली मानवीय और नैतिक सम्भावनाएँ विद्यमान हैं। राम, सीता, कृष्ण, अर्जुन, युधिष्ठिर और दुर्योधन जैसे पात्र किसी एक ऐतिहासिक काल की सीमाओं में आबद्ध नहीं हैं। प्रत्येक युग उन्हें अपने प्रश्नों और अनुभवों के आलोक में पुनः पढ़ सकता है। यही कारण है कि इन महाग्रंथों पर आधारित पुनर्सृजन की परम्परा निरन्तर विकसित होती रही है।

नरेन्द्र कोहली इसी परम्परा के महत्त्वपूर्ण आधुनिक रचनाकार हैं। रामकथा पर आधारित अभ्युदय और महाभारत पर आधारित महासमर उनकी औपन्यासिक प्रतिभा के प्रतिनिधि उदाहरण हैं। उपलब्ध ग्रंथ–सूचनाओं में अभ्युदय को दो खण्डों में तथा महासमर को आठ मूल खण्डों में उल्लिखित किया गया हैकृबन्धन, अधिकार, कर्म, धर्म, अन्तराल, प्रच्छन्न, प्रत्यक्ष और निर्बन्ध। बाद में आनुषंगिक सहित इसका नौ–खण्डीय संस्करण भी प्रकाशित हुआ।[1]

कोहली की विशिष्टता केवल इतनी नहीं है कि उन्होंने पौराणिक कथाओं को उपन्यास का आधार बनाया। उनकी मौलिकता इस बात में है कि उन्होंने पुराकथा के भीतर छिपे सामाजिक, राजनीतिक, मनोवैज्ञानिक और नैतिक तत्त्वों को आधुनिक पाठक के सामने नये ढंग से उपस्थित किया। इसीलिए उनकी रचनाएँ पुनर्कथन न होकर पुनर्सृजन की श्रेणी में आती हैं।

शोध–समस्या, उद्देश्य एवं परिकल्पना

नरेन्द्र कोहली के पौराणिक उपन्यासों के अध्ययन की मूल समस्या यह है कि पौराणिक कथा और आधुनिक दृष्टि का सम्बन्ध किस प्रकार स्थापित होता है। यदि कथा का आधार प्राचीन है, पात्र मिथकीय हैं और घटनाएँ सांस्कृतिक स्मृति में पहले से प्रतिष्ठित हैं, तो उस पर आधारित रचना में लेखक की आधुनिकता किस स्तर पर दिखाई देती है?

प्रस्तुत अध्ययन का उद्देश्य इसी प्रश्न का उत्तर खोजना है। इसके लिए निम्न बिन्दुओं को आधार बनाया गया है–

- कोहली के पौराणिक उपन्यासों में आधुनिक दृष्टि के स्वरूप का विवेचन।
- अभ्युदय में सामाजिक एवं जनवादी चेतना का विश्लेषण।
- महासमर में सत्ता, राजनीति और नैतिकता की आधुनिक व्याख्या।
- मिथकीय पात्रों के मानवीकरण और तर्कशील पुनर्पाठ का अध्ययन।
- स्त्री, श्रमिक और सामान्य जन के चित्रण में आधुनिक संवेदना की पहचान।
- परम्परा और आधुनिकता के बीच कोहली द्वारा निर्मित रचनात्मक सम्बन्ध का विश्लेषण।

इस अध्ययन की परिकल्पना यह है कि नरेन्द्र कोहली के पौराणिक उपन्यास पौराणिक आख्यानों के पुनर्लेखन मात्र नहीं हैं। वे मिथकीय सामग्री को आधुनिक सामाजिक और नैतिक प्रश्नों से जोड़ते हुए एक ऐसी रचनात्मक दृष्टि निर्मित करते हैं जिसमें भारतीय परम्परा और आधुनिक चेतना का समन्वय दिखाई देता है।

शोध–पद्धति

प्रस्तुत अध्ययन में विश्लेषणात्मक, व्याख्यात्मक और पाठ–आधारित शोध–पद्धति का प्रयोग किया गया है। अभ्युदय और महासमर को प्राथमिक पाठ के रूप में तथा उपलब्ध आलोचनात्मक एवं संदर्भ सामग्री को सहायक स्रोत के रूप में ग्रहण किया गया है।

विश्लेषण के दौरान पौराणिक आख्यान को उसके आधुनिक सामाजिक संदर्भ से जोड़कर पढ़ा गया है। विशेष रूप से जहाँ उपन्यास में सामाजिक विषमता, सत्ता, प्रशासन, स्त्री–जीवन अथवा नैतिक निर्णय से सम्बन्धित प्रसंग आते हैं, वहाँ उनके आधुनिक अर्थ–संकेतों को रेखांकित किया गया है।

पौराणिकता और आधुनिकता का अन्तर्सम्बन्ध

आधुनिकता को केवल वर्तमान समय की घटनाओं का चित्रण मानना उचित नहीं है। आधुनिकता प्रश्न करने की क्षमता, तर्कशीलता, व्यक्ति–चेतना, सामाजिक न्याय और रूढ़ मान्यताओं के पुनर्मूल्यांकन से सम्बन्धित है। इस अर्थ में प्राचीन विषय पर लिखी गयी रचना भी आधुनिक हो सकती है।

नरेन्द्र कोहली की दृष्टि इसी तथ्य को प्रमाणित करती है। वे पौराणिक कथा को उसके सांस्कृतिक महत्त्व सहित स्वीकार करते हैं, पर उसके अर्थ को स्थिर नहीं मानते। लेखक का वर्तमान अनुभव उसके अतीत–बोध को प्रभावित करता है और अतीत की कथा वर्तमान को समझने का माध्यम बन जाती है।

प्रख्यात कथाओं के पुनर्सृजन के सम्बन्ध में यह दृष्टि विशेष महत्त्वपूर्ण है। किसी पूर्ववर्ती कृ ति पर आधारित नयी रचना उसका यांत्रिक अनुकरण नहीं होती। उपलब्ध मूल सामग्री में भी इस

बात पर बल है कि पुनर्सृजन को केवल "संशोधन अथवा पुनर्लेखन" नहीं माना जा सकताय उसमें स्वतन्त्र रचनात्मक अस्तित्व आवश्यक है।[2]

यही बात कोहली के पौराणिक उपन्यासों पर लागू होती है। वे रामायण और महाभारत को दोहराते नहीं, बल्कि उनके भीतर छिपे उन प्रश्नों को खोजते हैं जो आज भी मनुष्य के सामने उपस्थित हैं।

अभ्युदय में आधुनिक दृष्टि

रामायण–आधारित अभ्युदय नरेन्द्र कोहली की रचनात्मक आधुनिकता का महत्त्वपूर्ण उदाहरण है। सीता–स्वयंवर, राम का वनवास, हनुमान का समुद्र–संतरण और सेतु–निर्माण जैसे पारम्परिक प्रसंगों को कोहली तर्क और मानवीय सम्भावना के धरातल पर पुनर्गठित करते हैं।[3]

इस पुनर्गठन का उद्देश्य कथा के चमत्कार को नष्ट करना नहीं, बल्कि पाठक को परिचित घटना को नयी दृष्टि से देखने के लिए प्रेरित करना है। उपलब्ध आलोचनात्मक सामग्री में अभ्युदय के ऐसे प्रसंगों के सम्बन्ध में पाठकीय प्रतिक्रिया को इस प्रकार व्यक्त किया गया है– "अरे! मैंने तो ऐसा सोचा भी न था।"[4] यही प्रतिक्रिया कोहली की पुनर्सृजनात्मक प्रतिभा का सार है।

राम का चरित्र भी इसी आधुनिक दृष्टि से पुनर्परिभाषित होता है। राम केवल आदर्श पुत्र या आदर्श राजा नहीं हैंय वे लोककल्याण, न्याय और सामाजिक उत्तरदायित्व से जुड़े हुए व्यक्ति हैं। उनके चरित्र में जनवादी नैतिकता की सम्भावना दिखाई देती है।

राम को यदि केवल धार्मिक प्रतीक मानकर पढ़ा जाए तो उनके चरित्र की सामाजिक सम्भावना सीमित हो जाती है। कोहली की दृष्टि उसे विस्तृत करती है। राम के माध्यम से यह प्रश्न उठता है कि आदर्श शासन की कसौटी क्या है और शासक का वास्तविक दायित्व किसके प्रति है।

जनवादी चेतना और सामाजिक विषमता

कोहली की आधुनिक दृष्टि का एक महत्त्वपूर्ण पक्ष जनसाधारण के प्रति उनकी सहानुभूति है। अभ्युदय के सामाजिक संसार में शक्ति और साधन का असमान वितरण दिखाई देता है। एक ओर धन, शस्त्र और सत्ता से सम्पन्न वर्ग है, दूसरी ओर साधनहीन आश्रमवासी और सामान्य जन।

गहन का प्रसंग इस विषमता का प्रतिनिधि उदाहरण है। शक्तिशाली वर्ग द्वारा उसके परिवार के साथ किया जाने वाला व्यवहार यह दिखाता है कि आर्थिक कमजोरी सामाजिक असुरक्षा में भी बदल जाती है। विशेष रूप से स्त्रियों के साथ होने वाला अत्याचार वर्गीय सत्ता के प्रदर्शन का माध्यम बन जाता है।

यहाँ कोहली की आधुनिकता केवल सहानुभूति में नहीं, बल्कि सामाजिक विश्लेषण में है। वे शोषण को केवल किसी एक व्यक्ति की दुष्टता नहीं मानतेय उसके पीछे स्थित शक्ति–संरचना को भी देखते हैं।

इस प्रकार राक्षस एक विशिष्ट पौराणिक जाति या समुदाय का प्रतिनिधि न रहकर एक राक्षसी प्रवृत्ति का प्रतीक बन जाता है। वह प्रवृत्ति जहाँ शक्ति सम्पन्न व्यक्ति कमजोर व्यक्ति की मानवीय गरिमा को स्वीकार नहीं करता।

सत्ता और प्रशासन की आलोचना

अभ्युदय में आधुनिक दृष्टि का दूसरा महत्त्वपूर्ण आयाम सत्ता और प्रशासन की आलोचना है। आर्या अनुगता के साथ हुई घटना की सूचना जब शासन–प्रतिनिधियों तक पहुँचती है, तब भी प्रभावी कार्रवाई नहीं होती। इसका कारण केवल भय नहीं, बल्कि सत्ता और अपराध के बीच स्थापित सम्बन्ध है।

उपन्यास में शासन–प्रतिनिधि बहुलाश्व को राक्षसों की ओर से बहुमूल्य उपहार प्राप्त होने का प्रसंग इसी व्यवस्था को स्पष्ट करता है। उपलब्ध मूल सामग्री में इस प्रसंग का उल्लेख करते

हुए "बहुमूल्य रथ, स्वर्णाभूषण, मदिरा का बड़ा भाँड़" और एक सुन्दरी दासी के आश्वासन का उल्लेख है।''[5]

यह प्रसंग पौराणिक कथा की सीमा से बाहर निकलकर आधुनिक राजनीतिक यथार्थ का संकेत देने लगता है। जब प्रशासन का नैतिक दायित्व निजी लाभ से नियंत्रित होने लगे, तब न्याय व्यवस्था का अस्तित्व केवल औपचारिक रह जाता है।

यही कारण है कि कोहली की रचना में पौराणिक सत्ता–व्यवस्था आधुनिक पाठक को परिचित प्रतीत होती है। कथा प्राचीन है, लेकिन उसके भीतर उठाया गया प्रश्न–क्या सत्ता न्याय के पक्ष में खड़ी है या शक्तिशाली के पक्ष में?–सर्वथा आधुनिक है।

आर्थिक विषमता और जनजीवन

लंका का चित्रण नरेन्द्र कोहली की सामाजिक दृष्टि का अत्यन्त महत्त्वपूर्ण पक्ष है। वहाँ अपार सम्पदा और राजसी वैभव है, लेकिन सामान्य नागरिकों का जीवन अभावग्रस्त है।

एक ओर सामन्तों के ऊँचे महल हैं, दूसरी ओर निर्धन श्रमिकों की झुग्गियाँ। एक ओर उपभोग की असीम सम्भावना है, दूसरी ओर भोजन और मूलभूत सुविधाओं का अभाव। इस विरोधाभास के माध्यम से कोहली आर्थिक व्यवस्था के नैतिक पक्ष पर प्रश्न उठाते हैं।

इस स्थिति को अत्यन्त सारगर्भित ढंग से व्यक्त किया गया है– "एक ओर निर्बाध विलास है तो दूसरी ओर सीमाहीन भूख।"[6] यह वाक्य केवल लंका के सामाजिक यथार्थ को नहीं, बल्कि उस व्यापक सामाजिक व्यवस्था को रेखांकित करता है जिसमें सम्पत्ति का असमान वितरण मानव जीवन में असमान अवसर पैदा करता है।

इसी प्रसंग में लंका की स्थिति की तुलना आधुनिक महानगरों की गंदी बस्तियों से की जाती है। यह तुलना बताती है कि कोहली का उद्देश्य अतीत का सामाजिक इतिहास लिखना नहीं, बल्कि उसके माध्यम से वर्तमान समाज की विषमता को समझना है।

स्त्री–अस्मिता और सामाजिक शक्ति

नरेन्द्र कोहली की आधुनिक दृष्टि का एक महत्त्वपूर्ण आयाम स्त्री–जीवन का चित्रण है। उनके यहाँ स्त्री पर होने वाली हिंसा केवल व्यक्तिगत कामेच्छा या अपराध का प्रश्न नहीं है। उसके पीछे सामाजिक और वर्गीय शक्ति–संबंध भी सक्रिय हैं।

गहन के परिवार की स्त्रियों के साथ होने वाली हिंसा इसका तीखा उदाहरण है। शक्तिशाली वर्ग कमजोर वर्ग की स्त्री की देह पर अधिकार स्थापित करके केवल एक व्यक्ति को नहीं, बल्कि पूरे वर्ग को अपमानित करता है।

यहाँ स्त्री का प्रश्न वर्गीय प्रश्न से जुड़ जाता है। कोहली की दृष्टि में स्त्री की अस्मिता सामाजिक न्याय का अनिवार्य हिस्सा है। यही कारण है कि उनका पौराणिक आख्यान आधुनिक स्त्री–विमर्श से संवाद करता है।

सीता का चरित्र भी केवल पतिव्रता के पारम्परिक आदर्श तक सीमित नहीं है। वह भारतीय सांस्कृतिक स्मृति में स्त्री–गरिमा, नैतिक शक्ति और संघर्ष की प्रतिनिधि बनती है। कोहली की रचनात्मक दृष्टि उसके चरित्र को अधिक मानवीय और जीवन्त बनाती है।

महासमर : तर्कशीलता और मिथकीय पुनर्पाठ

महाभारत पर आधारित महासमर में आधुनिक दृष्टि का एक प्रमुख आधार तर्कशीलता है। महाभारत की अनेक घटनाएँ चमत्कार, दैवी हस्तक्षेप और अलौकिकता से जुड़ी हुई हैं। कोहली इन घटनाओं के पीछे मानवीय और सामाजिक तर्क तलाशते हैं।

महासमर–5 : अन्तराल में अर्जुन के दिव्यास्त्र प्राप्त करने, स्वर्ग जाने, शिव के दर्शन तथा उर्वशी के प्रसंगों की नयी व्याख्या इसी प्रक्रिया का उदाहरण है। उपलब्ध सामग्री में इन प्रसंगों के सम्बन्ध में अनेक प्रश्न उठाये गये हैं–क्या अर्जुन वास्तव में उस स्वर्ग में गये थे जहाँ सशरीर कोई

नहीं जा सकता? क्या शिव–दर्शन को उसी पारम्परिक अर्थ में ग्रहण किया जाना चाहिए? और अर्जुन जैसे पात्र के उर्वशी के प्रस्ताव को अस्वीकार करने के पीछे कौन–सी मानसिक या नैतिक प्रक्रिया थी?[7]

इन प्रश्नों का महत्त्व इसलिए है कि लेखक पाठक को अन्धविश्वास और अविश्वास–दोनों अतियों से बचाकर तर्कपूर्ण मध्यभूमि पर लाता है।

इस दृष्टि से कोहली का आधुनिकतावाद नास्तिकता नहीं है। वह तर्कशील आस्था की सम्भावना तलाशता है।

महासमर में सत्ता, राजनीति और धर्म

महाभारत मूलतः सत्ता–संघर्ष का महाग्रंथ है। कोहली इस सत्ता–संघर्ष को आधुनिक राजनीतिक दृष्टि से पढ़ते हैं। युधिष्ठिर का भय, अर्जुन की तैयारी, दुर्योधन की राजनीतिक आकांक्षा और यादवों की राजनीति–ये सभी घटनाएँ सत्ता और नैतिकता के बीच तनाव को स्पष्ट करती हैं।

महासमर में पात्रों को पूर्णतः श्वेत या श्याम रूप में नहीं रखा गया। उनके निर्णय परिस्थितियों से संचालित होते हैं। यही जटिलता आधुनिक उपन्यास की पहचान है।

धर्म भी यहाँ स्थिर नियमों का संग्रह नहीं है। वह परिस्थितियों में न्यायपूर्ण निर्णय लेने की चुनौती है। इस प्रकार धर्म का प्रश्न आधुनिक नैतिक विवेक से जुड़ता है।

कृष्ण का आधुनिक पुनर्पाठ

महासमर–7 : प्रत्यक्ष में कृष्ण का चरित्र विशेष महत्त्व ग्रहण करता है। पुस्तक के उपलब्ध विवरण में स्पष्ट रूप से कहा गया है कि इस खण्ड में "सबसे अधिक प्रत्यक्ष" नायकों के नायक श्रीकृष्ण होते हैं और इसी खण्ड में गीता का प्रसंग भी आता है।[8]

कृष्ण का यह रूप केवल देवत्व का रूप नहीं है। वे राजनीति, कूटनीति, मनोविज्ञान और नैतिक निर्णय के गहरे ज्ञाता के रूप में सामने आते हैं। कृष्ण के माध्यम से कोहली धर्म को कर्मकाण्ड से आगे ले जाकर न्यायपूर्ण निर्णय और लोकहित की चेतना से जोड़ते हैं।

गीता का उपन्यास में समावेश इसी कारण महत्त्वपूर्ण है। वह केवल दार्शनिक ग्रंथ का उद्धरण नहीं, बल्कि अर्जुन के अस्तित्वगत संकट का उत्तर है। इस प्रकार दर्शन और कथा का समन्वय होता है।

उपलब्ध पुस्तक–विवरण भी प्रत्यक्ष को महाभारत की कथा के उस चरण से जोड़ता है जिसमें युद्ध की तैयारी और युद्ध के प्रथम चरण का चित्रण है तथा कृष्ण के राजनीतिक निर्णयों को प्रमुखता दी गयी है।

मिथकीय पात्रों का मानवीकरण

कोहली की आधुनिक दृष्टि का सबसे उल्लेखनीय पक्ष मिथकीय पात्रों का मानवीकरण है। राम, कृष्ण, अर्जुन और युधिष्ठिर अपने असाधारण गुणों के बावजूद परिस्थितियों, दायित्वों और मानसिक द्वन्द्वों से जूझते हुए दिखाई देते हैं।

यह मानवीकरण मिथकीय चरित्रों की गरिमा को कम नहीं करता, बल्कि उन्हें आधुनिक पाठक के अधिक निकट लाता है। पाठक उन्हें पूजनीय प्रतीकों के साथ–साथ संघर्षशील मनुष्य के रूप में भी समझता है।

इसी कारण कोहली के पात्र मनोवैज्ञानिक रूप से अधिक जटिल बनते हैं। उनका निर्णय केवल कथानक की आवश्यकता नहीं रहताय उसके पीछे कारण, अनुभव और मानसिक प्रक्रिया दिखाई देती है।

आधुनिकता का जनपक्ष

कोहली की आधुनिकता का एक महत्त्वपूर्ण पक्ष उसका जनपक्ष है। उनके यहाँ सामान्य मनुष्य कथा के हाशिये पर उपस्थित निष्क्रिय पात्र नहीं है। उसकी पीड़ा सत्ता और व्यवस्था के मूल्यांकन की कसौटी बनती है।

गहन, आश्रमवासी, श्रमिक, निर्धन स्त्रियाँ और अन्य सामान्य पात्र यह प्रश्न उठाते हैं कि किसी भी सभ्यता का वास्तविक मूल्यांकन उसके महलों से नहीं, बल्कि उसके सबसे कमजोर नागरिक के जीवन से होना चाहिए।

यही दृष्टि कोहली को केवल पौराणिक कथाकार नहीं रहने देती। वे पौराणिक कथा के माध्यम से सामाजिक आलोचक की भूमिका भी ग्रहण करते हैं।

परम्परा और आधुनिकता का रचनात्मक समन्वय

नरेन्द्र कोहली की आधुनिकता को परम्परा–विरोधी कहना उनके साहित्य की मूल प्रकृति को समझने में बाधक होगा। वे भारतीय परम्परा को अस्वीकार करके आधुनिक नहीं बनते; बल्कि परम्परा के भीतर से आधुनिक प्रश्नों को खोजते हैं।

उनके लिए मिथक अतीत की जड़ स्मृति नहीं, बल्कि वर्तमान से संवाद करने वाला जीवित सांस्कृतिक स्रोत है। रामायण और महाभारत में निहित सत्ता, न्याय, परिवार, युद्ध, स्त्री, धर्म और नैतिकता के प्रश्न प्रत्येक युग में नये अर्थ ग्रहण कर सकते हैं।

कोहली का पौराणिक लेखन इसी सम्भावना का साहित्यिक प्रमाण है। उनकी रचनाओं में अतीत वर्तमान का विकल्प नहीं है, बल्कि वर्तमान को समझने का एक अतिरिक्त परिप्रेक्ष्य है।

कोहली की आधुनिक दृष्टि की प्रमुख विशेषताएँ

उपर्युक्त विवेचन के आधार पर नरेन्द्र कोहली की पौराणिक आधुनिकता की निम्न विशेषताएँ रेखांकित की जा सकती हैं–

- तर्कशीलता : पौराणिक घटनाओं की तार्किक एवं मानवीय व्याख्या।
- मानवीयता : मिथकीय पात्रों को मनुष्य की जटिलताओं के साथ प्रस्तुत करना।
- जनवादी चेतना : सामान्य और वंचित व्यक्ति के जीवन के प्रति सहानुभूति।
- सत्ता की आलोचना : शासन और शक्तिशाली वर्ग के सम्बन्धों पर प्रश्न।
- सामाजिक न्याय : वर्गीय और आर्थिक विषमता के प्रति असहमति।
- स्त्री–संवेदना : स्त्री पर होने वाली हिंसा को सामाजिक संरचना से जोड़ना।
- नैतिक प्रश्नाकुलता : धर्म और अधर्म को परिस्थितिजन्य विवेक के साथ देखना।
- परम्परा का पुनर्पाठ : भारतीय सांस्कृतिक स्मृति को आधुनिक जीवन से जोड़ना।
- मिथक का मानवीकरण : देवत्व और मनुष्यत्व के बीच रचनात्मक सम्बन्ध स्थापित करना।
- समकालीनता का अतिक्रमण : वर्तमान घटना तक सीमित न रहकर शाश्वत मानवीय प्रश्नों की ओर बढ़ना।

निष्कर्ष

नरेन्द्र कोहली के पौराणिक उपन्यास हिन्दी साहित्य में परम्परा और आधुनिकता के रचनात्मक समन्वय का महत्त्वपूर्ण उदाहरण हैं। अभ्युदय और महासमर में रामायण और महाभारत केवल कथास्रोत नहीं रह जातेय वे आधुनिक समाज के प्रश्नों को समझने की वैचारिक भूमि बन जाते हैं।

अभ्युदय में सामाजिक विषमता, जनसाधारण की असुरक्षा, सत्ता का दुरुपयोग, स्त्री पर हिंसा और प्रशासनिक निष्क्रियता जैसे प्रश्न पौराणिक कथा के माध्यम से सामने आते हैं। महासमर में सत्ता, राजनीति, धर्म, नैतिकता और व्यक्ति के निर्णय की जटिलताओं को आधुनिक बौद्धिक धरातल मिलता है।

कोहली की आधुनिकता का आधार तर्कशीलता और मानवीयता है। वे पौराणिक चमत्कार के पीछे तर्क, आदर्श के पीछे संघर्ष और सत्ता के पीछे सामाजिक उत्तरदायित्व को देखने का प्रयास करते हैं। मिथकीय पात्रों को मनुष्य की मानसिक और सामाजिक जटिलताओं से जोड़ना उनकी औपन्यासिक उपलब्धि है।

उनकी रचनाओं में आर्थिक विषमता, स्त्री–असुरक्षा, सत्ता और अपराध का गठजोड़ तथा सामान्य मनुष्य की उपेक्षा जैसे प्रश्न वर्तमान समाज की समस्याओं के साथ संवाद करते हैं। इसलिए उनका पौराणिक संसार अतीत का पुनर्निर्माण भर नहीं हैय वह वर्तमान की आलोचनात्मक समझ का माध्यम है।

अतः नरेन्द्र कोहली के पौराणिक उपन्यासों की आधुनिकता को "परम्परा के भीतर से आधुनिक प्रश्नों की खोज" के रूप में परिभाषित करना अधिक उचित होगा। वे अतीत की ओर लौटते अवश्य हैं, किन्तु अतीत में ठहरने के लिए नहीं; बल्कि वर्तमान मनुष्य को अपनी सामाजिक, नैतिक और सांस्कृतिक स्थिति पर पुनर्विचार करने के लिए प्रेरित करने हेतु।

सन्दर्भ–सूची–

1. कोहली, नरेन्द्र : महासमर–7 : प्रत्यक्ष। नई दिल्ली : वाणी प्रकाशन, रजत संस्करण, 2010। उपलब्ध पुस्तकालयीय अभिलेख में 394 पृष्ठ।
2. नरेन्द्र कोहली, आश्रितों का विद्रोह, पृ. 9।
3. नरेन्द्र कोहली, अंगूरों की बेलि, पृ. 97।
4. नरेन्द्र कोहली, त्रासदियाँ : एक घर की, पृ. 11।
5. नरेन्द्र कोहली, त्रासदियाँ : खम्भा लेखन, पृ. 98।
6. नरेन्द्र कोहली, मेरी श्रेष्ठ व्यंग्य रचनाएँ, हिन्दुस्तानी, पृ. 117।
7. नरेन्द्र कोहली, त्रासदियाँ : उज्ज्वल भविष्य की, पृ. 59।
8. नरेन्द्र कोहली, "बात तो चुभेगी", नवम्बर–दिसम्बर, 1981, पृ. 10।

संत कबीर के काव्य दर्शन में सामाजिक शिक्षा

डॉ. मो. मजीद मियाँ

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सारांश :

कालजयी कबीर के संदेश में मानवता की चिरन्तन निधि हैं। समाज में आज सांस्कृतिक शून्यता है। इस शून्यता की खोज कबीर के मूल्यवादी और मानवतावादी दृष्टिकोण में निहित है। कबीर क्रांति के प्रतीक हैं। कबीर का विद्रोह सामाजिक अन्याय, विषमता, अतिचार तथा व्यवस्था की हताशा और धुरीहीन चरित्र के खिलाफ है। कबीर ने जिस एकता, धार्मिक सहिष्णुता और जनचेतना की बात कही वह भारतीय समाज की पुरानी व्यवस्था है। भारत की समावेशी संस्कृति कबीर की समाहारी जीवन दृष्टि में अभिव्यक्त हो रही है। इस शोध आलेख में समझने की कोशिश की गई है कि नवीन चुनौती का सामना करने के लिए कबीर की संचार दृष्टि कितनी प्रासंगिक है? उनके संदेशों का आज के युवकों के लिए क्या मायने हैं? इस युग में पैसा, बाजार और मशीन इन तीनों के खिलाफ संघर्ष में कबीर के विचार कितने समर्थ हैं।

मुख्य शब्द : कबीर, संचार, समाज-सुधार, संवाद, धर्म, सांप्रदायिकता, सद्भावना

प्रस्तावना :

मनुष्य को ईश्वर की सर्वश्रेष्ठ रचना माना जाता है। इसका कारण यह है कि मनुष्य एक विचार करनेवाला प्राणी है। अपने जीवन को विकसित करने के लिए उसने सातत्यपूर्ण रूप से अपना आध्यात्मिक, मानसिक, बौदिधक, सामाजिक, भौतिक एवं सांस्कृतिक विकास किया है। जीवनमूल्य और संस्कार मनुष्य के जीवन के विकास का एक अविभाज्य अंग। भारतीय मनिषीयों ने मनुष्य के जीवन जीने के मुख्य रूप से दो उददेश्य माने है एक अभ्युदय और दुसरा निःश्रेयस । तभी तो कहा जाता है- "परहित सरिस धर्म नहीं भाई। पर पीडा सम नही अधमाई।" 21 वी सदी भौतिक संपन्नता का युग है परंतु इसी युग में भारतीय समाज विभिन्न दोषों से ग्रस्त हुआ है। वैज्ञानिक उपलब्धियों की चकाचौंध ने भारतीय संस्कृति की नींव को ही सांप्रदायिक वैमनस्य की जडों ने जकड लिया है। लोकतांत्रिक देश होने के बावजुद भी आज के भारतीय समाज की वास्तविकता कुछ और ही है। भारत देश की सामाजिक अवस्था का चित्रण करते हुए डॉ. नलिनी पूरोहित लिखती है-

"जन जीवन है अस्त-व्यस्त, जनता है सरकार से त्रस्त,

कानून का सूरज है अस्त, चहुँ ओर व्यभिचार है जबरदस्त।"1

आधुनिक युग का मानव भौतिक संसाधनों को जुटाने में आत्मकेंद्रित व्यक्तिवादी, असहिष्णु हो गया है। सबसे बडी बात तो यह है कि भौतिक मूल्य मानवी मूल्यों को प्रभावित कर रहे है। मानवी मूल्यों का अवमूल्यन और बाजारीकरण का बढता हुआ प्रभाव भारतीय समाज की नींव को झकझोर रहा है। इस संदर्भ में डॉ.परशुराम जी लिखते है, बाजार हमारे दौर का सबसे प्रभावी तत्व बना दिया गया है, जो समाज को अपनी गिरफ्त में लेता जा रहा है। यह बाजार महज खरीदने बेचने का नहीं, बडे पैमाने पर राष्ट्र को विवेकहीन और विचार शून्य बनाने का उपक्रम है। प्रोद्योगिकी ने भयावह दासता का जन्म दे कर हमें कब्जे में कर लिया है। उपभोक्ता संस्कृति ने परंपरागत समाज के नैतिक मूल्यों को अपदस्त कर दिया है। ऐसे दिशाहीन माहोल में मानव समाज को सतमार्ग पर अग्रसर करने का यथायोग्य मार्ग केवल संत साहित्य ही प्रशस्त कर सकता है। डॉ. वासुदेव सिंह जी इसके बारे में अपने विचार व्यक्त करते हुए लिखते है, सामाजिक महता की दृष्टि से संत काव्य की पहचान है। संत कवियों ने सभी प्रकार की संकीर्णताओं,बाहयाचारों एवं मिथ्या रूढियों का विरोध करते हुए मानवतावाद का संदेश दिया, सभी प्राणियों को एक सामान्य धरातल पर प्रतिष्ठित किया तथा दार्शनिक मतवाद अथवा कोरे तर्क के चक्कर में न पडकर स्वानुभूति पर

बल दिया, शताब्दियों से शोषित एवं पीडित तथाकथित निम्न वर्ग के उत्थान की घोषणा की, समाज में व्याप्त छुआछुत, उँच-नीच की भेद भावना तथ जन्मगत श्रेष्ठता का विरोध किया, शास्त्रवचन की अपेक्षा अनुभव को महता देते हुए सत्य का उदघाटन किया। इन कवियों ने ईश्वर की सर्वशक्तिमता और सर्वव्यापकता का उदघोष करते हुए परमसत्य को निर्व्वव्द - निर्भीक वाणी में अभिव्यक्ति किया तथा मिथ्या धारणाओं का कठोर शब्दावली में खंडन किया। इस प्रकार इन्होंने मानव समाज के सामूहिक कल्याण की चर्चा की और धर्म निरपेक्ष सामाजिक व्यवस्था को प्रोत्साहन दिया। ऐसी संत परंपरा में निर्गुण काव्यधारा के कवि संत कबीर का स्थान अग्रणीय है।

संत कबीर का महत्व हिंदी साहित्य के इतिहास में भक्तिकाल के ज्ञानाश्रयी शाखा का जगमगता तारा के रूप में कबीर जी को पहचाना जाता है। मध्यकाल के अंधकार भरे युग में ज्ञान का दीप लेकर अवतरित होनेवाले तथा भोली भाली जनता को सच्चा मार्गदर्शन करने वाले एक महान व्यक्तित्व की जरूरत महसूस हो रही थी ऐसे काल में संत कबीर का जन्म हुआ। संत कबीर ने इस काल मुख्यत समाज मे फैली असंख्य कुप्रथाओं और आडंबरों पर तीव्र प्रहार किया इसके लिए उन्होंने खंडन-मंडन पदधति का इस्तमाल किया और दुसरी महत्वपूर्ण बात यह है कि उन्होनं मानवता ही सच्चा धर्म है इस बात को लोगों के मन मस्तिष्क तक पहुँचाया। संत कबीर एक कवि, साधक और समाज सुधारक रूप में इस नूतन सामाजिक, सांस्कृतिक क्रांति के अग्रदूत थे। यदयपी समाज संरचना के लिए उन्होंने कोई सुधारवादी आंदोलन नही चलाया। उनकी चेतना मूलतः आध्यात्मिक थी। वह स्वभाव के संत थे, किंतु कर्म से साधक और एक सच्चे समाजसुधारक थे। आचार्य रामचंद्र शुक्ल जी कबीर के चरित्र को अभिव्यक्त करते हुए लिखते है- **"जो ब्रम्ह हिंदुओं की विचार पध्दति में ज्ञानमार्ग का एक निरूपण था उसी को कबीर ने सूफियों के ढर्रे पर उपासना का ही नही प्रेम का भी विषय बनाया और उसकी प्राप्ति के लिए हठयोगियों की साधना का समर्थन किया। इसप्रकार उन्होंने भारतीय ब्रम्हवाद के साथ सूफियों के भावात्मक रहस्यवाद,हठयोगियों के साधनात्मक रहस्यवाद एवं वैष्णवों के अहिंसावाद तथा प्रगतिवाद का मेल करके अपना पंथ खडा किया।"2** इस तरह संत कबीर के काव्य में सामाजिक दर्शन को हम स्पष्ट रुप से देख सकते है।

हमारे भारतीय समाज आज भी मूर्ति पूजा का बोलबाला है तो कबीर के काल में इसका कितना प्रचलन होगा इसका हम अंदाजा लगा सकते है। ऐसे काल में मूर्ति पूजा के खिलाफ बोलना भी बहुत कठिन था। कबीर दास के युग में आक्रमणकारियों ने कई मंदीरों मे होनेवाली मूर्तियों को तोडा था इसके उपर न पूजारी कुछ कर सके न मूर्ति में छिपे देव। ऐसी मूर्ति पूजा के विरोध मे कबीर ने वातावरण तैयार किया। हिंदुओं की पत्थर पूजने की प्रथा के बारे में वे कहते है-

"पाहन पूजै हरि मिलै तो मैं पूजूं पहार
ताये चाकी भली पीस खाय संसार।"3

हिंदुओं के साथ-साथ कबीर ने मुस्लिम समाज के नमाज पढन पर आपती उठाते हुए कहा था की तुम इतनी जोर से अल्लाह को पुकारते हो क्या तुम्हारा अल्लाह बहरा हो गया है। संत कबीर जी के मतानुसार परमात्मा बाहर नही तो भीतर है। परमात्मा मंदिर मस्जिद में नही मानव के हदय में है। इसलिए उन्होंने आजन्म मूर्तिपूजा तथा बाहय आडंबरोंपर फटकार लगायी है इसलिए उन्होंने मोको कहाँ ढुंढे बंदे कहा है।

संत कबीर जी अपने समय के सर्वाधिक जागरूक एवं संवेदनशील मनुष्य थे। उनकी पैनी दृष्टि से समाज की काई गतिविधि छिपी नही रह सकी थी। धर्म के नामपर जो विविध प्रकार के बाहयाचार प्रचलित थे। जैसे हिंदू और मुसलमान दोनों में माला का पर्याप्त महत्व है। हिंदू जप के लिए और मुसलमान तसबीह के लिए माला का सहारा लेते है। दोनों जीवनभर माला फेरते है, पर उनके मन की चंचलता समाप्त नहीं होती, उनके मन की अशांति, दुविधा और भ्रम दूर नहीं है। अगर सच्चा भजन करना है तो मनरूपी मनके को घुमाओं। माला और तसबीह फेरने से कुछ होनेवाला नही है। अगर वास्तव में कुछ बदलना है तो मन की प्रवृति को बदलो, उसी से तुम्हारा कल्याण होगा, तभी तो वे कहते है-

"माला फेरत जुग गया, गया न मन का फेर,

कर मनका डारि के, मन का मन का फेर।"4

उनका यह संदेश सभी प्रकार के बनावटीपन से मुक्त हैं। वह ऐसे सत्य पर आधारित है जो किसी भी प्रकार के वेश भूषा, कर्म कांड और बाहयाचार में नही पाया जाता। वह सत्य हमारे भीतर नित्य है। स्वार्थी, लोभी, कामी और भ्रष्ट साधुओं के उस काल में गरीब दीन, हीन जनता झुठे कर्मकांड में फॅसकर अंधश्रध्द हो गयी थी। इसलिए वे सच्चे साधु की पहचान बताते हुए कहते है। उन्होंने हिंदुओं के एकादशी, श्राध्द, तीर्थ, व्रत, वेद, मंदिर, अवतार और छुआछुत का विरोध किया तो दूसरी ओर मुसलमानों के रोजा, नमाज, हज, कुरान, पैगम्बर और ताजिरादारी की आलोचना की है। समाज पर अपना प्रभाव जमाए रखने के लिए पुरोहित वर्ग ने स्वर्ग नरक की कल्पना कर ली और शास्त्रों की दुहाई देकर लोगों को समझाने लगे कि जो उनके वचनों में अविश्वास करेगा या पालन नही करेंगे, उसे अनंतकाल तक नरक की यातनाएँ भोगनी पडेगी। इसप्रकार धर्म के साथ भय को जोडकर जनसामान्य को भ्रमित किया जा रहा था। जातियों एवं उपजातियों में विभक्त हिंदू जनता मुर्तिपूजा एवं व्रत-उपवास में फॅसी की असत्य ही सत्य के रूप में दिखाई दे रहा था। हिदु और मुसलमान दोंनों धर्मा में फैले आडंबरों के वे निर्मम आलोचक है। मूर्ति पूजा का खंडन करते हुए ईश्वर के घट में निवास कि बात कही है-

"कस्तूरी कुंडलि बसै, मृग ढूँढे बन माँहि,

ऐसै घटि घटि राम है, दुनिया देखें नांहि।"5

इस तरह संत कबीर जी ने मिथ्या आडंबरों और पाखंडों का विरोध कर आंतरिक साधना और अंतकरण की शुदधता को महत्वपूर्ण माना है। संत कबीर जी की दृष्टि से सभी लोग एक ही ईश्वर की संतान है। इसकारण उच्च-नीच का भेदभाव गलत है। इस संदर्भ में आचार्य परशुराम चतुर्वेदी जी का मत है कि, सभी मनुष्य एक ही मानव समाज के अंग है। एक विशाल वृक्ष की विभिन्न शाखाओं के समान है। सबके मूल की ओर दृष्टि डालने पर उनमे कोई अन्तर नही दीखता और न इसिकारण उससे एक दूसरे के पृथक व उच-नीच समझने का कोई आधार है। कबीर स्वयं मध्यम वर्ग से आए थे इसकारण सामंती विचारधारा का विरोध एवं दलित पीडित जनता के प्रति न्याय की भावना उनमें दिखायी देती है। उन्होंने जाँति पाँति के बंधनों को तोडा था। उनका यह विश्वास था की सभी एक ही हॉड मॉस के बने है इसलिए शूद्र नीच और ब्राम्हण उच्च कैसे सकता है। शुद्रों को नीच समझनेवाले ब्राम्हणों से कबीर प्रश्न पुछते है क्या हमारी नसों में लहु और तुम्हारी नसों दुध बहता है यदि नही तो आप ब्राम्हण और हम शुद्र कैसे हो सकते है। वे कहते है सब में एक ही परमब्रम्ह की ज्योति है-

"एक बूंद एकै मल मूतर, एक चाम एक गूदा,

एक जोति थै सब उतपना, कौन बॉभन कौद सूदा।"6

संत कबीर जी को विश्वास था कि केवल उँचे कुल में जन्म लेने से कोई उँचा नही होता। उँचे कुल में जन्म लेकर अगर उस इन्सान की करनी नीच है तो वह ऐसी ही बात हुई जैसे सोने के कलश में मदिरा भर दी गयी हो। कबीर कहते है कि सभी जातिगत भेदभाव को भूलकर मनुष्य सुख और शांति से रहे। इस तरह संत कबीर जी ने भटकी हुई समस्त मानव जाति को एक मिलन बिंदु पर लाने का महान कार्य किया है। संत कबीर जी के इसी कार्य के कारण जनता उनसे प्रेम करती है आचार्य हजारी प्रसाद व्दिवेदी जी लिखते है, इसी गुण के कारण सैकडों वर्ष से उन्हें साधारण जनता का नेता और साथी बना दिया है। वे केवल श्रध्दा और भक्ति के पात्र नही है, प्रेम और विश्वास के पात्र बन गए है। सच पूछा जाय तो जनता कबीरदास पर श्रध्दा करने की अपेक्षा प्रेम अधिक करती है। संत कबीर जी प्रेम की भाषा के अभिलाषी थे इसकारण पुस्तकीय ज्ञान को महत्वपूर्ण नही मानते थे। उनके मतानुसार पुस्तकीय ज्ञान केवल एक परिपाठी अथवा एक रूढि मात्र है। जिसका मनुष्य के आचरण से कोई संबंध नही है। कबीर के धर्म का आधार विश्वास और व्यक्तिगत अनुभव था। इसलिए वह शास्त्र ज्ञान की अपेक्षा स्वानुभूति से मिले ज्ञान को महत्वपूर्ण मानते थे। उनकी प्रतिभा सर्जनामूलक थी न की अनुकरणमूलक। वे कहते है-

"तू कहता कागद की लेखी,

मै कहता आँखिन की देखी।"7

उनका विश्वास था की सच्चा सदविवेक ईश्वर के प्रति प्रेम उत्पन्न करता है। सच्चा पंडित पुस्तक को पढनेवाला नहीं, प्रेमतत्व को जानने वाला होता है। पुस्तकीय ज्ञान की अनुपयुक्तता को स्पष्ट करते हुए वह कहते है-

"पोथी पढी पढी जगमुआ, पंडित भया न कोइ,

ढाई आखर प्रेम का पढे सो पंडित होइ।"8

संत कबीर जी के इसी विश्वास के कारण वे पंडितों को फटकारते है। शास्त्रों की नीरस बातें उन्हें अप्रिय लगती है। सामाजिक एकता के लिए वे सभी मानवजाति में प्रेम भाव को महत्वपूर्ण मानते है। उनका प्रेम विश्वव्यापी है। इसी कारण संत कबीर जी व्यावहारीक अर्थ में अपढ होकर भी उनका साहित्य अशिक्षित लोगों के लिए अत्यंत मार्गदर्शक साबित हुआ है। संत कबीर जी ने अपना समस्त जीवन लोककल्याण के लिए समर्पित कर दिया था। वे दयालु और सेवापराणवादी जीव थे। वे अज्ञान के कारणों की तह तक गए और उन्होंने केवल समाजरूपी वृक्ष की डाल या पात को ही नही धोया तो जड को सिंचकर समाज को सदाचार का पाठ पढाया। कबीर जी की कविता में शील, दया, उदारता, दीनता, धैर्य, संतोष, सत्यता आदि का उपदेश वैष्णव धर्म के सदाचार के महत्व से प्रभावित है। वास्तविकता संत कबीर का काल वासना से ग्रस्त युग था ऐसे समाज को सात्वीक वृति के संस्कार की जरूरत थी जो संत कबीर के कारण पूरी हुई। उन्हें जहाँ से भी जो भी अच्छा लगा उसे ग्रहण किया इसलिए दूसरों को हमेशा मदत करने का संदेश देते हुए वे कहते है-

"बडा भया तो क्या भया जैसे पेड खजूर,

पंथी को छाया नही फल लागे अति दूर।"9

तात्पर्य यह है कि संत कबीर जी ने जीवन में सदाचरण के महत्व का प्रतिपादीत किया है। संत कबीर जी ने मनुष्य को कुसंगति से हमेशा दूर रहने का आवाहन किया है। कुसंगति के प्रभाव को व्यक्त करते हुए वे कहते है की स्वाति नक्षत्र की स्वच्छ बूँद जब पृथ्वी पर पडती है तो मिटटी में मिलने के कारण वह मैली हो जाती है उसिप्रकार से मनुष्य को कुसंगति से गलत परिणामों को भुगतना पडता है। अगर आप मुर्ख इन्सान की संगति में रहोगे तो वह निश्चित रूप से आपको डुबाकर रख देगा-

"मूरिष संग न कीजिए, लोहा जलि न तिराइ,

कदनी सीप भवंग मुषीं एक बूंद तिहूँ भाइ।"10

कुसंगति का और एक जगह वर्णन करते हुए वे कहते है कि कुसंगत में रहना याने बेरी के वृक्ष के समिप केले के वृक्ष को रखने के समान है। क्योंकी बेरी का वृक्ष जब हिलता है, तो वह अपने कॉटों से केले के पतों को चिर कर रख देता है। तात्पर्य यह है कि कुसंगति में रहकर हमें दुख ही भुगतना पडता है। संत कबीर जी का काल धर्म के नाम पर अंधश्रध्दा से भरे हुई अनेक कुप्रथाओं का काल था। इस काल में धर्म के नाम पर प्राणियों की हत्याएँ की जाती थी। हिंदु और मुस्लिम दोंनों ही धर्मो में हिंसा वृति घर चुकी थी। ऐसे युग में संत कबीर जी ने अहिंसा को धर्माचरण का प्रमुख तत्व मानकर अपने विचारों को विस्तार के साथ प्रस्तुत करना आवश्यक समझा। मुस्लिम धर्मों के अनुयायियों की हिंसा वृति की निंदा करते हुए वे कहते है-

"दिन में रोजा रखत है राति हनत है गाय,

यह तौ खून वह बंदगी कैसे खुसी खुदाय।"11

हिंदू गाय को पूजनीय मानते है इसलिए गाय की हत्या नही करते पर पूजा के नामपर भगवान को प्रसन्न करने के लिए बकरे की हत्या करते है। बकरी का माँस खाने का निषेध करते हुए वे कहते है-

"बकरी पाती खाती है, ताकी काढे खाल,

जे नर बकरी खात है, तिनको कौन हवाल।"12

इस तरह संत कबीर जी ने अहिंसा की भावना का विरोध कर सभी प्राणीमात्राओं में ईश्वर का निवास होने की बात कही है। संत कबीर जी के यह क्रांतिकारी विचार मनुष्य को आंतरिक रूप से परिवर्तन करने के लिए विवश करते है। इसके बारे मे अपने विचार प्रकट करते हुए डॉ. कांतिकुमार लिखते है, कबीरदास एक खतरनाक कवि है। कबीरदास

से खतरा उनके युग के उन सब लोगों के लिए था जो स्थापित मूल्यों में परिवर्तन की कल्पना मात्र से भयभीत थे और कबीरदास से खतरा आज के सामान्य पाठक को भी है। कबीरदास को पढने के बाद हम ठीक वही नही रह जाते जो हम कबीरदास को पढने के पहले हाते है। निश्चित रूप से हम कह सकते है कि कबीर का धर्म सच्चा मानव धर्म है जो मनुष्य को मनुष्य से जोडता है तोडता नही, जिसमें ऐसी सच्चाई है जो सभी धर्मो का मूल है। उनका दृष्टिकोण मानवतावादी है और उनकी कविता जनमानस के अधिक निकट है।

निष्कर्ष :

कबीर मध्यकाल के क्रांतिपुरुष थे। उन्होंने देश के अंदर और बाहर की परिस्थितियों पर एक ही साथ धावा बोलकर, समाज और भावलोक को जो प्रेरणा दी, उसे न तो इतिहास भुला सकता है। और न ही साहित्य। उन्होंने रुढ़ियों पर जिस साहस और शक्ति से प्रहार किया, यह देखते ही बनता है। महात्मा कबीर दास ने पीड़ित जनता के दुख- दर्द को दूर करने के लिए 'राम रसायन' का आविष्कार किया। कबीर साहब ने पहली बार जनता को उसकी विफलता में ही खुश रहने का संदेश दिया। कबीर ने समाज की दुर्बलता और अधोगति को बड़ी करुणा से देखकर, उसे ऊपर उठाने के मौलिक प्रयत्न किया। उन्होंने भय, भर्त्सना और भक्ति जैसे अस्त्रों का उपयोग राजनैतिक विभिषिकाओं और सामाजिक विषमताओं जैसे शत्रु को परास्त करने के लिए किया। कबीर यह बात समझ चुके थे कि इन शत्रुओं के विनाश होने पर ही जनता का त्राण मिल सकता है। अतः उनका सारा विरोध असत्य, हिंसा और दुराग्रह से था। उनका उद्देश्य जीवन के प्रति आशा पैदा करना था। वह कहते हैं, सारे अनर्थों की जड़, असत्य और अन्याय है, इनका निर्मूल होने पर ही शुभ की कल्पना की जा सकती है। इसी अध्य का सहारा लेकर उन्होने हिंदू - मुस्लिम के भेद भाव को मिटाने क प्रयत्न किया था, इसके साथ-साथ ही उन्होंने अपने नीतिपरक पदों के द्वारा जनता का मनोबल बढ़ाने का प्रयत्न किया था। आज के परिवेश में भी इन्हीं उपायों की आवश्यकता है। सांप्रदायिक मतभेदों या दंगों का कारण अज्ञान या नासमझी है। इस नासमझी या अज्ञान को दूर करने के लिए कबीर द्वारा बताए गए उपायों का प्रयोग किया जाना आवश्यक है। कबीर की वाणी ही समस्त समस्याओं का निवारण करने में समर्थ है। उन्होंने समाज में ऊंच- नीच का भेद मिटाकर सबको एक समान रूप से व्यवहार करने की सीख दी। आज के संदर्भ में भी इसी की जरुरत है। वर्तमान समस्याएं चाहे सांप्रदायिक हो चाहे वैयक्तिक, सबका समुचित समाधान नैतिक मूल्य प्रस्तुत करते हैं।

संदर्भ ग्रंथ :

1. पुष्पपाल सिँह, कबीर ग्रंथावली, पृष्ठ-14, अशोक प्रकाशन, दिल्ली,
2. डॉ. परशुराम सिंह, ईशा साहित्य-संस्कृति, शोध संवाही अंक 13 वर्ष 2015
3. डॉ श्याम सुन्दरदास, कबीर ग्रन्थावली, पृष्ठ-34, हरीश प्रकाशन मंदिर, 2019
4. प्रो. अग्रवाल, अकथ प्रेम कहानी, कबीर की कविता और उनका समय, पृष्ठ-77, राजकमल प्रकाशन, 2019
5. वहीं, पृष्ठ 77-78
6. डॉ श्याम सुन्दरदास, कबीर ग्रन्थावली, पृष्ठ-33, हरीश प्रकाशन मंदिर, 2019
7. वही, पृष्ठ 57
8. वही, पृष्ठ 58
9. प्रमोद चंद्र सास्त्री, कबीर बीजक, पृष्ठ-149, श्री थाकुर प्रसाद पुस्तक भंडार, 2013
10. डॉ श्याम सुन्दरदास, कबीर ग्रंथावली, पृष्ठ-2, हरीश प्रकाशन दिल्ली,
11. वही, पृष्ठ 65
12. डॉ श्री अण्णासाहेब डांगे, संत कबीर के काव्य में सामाजिक दर्शन, 2013

मृच्छकटिक में रस योजना

शोधार्थी

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शोध-निर्देशक

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मृच्छकटिक का मुख्य रस शृंगार है। अनेक रसों के विभिन्न सामग्रियों से परिपुष्ट श्रृंगार का सुन्दर रूप कवि ने दिखलाया है। सहृदय कवि ने अपनी अनुभूतिमय एवं संवेदनशील कल्पना के प्रसाद द्वारा मृच्छकटिक में इतने रससिक्त प्रसंगों की अवतारणा की है कि सारा प्रकरण वेदनाजनित आँसुओं का एक सागर–सा बन गया है। पात्रों के चरित्रांकन में, वातावरण की सजीवता में, उद्देश्य की प्राणवत्ता में, प्रकृति के उत्कृष्ट कलात्मक वर्णन में शृंगार की सुसम्बद्ध अभिव्यक्ति जो इस प्रकरण में हुई है, संस्कृत के अन्य नाटकों में दुर्लभ है। श्रृंगार का ये सरस चित्र देखते ही बनता है –

धन्यानि तेषां खलु जीवितानि ये कामिनीनां गृहमागतानाम्।
आर्द्राणि मेघोदकशीतलानि गात्राणि गात्रेषु परिष्वजन्ति।।[1]

अपने घर पर वर्षा में भीग कर आई हुई भीगी प्रेयसियों को अपनी बाँहों में जकड़ कर जो प्रेमी आलिंगन करता है, निश्चय ही उसका जीवन धन्य है।

वसन्तसेना के श्रृंङ्गारोद्दीपक ललित गति का वर्णन विटं की निम्न उक्ति में एक हृदयवेधक एवं मार्मिक अनुभूति का मानो साक्षात्कार करा देता है–

क्रि यासि बालकदलीव विकम्पमाना रक्तांशुकं पवनलोलंदशं वहन्ती।
रक्तोत्पलं प्रकरकुड्मलमुत्सृजन्ती टङ्कर्मनःशिलागुहेव विदार्यमाणा।।[2]

अरी ओ वसन्तसेने, डर कर इस तरह क्यों भाग रही हो? सरस कोमल केले के पत्ते की तरह थरथर काँपते ये तुम्हारे लाल–लाल आँचल हवा में उहरा रहे हैं। आह! तुम्हारे भागते हुए कमल कोमल पैर जो राजमार्ग के कुट्टिम पर उठ–गिर रहे हैं, वे लगते हैं मानो लाल–लाल कमल के फूलों को ही बिखेर रहे हैं। तुम्हारी देह की यह रक्ताभ छवि लगता है जैसे मनःशिल की गुहा हो, जिसे कोई छेनी से टाँक रहा हो और छेनी की चोट से उस मनःशिल के छोटे–छोटे कण उड़कर चारों ओर बिखर रहे हों।

पञ्चम अङ्क में कवि ने उद्दीपन रूप वर्षा का विशद एवं सुन्दर वर्णन किया है। इस वर्णन में चमत्कारोत्पादक अनेक सूक्तियों का समाहार दर्शनीय है। धर्मप्राण चारुदत्त को मेघाच्छन्न आकाश को देखते ही वामन भगवान् की लीला का स्मरण हो आता है–

मेधो जलार्द्रमहिषोदरभृङ्गनीलो विद्युत्प्रभारचितपीतपटोत्तरीयः।
आभाति संहतबलाकग्रहीतशङ्खः खं केशवोऽपर इवाक्रमितुं प्रवृत्तः।।[3]

भवभूति के मालती माधव और कुछ सीमा तक उत्तररामचरित में भी काव्यात्मक वर्णन को दृष्टि से जो अंश अति उत्तम कोटि में रखे जा सकते हैं, उन्हीं अंशों के कारण उनका रूपकत्व समादृत है। हाँ, काव्यत्व और रूपकत्व का सबन्वित एवं सन्तुलित स्वरूप केवल कालिदास के नाटकों में हम अवश्य देख सकते हैं। नाटकीय संविधान को घटना–चक्र की दृष्टि से गति देने के लिए कवि ने निश्चय ही अपनी काव्य–प्रतिभा का समुचित उपयोग मृच्छकटिक में किया है। कुछ आलोचकों ने यह आक्षेप किया है कि कवि को प्रकृति–वर्णन करने के पर्यास अवसर उपलब्ध हुए हैं, किन्तु

कवि ने या तो उसकी अनुचित उपेक्षा की अथवा असावधानी के कारण हाथ में आये अवसर खो दिए। यह सच है कि अष्टम अंक के जीर्णोद्यान–वर्णन में कवि को प्रकृति–वर्णन का पर्याप्त अवसर प्राप्त था, किन्तु यहाँ भी कवि यदि पश्चम अंक में वर्णित वर्षा–वर्णन की तरह प्रकृति–वर्णन उलझता तो निश्चय ही नाटकीय दृष्टि से मृच्छकटिक में जो स्वाभाविक, है, उसे यह खो देता। मृच्छकटिक का पंचम अंक श्रव्यकाव्य की दृष्टि से जितना अधिक मनोरम् है, दृश्यकाव्य की दृष्टि से उतना स्वाभाविक नहीं लगता। अभिसारिका वसन्तसेना के मुख से अनेक श्लोकों को कहलवाना भी की दृ ष्टि से चाहे जितना रुचिकर हो, किन्तु नाटकीय संविधान की दृष्टि त नहीं प्रतीत होता है। ठीक इसी तरह चतुर्थ अंक में वसन्तसेना के सातों आँगनों का विस्तृत वर्णन निश्चय ही ऊबा देने वाला है।

रंग मंच की दृष्टि से भी यह नाटक सदोष प्रतीत होता है। यह दस अंक का एक विशाल नाटक है। मंच पर एक बैठक में इसे अभिनीत करना बिल्कुल असंभव है। मंचीय विनोद की दृष्टि से डॉ० भोलाशंकरजी भी इसमें कुछ दोष मानते हैं। उनका कहना है–मृच्छकटिक के प्रत्येक अंक में केवल एक ही दृश्य न होकर अनेक दृश्य पाये जरते हैं। कालिदास के नाटकों में यह बात नहीं है। उसके प्रत्येक अंक में केवल एक ही दृश्य है। मृच्छकटिक का पहला अंक ही चार दृश्यों में विभक्त है। उसी अंक में एक साथ चारुदत्त के घर अदृश्य और साथ ही गली में वसन्तसेना का पीछा करते हुए शकार का दृश्य दिखलाने में मंच को निःसन्देह असुविधा होगी। ऐसे दृश्य हमें अत्य अंकों में भी मिलते हैं।

मृच्छकटिक एक भारतीय सुखान्त नाटक है, फिर भी पाश्चात्य दुःखान्त वातावरण के सृजन में यह प्रकरण लाजवाब है। इसलिए कुछ आलोचकों ने इस पर यनानी रंगमंच का प्रभाव माना है। मृच्छकटिक की शैली नितान्त सरल तो एक है। बड़े–बड़े छन्दों का प्रयोग नहीं के बराबर हुआ है। नई उद्भावनाएँ, अछूती कल्पनाओं का सामञ्जस्य, इस प्रकरण की विशेषता है। प्रकरण की भाषा में सुकुमारता, सन्दीप्ति, मृच्छकटिक नाटक नहीं एक प्रकरण है। प्रकरण का नायक धीर–प्रशान्त लक्षणयुक्त कोई विप्र, अमात्य या वणिक होता है। मृच्छकटिक का नायक ब्राह्मण चारुदत्त भी धीर–प्रशान्त है। प्रकरण की नायिका कुलजा और बेश्या में से कोई एक अथवा दोनों ही होती है। इस प्रकार नायिका के आधार पर प्रकरण के तीन भेद हैं। जिस प्रकरण में दोनों तरह की नायिकाएँ होती हैं, उसमें धूर्त, द्यूतकर, सभिक, विट, चेट आदि पात्र मंच पर उपस्थित होते हैं। मृच्छकटिक को नायिका वसन्तसेना वेश्या एवं धूता कुलजा है। इस दृष्टि से भी मृच्छकटिक एक प्रकरण है। प्रकरण की कथावस्तु भी नाटक की तरह प्रख्यात न होकर कवि–कल्पित होती है। मृच्छकटिक की भी कथा चारुदत्त एवं वसन्तसेना का संगम–शूद्रक के उर्वरक मस्तिष्क की देन है। इस विश्लेषण से हम इस निष्कर्ष पर आते हैं कि मृच्छकटिक निश्चय ही एक प्रकरण है। क्योंकि इसमें प्रकरण के प्रायः सभी लक्षण मिलते हैं किन्तु नाटक के सभी लक्षण घटित नहीं होते। अतः निश्चित रूप से मृच्छकटिक एक प्रकरण है। धनञ्जय और महापात्र विश्वनाथ ने भी इसे प्रकरण ही माना है। यया–

भवेत् प्रकरणे वृत्तं लौकिकं कविकल्पितम्।।
शृङ्गारोऽङ्गी नायकस्तु विप्रोऽमात्योऽथावा वणिक्।
सापायधर्मकामार्थपरो धीरप्रशान्तकः।।
नायिका कुलजा, क्वापि वेश्या क्वापि क्वचिद् द्वयम्।
तेन भेदास्त्रयस्तस्य तत्र भेदतृतीयकः।
कितवद्यूतकारादिविटचेट कसङ्कुलः।।[4]

रस–विवेचन–भारतीय नाटघसमीक्षा के अनुसार रस रूपक का मुख्यतत्त्व है । पाश्चात्य आलोचकों ने प्रभावान्विति को ही नाटक का प्राण कहा है। समालोषचको का कथन है कि दोनों में बहुत कुछ समानता है। विभाव, अनुभाव और संचारी भाबों के संयोग से सहृदयों को जो एक

अलौकिक आनन्द की अनुभूति होती है वहीं रस है। इस रस की प्रतीति कराना ही रूपको का प्रयोजन है। विविध रूपकों भिन्न–भिन्त प्रकार के रसों की प्रधानता और गौणता होती है। प्रकरण में रस दो प्रकार का होता है संभोग (संयोग) श्रृंङ्गार और विप्रलम्भ (वियोग) श्रृङ्गार मृच्छकटिक में संभोग शृङ्गार अङ्गी रस है तथा विप्रलम्भ श्रृंङ्गार, करुण, हास्य भयाानक, बीर तथा शान्त आदि उसके अङ्ग हैं। इन सबका सक्षिप्त विवेचन इस प्रकार किया जा सकता है।

संभोग श्रृंङ्गार – मृच्छकटिक में चारुदत्त और वसन्तसेना के प्रेम का चित्रण किया गया है। वसन्तसेना एक गणिका है जो नाट्य–समीक्षा की दृष्टि से सामान्य नायिका है। यद्यपि सामान्य नायिका का प्रेम रस की कोटि तक नहीं पहुंचना रसाभास ही रहता है यह माना जाता है तथापि यही गणिका बसन्तसेना प्रेम कुलनारी के समान ही अनन्य प्रेम है वह अन्त में वधू पद को प्राप्त करती इसलिये यह प्रेम रस की कोटि तक पहुंच ही जाता है। कामदेवायतन में गुणों के भण्डार तथा रूपयौवनसम्पन्न चारुदत्त को देखकर वसन्तसेना के हृदय में अनुराग उत्पन्न हो जाता है। प्रथम अंक के चतुर्थ दृश्य में चारुदत्त और बसन्तसेना परस्पर मिलते हैं। चारुदत्त उसके रूप की प्रशंसा करता है और उसकी शालीनता का मन ही मन विश्लेषण करता है। इसी समय चारुदत हृदय में भी अनुराग का उदय हो जाता है। द्वितीय, तृतीय और चतुर्थ अङ्क विप्रलम्भ शृङ्गार के अभिब्यञ्जक भावों से यह संयोग श्रृंङ्गार परिपुष्ट होता है। तदनन्तर, पञ्चम अङ्ग में वसन्तसेना अभिसारिका बनकर चलती है। यहाँ मेघगर्जना और दुर्दिन का अम्धकार तथा विद्युत् की चमक संयोग के उद्दीपन के रूप में सहाय होते हैं। मेघों ने चारुदत्त के प्रेम को उद्दीप्त कर दिया है और वह कह उठता है–

भो मेघ, गम्भीरतरं नद त्व तव प्रसादात् स्मरपीडित मे।
संस्पर्श रोमाञ्चितजातरागं कदम्बपुष्पत्यमुपैति मात्रम्।।[5]

वसन्तसेना चारुदत्त के घर पहुंचती है और वसन्तसेना का आलिङ्गन करके चारुदत्त अपने कोमल भावों को इस प्रकार प्रकट करता है–

धन्यानि तेषां खलु जीवितानि ये कामिनीनां ग्रहमागतानाम्।
आर्द्राणि मेघोदकशीतलानि गात्राणि गात्रेषु परिष्वजन्ति।।[6]

किन्तु यह मिलन चरम मिलन नहीं, इसी हेतू षष्ठ अंक के आरम्भ में चारुदत्त से पुनः मिलने के लिये तथा उसके आभ्यन्तर–प्रवेश का अधिकार प्राप्त करने के लिये बसन्तसेना की उत्सुकता दिखाई गई है। सप्तम अंक में चारुदत्त भी वमन्तसेना से मिलने के लिये उत्सुक है। किन्तु देव का विधान । वसन्तसेना का मोटन चारुदत्त पर अभियोग और मृत्युदण्ड यहाँ विप्रलम्भ करुण दशा को ही पहुँचने वाला है कि पुनर्मिलन होता है और चारुदत्त अकस्मात् कह उठता है–

अहो प्रभावः प्रियसंगमस्थ मृतोऽपि को नाम पुनश्रियेत।[7]

इस प्रकार यहाँ आरम्भ में सम्भोग शृङ्गार का उदय होता है और वह विप्रलम्म इत्यादि मे पुष्ट होता हुआ अन्त में परिपाक दशा को पहुँच जाता है अतः यहाँ सम्भोग शृङ्गार अङ्गी रस है। वसन्तसेना के प्रति शकार आकर्षण उसका पीछा करना, अनुनय करना तथा प्रेम प्रदर्शित करना इत्यादि शृङ्गाराभास है।

विप्रलम्भ श्रृंङ्गार मृच्छकटिक में अनेक स्थलों पर विप्रलम्भ की सुन्दर अभिव्यञ्जना की गई है। द्वितीय अङ्क के आरम्भ में वसन्तसेना विशेष उत्कण्ठित है (मोत्कण्ठा) हृदय में कुछ सोच रहा है हृदयेन किमप्यालिखन्ती और स्नान आदि में भी रुचि नहीं रखती। वह शून्यहृदया–सी किसी की कामना कर रही है। चतुर्थ अङ्क के आरम्भ में वसन्तसेना चारुदत्त के चित्र की रचना करती है और उसी में मग्न है। पञ्चम अङ्क के आरम्भ में जब विदूषक चारुदत से गणिका–प्रसङ्ग छोड़ने की प्रार्थना करता है तो वहाँ चारुदत्त की भी वसन्तसेना के प्रति उत्सुकता प्रकट होती है गुणहायों ह्यसो जनः। साथ ही विरह की वेदना भी वयमर्थैः परित्यक्ता ननु त्यक्तव सा मया। पष्ठ और सप्तम

अङ्क में दोनों ओर से बिरह की उत्कण्ठा व्यक्त की गई है। इस प्रकार मृच्छकटिक में विप्रलम्भ शृङ्गार का भी सुन्दर चित्रण किया गया है।

करुण रस– इष्ट की हानि से शोक का उद्रेक होता है। इसके चित्रण द्वारा सहृदयों को करुण रस का आस्वादन हुआ करता है। प्रथम अङ्क में चारुदत्त के वैभवनाश तथा दरिद्रावस्था का करुण चित्रण है (पृ० १४–२०)। सुखात्तु यो याति मरो दरिद्रतां धृतः शरीरण मृतः स जीवति (१०,१०) अल्पक्लेशं मरणं दारिद्रय–मनन्तकं दुःस्वम् (१, ११)। इसी प्रकार संवाहक के भूमिपतन में (१० ७६)। अलङ्कारों की चोरी का समाचार सुनकर धूता की मूर्च्छा (पृ० १३४) तथा बाद में वमन्तसेना गणिका की मूर्च्छा में, चारुदत्त की मृत्युदण्ड की घोषणा होने पर के रुदन में (अङ्क ६) तथा धूता के अग्नि प्रवेश की बात सुनकर चारूदत्त के मूर्च्छित होने (१०) इत्यादि के वर्णनों में करुण रस की अभियञ्जना की, गई है। जब सकार बसन्तसेना का गला घोट देता है और वह मुच्छित होकर गिर पड़ती है तब विट ने जो शोक प्रकट किया है उसमें तो करुण रस की अत्यन्त सुन्दर व्यञ्जना हुई है– दाक्षिण्योदकवाहिनी विगलिता।

हास्यरस–हास्य और व्यङ्ग की दृष्टि से तो मृच्छकटिक का सस्कृत नाटकों में अत्यन्त महत्वपूर्ण स्थान है। शूद्रक ने अनेक प्रकार से हास्य व्यञ्जना का प्रयास किया है, जैसे–(१) विनोदी तथा हंसोड़ पात्रों द्वारा विदूषक और शकार के अनेक कार्यों तथा संवादों से समस्त प्रकरण में हास्य की व्यञ्जना की गई है। यहाँ शकार के मूर्खतापूर्ण कायों से हास्य योजना की गई है। विदूषक के हास्योत्पादक कार्य ऐसे मूर्खतापूर्ण नहीं हैं। (२) विनोदपूर्ण परिस्थितियों की उद्भावना करके, जैसे द्वितीय अङ्क के द्वितीय दृश्य में द्यूतकरों के झगड़े में हास्य रस की झलक है। वसन्तसेना की अत्यन्त मोटी माता के वर्णन से हास्य का उद्रेक होता है। दर्दुरक का माथुर की आँखों में धूल डालना और बीरक तथा चन्दनक का परस्पर जातिसूचक संकेत देना हास्योत्पादक घटनाएँ है। (३) व्यङ्गोक्तियों द्वारा, जैसे शकि युष्माकं यानपात्राणि बहन्ति (पृ० १८२) इत्यादि व्यङ्गोक्तियों से एक मधुर हास्य की व्यञ्जना होती है। (४) अद्भुत प्रश्नोत्तरों द्वारा, जैसे वसन्तसेना के चेट तथा विदूषक के प्रश्नोत्तरों से (१० २००–२०२)। यहाँ विदूषक की मूर्खता तथा उसके पगपरिवर्तन करके सेनावसन्ते कहने से भी हास्य रस की उद्भावना होती है वस्तुतः हास्य रस की व्यञ्जना में मृच्छकटिक संस्कृ त का सर्वोत्कृष्ट नाटक है।

अन्य रस–खुण्टमोडक की भगदड़ में भयानक की, बौद्ध भिक्षु की अष्टम अङ्क के आरम्भ की उक्तियों में शान्त रस की, शर्विलक की उक्ति में युद्ध बीर की तथा चारुदत्त के वर्णन में दानवीर की और मतवाले गन्धगज से कर्णपूरक द्वारा भिक्षु की रक्षा किये जाने के वर्णन में अद्भुत रस की झलक मिलती है। इस प्रकार मृच्छकटिक में प्रायः सभी रसों का सुन्दरता के साथ समावेश हुआ है।

सन्दर्भ सूची

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2. वही 1/20
3. वही 5/2
4. सा0द0 6/224–226
5. मृच्छ0 5/47
6. वही 5/49
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यशपाल के उपन्यासों में नारी–मुक्ति, समानता और आत्मनिर्भरता : वैचारिक अन्तर्विरोधों का अध्ययन

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सारांश

हिन्दी उपन्यास परम्परा में यशपाल का साहित्य सामाजिक यथार्थ, वर्ग–संघर्ष, राजनीतिक चेतना तथा स्त्री–पुरुष सम्बन्धों की पुनर्व्याख्या के लिए विशिष्ट महत्त्व रखता है। उनकी रचनाओं में नारी केवल प्रेम, परिवार या भावुकता का विषय नहीं है, बल्कि सामाजिक संरचना, आर्थिक सम्बन्धों और सत्ता–व्यवस्था के भीतर स्थित एक स्वतंत्र मानवीय व्यक्तित्व है। प्रस्तुत शोध–पत्र में यशपाल के उपन्यासों में नारी–मुक्ति की अवधारणा का अध्ययन आर्थिक आत्मनिर्भरता, सामाजिक समानता, देह–स्वातन्त्र्य, विवाह–परिवार संस्था, मातृत्व, स्त्री–पुरुष सम्बन्ध तथा स्त्री की अपनी सक्रिय भूमिका के संदर्भ में किया गया है। 'दिव्या', 'झूठा सच', 'मनुष्य के रूप', 'पार्टी कामरेड', 'क्यों फँसे', 'बारह घण्टे' और 'मेरी तेरी उसकी बात' आदि कृतियों के आधार पर यह स्पष्ट करने का प्रयास किया गया है कि यशपाल नारी–मुक्ति को मूलतः आर्थिक और सामाजिक स्वाधीनता से जोड़ते हैं। 'दिव्या' में सीरो और दिव्या के माध्यम से आत्मनिर्भरता के दो भिन्न रूप सामने आते हैंय 'झूठा सच' में स्त्री की आर्थिक स्वतंत्रता और सामाजिक प्रतिष्ठा के बीच के अन्तर को रेखांकित किया गया हैय जबकि बाद की रचनाओं में विज्ञान, पारस्परिक सहमति और वैयक्तिक स्वतंत्रता का प्रश्न अधिक स्पष्ट होता जाता है। फिर भी यशपाल की नारी–दृष्टि का एक महत्त्वपूर्ण अन्तर्विरोध यह है कि वे स्त्री–संगठन और सामूहिक स्त्री–प्रतिरोध की अपेक्षा वैचारिक परिवर्तन तथा स्त्री–पुरुष के पारस्परिक सम्बन्धों पर अधिक बल देते हैं। अतः उनका नारी–विमर्श प्रगतिशील और आधुनिक होते हुए भी पूर्णतः क्रियाशील सामाजिक स्त्री–मुक्ति आन्दोलन का रूप नहीं ग्रहण कर पाता। यही अन्तर्विरोध यशपाल की नारी–मुक्ति चेतना को आलोचनात्मक दृष्टि से अधिक महत्त्वपूर्ण बनाता है।

बीज शब्द : यशपाल, नारी–मुक्ति, नारी–समानता, आत्मनिर्भरता, 'दिव्या', स्त्री–पुरुष सम्बन्ध, आर्थिक स्वाधीनता, मार्क्सवादी दृष्टि।

प्रस्तावना

नारी–मुक्ति का प्रश्न केवल स्त्री की व्यक्तिगत स्वतंत्रता का प्रश्न नहीं है; यह सामाजिक संरचना, आर्थिक सम्बन्धों, सांस्कृतिक मान्यताओं और सत्ता–वितरण से जुड़ा हुआ प्रश्न है। हिन्दी साहित्य में अनेक रचनाकारों ने स्त्री की स्थिति पर विचार किया, किन्तु यशपाल ने इस प्रश्न को विशेष रूप से भौतिक और सामाजिक आधार पर देखने का प्रयत्न किया। उनके लिए स्त्री की दासता का मूल कारण केवल धार्मिक रूढ़ियाँ या नैतिक बन्धन नहीं, बल्कि वे सामाजिक और आर्थिक परिस्थितियाँ हैं जिनमें स्त्री पुरुष पर आश्रित रहती है।

यशपाल की नारी–दृष्टि का मूल आग्रह यह है कि स्त्री को पुरुष की सम्पत्ति, भोग्या अथवा केवल पत्नी और माता की भूमिकाओं तक सीमित नहीं किया जा सकता। उसका अपना व्यक्तित्व है और उसे पुरुष के समान सामाजिक तथा आर्थिक अधिकार प्राप्त होने चाहिए। यही कारण है कि उनके उपन्यासों में नारी–मुक्ति का प्रश्न प्रेम और विवाह की सीमा से आगे जाकर उत्पादन, आर्थिक आत्मनिर्भरता, सामाजिक प्रतिष्ठा और व्यक्तिगत निर्णय की स्वतंत्रता से जुड़ता है। आधुनिक

आलोचनात्मक अध्ययनों में भी 'दिव्या' के संदर्भ में सामाजिक समानता, आर्थिक आत्मनिर्भरता, धार्मिक स्वतंत्रता और देह–मुक्ति को प्रमुख प्रश्नों के रूप में रेखांकित किया गया है।

किन्तु यशपाल की दृष्टि का दूसरा पक्ष भी उतना ही महत्त्वपूर्ण है। वे नारी को स्वतंत्र देखना चाहते हैं, परन्तु उनकी अनेक नायिकाएँ अपने मुक्ति–संघर्ष की सामूहिक प्रतिनिधि नहीं बन पातीं। वे पुरुष–प्रधान व्यवस्था से असन्तुष्ट तो हैं, पर उसके विरुद्ध संगठित प्रतिरोध का रूप बहुत कम ग्रहण करती हैं। इसीलिए यशपाल के नारी–विमर्श में एक ओर वैज्ञानिकता, समानता और आत्मनिर्भरता है, तो दूसरी ओर रोमांस, आश्रय और वैयक्तिक सम्बन्धों की आवश्यकता भी बनी रहती है।

नारी को साधन नहीं, समान मनुष्य मानने की दृष्टि

यशपाल की नारी–दृष्टि को समझने के लिए 'दिव्या' विशेष रूप से महत्त्वपूर्ण है। उपन्यास में महाश्रेष्ठी प्रेस्थ नारी को जीवन की पूर्ति का साधन मानता है। उसके लिए स्त्री पुरुष की महत्त्वाकांक्षा और शक्ति की प्राप्ति में उपयोगी हो सकती है। वह विवाह को सामाजिक और राजनीतिक शक्ति प्राप्त करने का माध्यम समझता है। इस दृष्टि से स्त्री स्वयं उद्देश्य नहीं, बल्कि पुरुष के उद्देश्य की पूर्ति का साधन है।

मारिश का दृष्टिकोण इससे मूलतः भिन्न है। वह स्त्री–पुरुष सम्बन्ध को पारस्परिक समर्पण और आश्रय के आदान–प्रदान के रूप में देखता है। इसी कारण प्रेस्थ और मारिश के भौतिक जीवन–बोध में कुछ समानताएँ होते हुए भी स्त्री के प्रश्न पर दोनों के बीच निर्णायक अन्तर दिखाई देता है। प्रेस्थ सत्ता और उपयोगिता की भाषा बोलता है, जबकि मारिश समानता और पारस्परिकता की।

यहीं यशपाल की नारी–दृष्टि का आधुनिक पक्ष उभरता है। वे स्त्री को पुरुष की उपलब्धि का साधन न मानकर स्वतंत्र मानवीय सत्ता के रूप में स्थापित करना चाहते हैं। इस दृष्टि से 'दिव्या' का ऐतिहासिक परिवेश वास्तव में वर्तमान सामाजिक प्रश्नों को देखने का माध्यम बन जाता है। आलोचकीय अध्ययनों में भी यह बात सामने आई है कि यशपाल ने बौद्धकालीन समाज की पृष्ठभूमि के माध्यम से आधुनिक नारी–स्वतंत्रता के प्रश्नों को उठाया।

आर्थिक आत्मनिर्भरता : नारी–मुक्ति का आधार

यशपाल के नारी–विमर्श का सबसे महत्त्वपूर्ण तत्त्व आर्थिक आत्मनिर्भरता है। उनके अनुसार जिस स्त्री का जीवन–निर्वाह पुरुष पर निर्भर है, उसकी सामाजिक स्वतंत्रता अधूरी रहेगी। स्त्री के प्रति दया, सहानुभूति और स्त्री–दाक्षिण्य वास्तविक समानता का विकल्प नहीं हो सकते। समानता तभी सम्भव है जब स्त्री स्वयं आर्थिक साधनों पर अधिकार रखे।

'बात–बात में बात' में यशपाल का कथन है– "यदि स्त्री आर्थिक रूप से पुरुष के अधीन और आश्रित रहेगी तो समाज में उसकी स्थिति पुरुष के समान कभी नहीं होगी" (यशपाल, बात–बात में बात, पृ. 48)। यह कथन उनकी सम्पूर्ण नारी–दृष्टि की आधारभूत स्थापना है। इसी कृति में वे यह भी स्पष्ट करते हैं कि पारम्परिक समाज में स्त्री की पहचान उसके अपने व्यक्तित्व से नहीं, बल्कि बेटी, बहू और माँ जैसे सम्बन्धों से निर्धारित होती है (वही, पृ. 51)।

यहाँ यशपाल का मार्क्सवादी सामाजिक दृष्टिकोण स्पष्ट दिखाई देता है। आर्थिक सम्बन्ध सामाजिक सम्बन्धों को प्रभावित करते हैं और उत्पादन–साधनों पर अधिकार व्यक्ति की सामाजिक शक्ति निर्धारित करता है। इसीलिए नारी–मुक्ति को केवल नैतिक या भावनात्मक प्रश्न मानना पर्याप्त नहीं है।

लेकिन 'दिव्या' इस सिद्धान्त की जटिलता को भी उजागर करती है। दिव्या के ऐतिहासिक समाज में आर्थिक आत्मनिर्भरता के उपलब्ध साधन अत्यन्त सीमित हैं। उसके सामने दासी या वेश्या बनने जैसे विकल्प उपस्थित होते हैं। इसीलिए उसकी स्थिति यह प्रश्न पैदा करती है कि क्या

केवल आर्थिक साधनों तक पहुँच मिल जाने से स्त्री वास्तव में स्वतंत्र हो जाती है? आधुनिक आलोचनाओं ने भी 'दिव्या' की इसी विडम्बना की ओर संकेत किया है कि आर्थिक साधन उपलब्ध होने पर भी यदि स्त्री के शरीर और अस्तित्व पर उसका अपना अधिकार नहीं है तो उसकी स्वतंत्रता अधूरी रहती है।

दिव्या और सीरो : आत्मनिर्भरता के दो रूप

'दिव्या' में दिव्या और सीरो की तुलना यशपाल की नारी–दृष्टि को समझने की सबसे महत्त्वपूर्ण कुंजी है। दोनों स्त्रियों में क्षमता है, दोनों अपने जीवन की परिस्थितियों से संघर्ष करती हैं, परन्तु शक्ति के उपयोग की उनकी प्रवृत्ति अलग है। सीरो अपने सामाजिक और राजनीतिक प्रभाव से परिचित है। वह पुरुष को अपने जीवन का अनिवार्य स्वामी नहीं मानती। पृथुसेन से उसका संघर्ष इसी आत्मबोध को व्यक्त करता है। उसका विद्रोही कथन– "मैं तुम्हारी क्रीत दासी नहीं हूँ" –नारी के स्वत्व की स्पष्ट घोषणा है (यशपाल, दिव्या, पृ. 163–164)। वह यह भी कहती है कि वह अपनी इच्छा से किसी पुरुष को चुन सकती है। इस प्रकार सीरो के लिए जीवन का अर्थ चुनाव की क्षमता और साधनों पर अधिकार से जुड़ा है।

दिव्या की स्थिति इसके विपरीत है। उसमें रूप, कला, कुल और सामाजिक क्षमता जैसे अनेक साधन हैं, फिर भी वह उनका राजनीतिक या आर्थिक शक्ति में रूपान्तरण नहीं कर पाती। उसके संस्कार और परिस्थितियाँ उसे आश्रय की तलाश में धकेलती हैं। गर्भावस्था में उसकी विवशता इस मानसिक पराधीनता को और स्पष्ट करती है– "आश्रय की खोज में भटकती तुम्हारे स्वामी के हाथों पड़ गयी हूँ" (यशपाल, दिव्या, पृ. 110)।

इस दृष्टि से सीरो और दिव्या केवल दो स्त्री पात्र नहीं हैंय वे नारी–मुक्ति की दो सम्भावनाओं के प्रतीक हैं। सीरो शक्ति–साधनों पर अधिकार चाहती है, जबकि दिव्या अपनी सुरक्षा और जीवन की निरन्तरता के लिए आश्रय खोजती है। यही अन्तर यशपाल की अवधारणा की सबसे बड़ी समस्या भी सामने लाता हैकृनारी को स्वतंत्र होने के लिए केवल स्वतंत्रता की इच्छा नहीं, बल्कि उस इच्छा को सामाजिक शक्ति में बदलने की क्षमता भी चाहिए।

स्त्री की देह, मातृत्व और सामाजिक नैतिकता

यशपाल की नारी–दृष्टि का एक महत्त्वपूर्ण पक्ष स्त्री की देह पर सामाजिक अधिकार का विरोध है। पारम्परिक समाज स्त्री के शरीर को परिवार, वंश और पुरुष की प्रतिष्ठा से जोड़ता है। स्त्री के लिए सतीत्व, पतिव्रत, कुलीनता और मातृत्व सम्मान के मानदण्ड बन जाते हैं, जबकि पुरुष के लिए वही नैतिकता समान कठोरता से लागू नहीं होती।

यशपाल इस दोहरे नैतिक मानदण्ड पर प्रश्न उठाते हैं। 'दिव्या' में स्त्री के लिए 'कुलवधू' और 'वेश्या' जैसी सामाजिक श्रेणियाँ वास्तव में उसके शरीर पर समाज के स्वामित्व की अलग–अलग अवस्थाएँ बन जाती हैं। एक ओर कुलवधू को पति और परिवार के लिए समर्पित रहना है, दूसरी ओर वेश्या को आर्थिक साधन के रूप में देखा जाता है। दोनों ही स्थितियों में स्त्री के स्वत्व का प्रश्न अनुत्तरित रह जाता है।

'बात–बात में बात' में यशपाल मातृत्व की सामाजिक प्रतिष्ठा पर भी प्रश्न उठाते हैं। उनके अनुसार समाज स्त्री को स्वतंत्र रूप से माँ बनने का अधिकार नहीं देताय मातृत्व को पति और परिवार की स्वीकृति से जोड़ देता है (यशपाल, बात–बात में बात, पृ. 49)। इस प्रकार मातृत्व, जो स्त्री की जैविक क्षमता है, सामाजिक नियंत्रण का साधन बन जाता है।

यहाँ यशपाल की वैज्ञानिक दृष्टि भी सक्रिय है। संतति–निरोध के साधनों और आधुनिक विज्ञान के विकास से वे स्त्री–पुरुष सम्बन्धों को परम्परागत नैतिकता से मुक्त करने की सम्भावना देखते हैं। 'क्यों फँसे' में यह दृष्टि अधिक स्पष्ट होती है। इस प्रकार 'दिव्या' से 'क्यों फँसे' तक

यशपाल के यहाँ नारी–मुक्ति की अवधारणा ऐतिहासिक–सामाजिक प्रश्न से आधुनिक वैज्ञानिक प्रश्न की ओर विकसित होती दिखाई देती है।

झूठा सच और आधुनिक स्त्री की विडम्बना

'झूठा सच' में यशपाल ने नारी–मुक्ति के प्रश्न को आधुनिक राजनीतिक और सामाजिक परिस्थितियों से जोड़ा है। तारा और कनक जैसी स्त्रियाँ शिक्षा और नौकरी के माध्यम से आर्थिक रूप से सक्रिय होती हैं, परन्तु आर्थिक गतिविधि उन्हें स्वतः सामाजिक समानता नहीं देती।

तारा का आर्थिक रूप से आत्मनिर्भर होना भी उसे पूर्ण स्वाधीनता नहीं देता। कनक को नौकरी मिलती है, परन्तु उसके सामने सामाजिक प्रतिष्ठा और स्त्री–सम्मान का प्रश्न बना रहता है। यशपाल दिल्ली का चित्र खींचते हुए बताते हैं कि हजारों स्त्रियाँ नौकरी करना चाहती थीं, पर अवसरों पर प्रभावशाली सम्पर्कों का अधिकार था (झूठा सच, पृ. 368)। इस प्रकार वे यह दिखाते हैं कि केवल रोजगार उपलब्ध होना पर्याप्त नहींय रोजगार के अवसरों की सामाजिक संरचना भी समान होनी चाहिए।

यहाँ 'दिव्या' और 'झूठा सच' के बीच ऐतिहासिक दूरी महत्त्वपूर्ण है। 'दिव्या' में स्त्री की आर्थिक स्वतंत्रता के साधन अत्यन्त सीमित हैं, जबकि 'झूठा सच' की स्त्री आधुनिक शिक्षा और नौकरी के माध्यम से आर्थिक क्षेत्र में प्रवेश कर चुकी है। फिर भी दोनों स्थितियों में सामाजिक दृष्टि का परिवर्तन अधूरा है। इससे स्पष्ट होता है कि आर्थिक परिवर्तन की गति सामाजिक चेतना की गति से अधिक हो सकती है।

नारी–मुक्ति में नारी की भूमिका

यशपाल की नारी–दृष्टि का सबसे विवादास्पद प्रश्न हैकृक्या स्त्री स्वयं अपनी मुक्ति की सक्रिय वाहक बनती है?

'दिव्या' में इसका उत्तर सरल नहीं है। सीरो इस दृष्टि से अपेक्षाकृत अधिक सक्रिय है। वह अपने अधिकार और शक्ति को पहचानती है। इसके विपरीत दिव्या परिस्थितियों का प्रतिरोध करने के बावजूद अन्ततः आश्रय की समस्या से मुक्त नहीं हो पाती।

यहीं से यशपाल की सीमा स्पष्ट होती है। वे स्त्री–मुक्ति के लिए पुरुष–प्रधान संरचना की आलोचना करते हैं, लेकिन स्त्रियों के संगठित आन्दोलन को अपने कथा–साहित्य में पर्याप्त स्थान नहीं देते। 'मनुष्य के रूप' और 'पार्टी कामरेड' में स्त्री पात्र सामाजिक और राजनीतिक गतिविधियों से जुड़ते हैं, किन्तु स्त्री–मुक्ति के स्वतंत्र सामूहिक संगठन की शक्ति अपेक्षाकृत कम दिखाई देती है।

इस आलोचना को गंभीरता से लिया जाना चाहिए। नारी–मुक्ति यदि केवल पुरुष की उदारता, प्रेम या वैचारिक परिवर्तन पर निर्भर हो तो वह पूर्ण मुक्ति नहीं है। मुक्ति तभी स्थायी हो सकती है जब स्त्री स्वयं सामाजिक शक्ति की संगठित इकाई बने। इस दृष्टि से यशपाल का साहित्य प्रश्न तो उपस्थित करता है, पर उसका पूर्ण सामाजिक समाधान प्रस्तुत नहीं करता।

वैज्ञानिकता बनाम रोमांसिकता

यशपाल की नारी–दृष्टि में वैज्ञानिकता और रोमांसिकता का द्वन्द्व विशेष रूप से दिखाई देता है। वे प्रेम को आध्यात्मिक या रहस्यमय अनुभूति तक सीमित नहीं रखते। स्त्री–पुरुष सम्बन्ध उनके लिए देह, मन, सामाजिक व्यवस्था और पारस्परिक सहमति से जुड़ा वास्तविक मानवीय सम्बन्ध है।

इसी कारण वे विवाह–पूर्व सम्बन्ध, पारस्परिक सहमति और आधुनिक वैज्ञानिक साधनों के माध्यम से स्त्री–पुरुष सम्बन्धों को पुनर्विचार के योग्य मानते हैं। 'मेरी तेरी उसकी बात' में वे सामाजिक मान्यता और वैयक्तिक इच्छा के बीच तनाव को सामने लाते हैं। वहाँ यह विचार मिलता है कि व्यापक सामाजिक मान्यताओं को केवल वैयक्तिक विद्रोह से नष्ट नहीं किया जा सकताय समाज को तोड़ने के बजाय मोड़ना आवश्यक है (यशपाल, मेरी तेरी उसकी बात, पृ. 201–203)।

यही कथन यशपाल की सम्पूर्ण सामाजिक दृष्टि को समझने में सहायक है। वे क्रान्ति को केवल विध्वंस नहीं, बल्कि चेतना और व्यवहार के परिवर्तन के रूप में देखते हैं। अतः उनके स्त्री–पात्रों का व्यक्तिगत विद्रोह भी व्यापक सामाजिक परिवर्तन की सम्भावना से जुड़ा है।

किन्तु समस्या यह है कि उनकी कई नायिकाएँ इस वैचारिक परिवर्तन की सक्रिय सामाजिक वाहक नहीं बन पातीं। परिणामतः कहीं–कहीं नारी–मुक्ति का प्रश्न रोमांटिक सम्बन्धों तक सीमित होता दिखाई देता है। यही कारण है कि यशपाल की नारी–दृष्टि को पूर्णतः समाजवादी नारीवाद कहने के बजाय उसे वैचारिक रूप से समाजवादी और कई स्तरों पर रोमांटिक कहा जाना अधिक उचित होगा।

'मेरी तेरी उसकी बात' और सम्बन्धों की नई चेतना

यशपाल की औपन्यासिक यात्रा में 'मेरी तेरी उसकी बात' तक आते–आते स्त्री–पुरुष सम्बन्धों का प्रश्न अधिक जटिल हो जाता है। यहाँ प्रेम, विवाह, मातृत्व, व्यक्तिगत स्वतंत्रता और सामाजिक उत्तरदायित्व परस्पर टकराते हैं।

ऊषा का प्रसंग विशेष महत्त्व रखता है। वह अपने व्यक्तिगत सुख की अपेक्षा अपने पुत्र के भविष्य को अधिक महत्त्व देती है। इससे यशपाल के यहाँ व्यक्ति और व्यापक सामाजिक हित के बीच सम्बन्ध की समस्या सामने आती है। व्यक्तिगत स्वतंत्रता को पूर्ण मान लेना और सामाजिक उत्तरदायित्व को पूरी तरह नकार देनाकृदोनों ही उनके लिए समाधान नहीं हैं।

इसी कृति में विवाह के पारम्परिक रूप पर भी प्रश्न उठाया गया है। पति–पत्नी के सम्बन्ध में प्रेम, आकर्षण, मित्रता और सामाजिक उत्तरदायित्व के बीच संतुलन की आवश्यकता सामने आती है। यशपाल का आग्रह यह है कि सम्बन्धों को केवल सामाजिक संस्था की मजबूरी से नहीं, बल्कि पारस्परिक समझ और स्वतंत्र व्यक्तित्व के आधार पर भी देखा जाना चाहिए।

निष्कर्ष

यशपाल की नारी–मुक्ति चेतना को उनकी सम्पूर्ण औपन्यासिक यात्रा के संदर्भ में देखने पर उसका विकास स्पष्ट दिखाई देता है। 'दिव्या' में नारी की सामाजिक पराधीनता, देह पर अधिकार, आश्रय और आत्मनिर्भरता का प्रश्न ऐतिहासिक पृष्ठभूमि में उठता है। 'झूठा सच' में वही प्रश्न आधुनिक शिक्षा, नौकरी और सामाजिक प्रतिष्ठा के संदर्भ में सामने आता है। 'मनुष्य के रूप' और 'पार्टी कामरेड' में स्त्री सामाजिक–राजनीतिक जीवन से जुड़ती है। 'क्यों फँसे' में विज्ञान और पारस्परिक सहमति के आधार पर स्त्री–पुरुष सम्बन्धों की पुनर्व्याख्या होती है और 'मेरी तेरी उसकी बात' तक पहुँचते–पहुँचते व्यक्तिगत स्वतंत्रता तथा सामाजिक उत्तरदायित्व का प्रश्न अधिक जटिल रूप ग्रहण करता है।

यशपाल की सबसे बड़ी देन यह है कि उन्होंने नारी–मुक्ति को केवल भावुक सहानुभूति का विषय नहीं बनाया। उन्होंने उसे आर्थिक आत्मनिर्भरता, उत्पादन–सम्बन्ध, सामाजिक अधिकार, वैज्ञानिक दृष्टि और स्त्री–पुरुष समानता से जोड़ा। वे स्त्री को 'देवी' बनाकर उस पर अतिरिक्त नैतिक बन्धन लगाने के भी विरोधी हैं और उसे केवल 'भोग्या' मानने के भी। उनके लिए वास्तविक सम्मान स्त्री के अपने व्यक्तित्व में है।

फिर भी उनकी दृष्टि की सीमाएँ स्पष्ट हैं। नारी–मुक्ति के लिए स्त्री–संगठन, सामूहिक संघर्ष और स्त्रियों की स्वतंत्र राजनीतिक सक्रियता को वे उतना महत्त्व नहीं दे पाए जितना आर्थिक आत्मनिर्भरता और स्त्री–पुरुष सम्बन्धों के पुनर्गठन को। उनकी अनेक नायिकाएँ संघर्ष करती हैं, पर सामूहिक प्रतिरोध की प्रतिनिधि नहीं बनतीं। इसलिए उनकी नारी–मुक्ति चेतना को 'विचारप्रवण विवेकवादी' चेतना कहना अधिक उपयुक्त होगाकृऐसी चेतना जो सामाजिक रूढ़ियों को चुनौती देती है, वैज्ञानिक और समानतामूलक दृष्टि विकसित करती है, परन्तु हर स्तर पर संगठित सामाजिक परिवर्तन का कार्यक्रम प्रस्तुत नहीं कर पाती।

अतः यशपाल का महत्त्व इस बात में है कि उन्होंने स्त्री–प्रश्न को निजी प्रेम और नैतिकता के संकुचित घेरे से निकालकर आर्थिक, सामाजिक और वैचारिक प्रश्न बनाया। उनकी रचनाएँ यह बोध कराती हैं कि नारी–मुक्ति केवल पुरुष से मुक्ति नहीं, बल्कि उन समस्त सामाजिक सम्बन्धों के पुनर्गठन का प्रश्न है जो स्त्री को आश्रित, भोग्या, सम्पत्ति अथवा केवल पत्नी–माता की भूमिका में सीमित करते हैं। इस अर्थ में यशपाल का नारी–विमर्श हिन्दी उपन्यास में आधुनिक स्त्री–चेतना की निर्मिति की एक महत्त्वपूर्ण कड़ी है।

सन्दर्भ सूची

1. यशपाल : दादा कामरेड, पृ. 32, 34, 37–38, 101, 122–124, 126, 132, 147, 150, 161–164।
2. यशपाल : बारह घण्टे, पृ. 97, 99, 101।
3. यशपाल : देशद्रोही, पृ. 56, 207–208, 240।
4. यशपाल : दिव्या, पृ. 81–86, 95, 102, 110, 119–120, 127–129, 147, 158, 163–165, 176, 203।
5. यशपाल : झूठा सच : भाग 2 : देश का भविष्य, पृ. 290, 395, 489।
6. यशपाल : मनुष्य के रूप, पृ. 72, 86–87, 167, 200, 205, 209, 219।
7. यशपाल : झूठा सच, पृ. 348, 368।
8. यशपाल : पिंजड़े की उड़ान, पृ. 37, 82।
9. यशपाल : ज्ञानदान, पृ. 36।
10. यशपाल : चित्र का शीर्षक, पृ. 28–29।
11. यशपाल : हिन्दुस्तान की समस्याएँ, पृ. 85–86।
12. यशपाल : चक्कर क्लब, पृ. 65, 90।
13. यशपाल : बात–बात में बात, पृ. 47–53, 59।
14. यशपाल : अप्सरा का शाप, पृ. 126।
15. यशपाल : मेरी तेरी उसकी बात, पृ. 23, 201–203, 305, 308, 391, 394, 455, 573, 629।
16. चक्रवर्ती, रेनू : "Communists in Indian Women's Movement", पृ. 187।
17. कुटुम्ब संस्था, खाजगी मालमत्ता आणि शान संस्था यांचा उद्‌गम, पृ. 61, 63।

व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन अवसर, चुनौतियाँ एवं भविष्य की संभावनाओं का अध्ययन

शोधकर्ता

रजनी बुडाना

पर्यवेक्षक

डॉ. लोकेश जारवाल

सारांश

वर्तमान समय में डिजिटल तकनीक ने व्यवसाय एवं वाणिज्य के स्वरूप में व्यापक परिवर्तन किया है। इंटरनेट, स्मार्टफोन, क्लाउड कंप्यूटिंग, आर्टिफिशियल इंटेलिजेंस, मशीन लर्निंग, बिग डेटा, इंटरनेट ऑफ थिंग्स, ब्लॉकचेन तथा डिजिटल भुगतान जैसी तकनीकों ने पारंपरिक व्यावसायिक प्रक्रियाओं को अधिक तीव्र, सुविधाजनक, पारदर्शी और ग्राहक-केंद्रित बनाया है। आज व्यवसाय केवल भौतिक बाजार तक सीमित नहीं है, बल्कि डिजिटल प्लेटफॉर्म के माध्यम से स्थानीय, राष्ट्रीय एवं वैश्विक बाजार तक पहुँच बना सकता है।

भारत में डिजिटल परिवर्तन का प्रभाव विशेष रूप से ई-कॉमर्स, डिजिटल बैंकिंग, ऑनलाइन भुगतान, डिजिटल मार्केटिंग, फिनटेक और ऑनलाइन सेवा क्षेत्र में दिखाई देता है। RBI के अनुसार भारत में डिजिटल भुगतान के विस्तार ने लेन-देन की सुविधा और दक्षता को बढ़ाया है तथा वित्तीय समावेशन को भी समर्थन दिया है। सितंबर 2024 में RBI-DPI का स्तर 465.33 रहा, जबकि मार्च 2018 को इसका आधार 100 निर्धारित किया गया था।

डिजिटल परिवर्तन ने व्यवसायों के लिए नए बाजार, नए व्यापार मॉडल, कम लेन-देन लागत, बेहतर ग्राहक अनुभव और डेटा-आधारित निर्णय लेने के अवसर पैदा किए हैं। दूसरी ओर, साइबर सुरक्षा, डेटा गोपनीयता, डिजिटल विभाजन, तकनीकी लागत, कुशल मानव संसाधन की कमी तथा डिजिटल धोखाधड़ी जैसी चुनौतियाँ भी सामने आई हैं। इस शोध-पत्र में व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन की अवधारणा, प्रमुख आयाम, सक्षम तकनीकें, अवसर, चुनौतियाँ तथा आर्थिक एवं सामाजिक प्रभावों का अध्ययन किया गया है। साथ ही भविष्य में डिजिटल व्यापार की संभावनाओं पर भी चर्चा की गई है।

मुख्य शब्द: डिजिटल परिवर्तन, व्यवसाय, वाणिज्य, ई-कॉमर्स, डिजिटल मार्केटिंग, आर्टिफिशियल इंटेलिजेंस, डिजिटल भुगतान, तकनीक।

1. परिचय

21वीं सदी में तकनीकी विकास ने मानव जीवन के लगभग प्रत्येक क्षेत्र को प्रभावित किया है। व्यवसाय और वाणिज्य भी इस परिवर्तन से अछूते नहीं रहे हैं। पहले व्यापार मुख्य रूप से भौतिक दुकानों, प्रत्यक्ष संपर्क, कागजी रिकॉर्ड और पारंपरिक भुगतान प्रणालियों पर निर्भर था। आज इंटरनेट और डिजिटल तकनीकों ने व्यापार करने के तरीके को पूरी तरह बदल दिया है।

डिजिटल परिवर्तन का अर्थ केवल किसी व्यवसाय में कंप्यूटर या इंटरनेट का प्रयोग करना नहीं है। यह संगठन की **व्यावसायिक प्रक्रिया, ग्राहक सेवा, विपणन, भुगतान, आपूर्ति श्रृंखला, निर्णय लेने की प्रक्रिया और व्यापार मॉडल में डिजिटल तकनीकों के माध्यम से व्यापक परिवर्तन** को दर्शाता है।

World Bank के अनुसार डिजिटल तकनीकें व्यक्तियों, व्यवसायों और सरकारों के बीच संपर्क को बदल रही हैं तथा उत्पादकता, नवाचार और समावेशन के नए अवसर पैदा कर रही हैं।

भारत में डिजिटल परिवर्तन की गति विशेष रूप से पिछले एक दशक में तेज हुई है। स्मार्टफोन, सस्ते इंटरनेट, डिजिटल इंडिया, UPI, डिजिटल बैंकिंग और ई-कॉमर्स प्लेटफॉर्म ने व्यापार को अधिक डिजिटल बनाया है। RBI के अनुसार डिजिटल भुगतान ने लेन-देन की लागत कम करने, सुविधा बढ़ाने और वित्तीय समावेशन को बढ़ावा देने में महत्वपूर्ण भूमिका निभाई है।

ई-कॉमर्स के विकास ने छोटे एवं मध्यम व्यवसायों को भी बड़े बाजारों तक पहुँचने का अवसर दिया है। अब एक छोटा व्यापारी भी वेबसाइट, सोशल मीडिया या डिजिटल मार्केटप्लेस के माध्यम से देश के विभिन्न हिस्सों में अपने उत्पाद बेच सकता है।

इस प्रकार डिजिटल परिवर्तन वर्तमान व्यवसाय व्यवस्था का एक महत्वपूर्ण आधार बन चुका है।

2. अध्ययन के उद्देश्य

इस शोध-पत्र के प्रमुख उद्देश्य निम्नलिखित हैं—

1. व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन की अवधारणा को समझना।
2. डिजिटल परिवर्तन के प्रमुख आयामों का अध्ययन करना।
3. डिजिटल परिवर्तन को सक्षम बनाने वाली प्रमुख तकनीकों का अध्ययन करना।
4. व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन से उत्पन्न अवसरों का विश्लेषण करना।
5. डिजिटल परिवर्तन से संबंधित प्रमुख चुनौतियों का अध्ययन करना।
6. डिजिटल परिवर्तन के आर्थिक प्रभावों का अध्ययन करना।
7. डिजिटल परिवर्तन के सामाजिक प्रभावों का विश्लेषण करना।
8. भारत में डिजिटल भुगतान एवं ई-कॉमर्स की भूमिका को समझना।
9. व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन की भविष्य की संभावनाओं का अध्ययन करना।
10. डिजिटल युग में व्यवसायों के लिए आवश्यक रणनीतिक बदलावों को समझना।

3. अनुसंधान पद्धति

प्रस्तुत शोध-पत्र में **वर्णनात्मक एवं विश्लेषणात्मक अनुसंधान पद्धति** का प्रयोग किया गया है। अध्ययन मुख्य रूप से द्वितीयक आँकड़ों पर आधारित है।

3.1 अध्ययन का स्वरूप

यह अध्ययन गुणात्मक एवं वर्णनात्मक प्रकृति का है, जिसमें व्यवसाय और वाणिज्य में डिजिटल परिवर्तन से संबंधित विभिन्न पहलुओं का विश्लेषण किया गया है।

3.2 आँकड़ों के स्रोत

अध्ययन के लिए निम्नलिखित द्वितीयक स्रोतों का उपयोग किया गया है—

- भारतीय रिजर्व बैंक (RBI) की रिपोर्ट
- World Bank की रिपोर्ट
- सरकारी रिपोर्ट एवं दस्तावेज

- शोध-पत्र एवं शोध-जर्नल
- पुस्तकें
- ई-कॉमर्स एवं डिजिटल मार्केटिंग से संबंधित प्रकाशित सामग्री
- विश्वसनीय ऑनलाइन स्रोत

3.3 विश्लेषण की प्रक्रिया

प्राप्त सामग्री का विषयवार अध्ययन करके डिजिटल परिवर्तन की अवधारणा, तकनीक, अवसर, चुनौतियाँ तथा आर्थिक-सामाजिक प्रभावों का विश्लेषण किया गया है।

4. व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन की अवधारणा

डिजिटल परिवर्तन को सामान्य रूप से व्यवसाय की गतिविधियों में डिजिटल तकनीकों के रणनीतिक एवं व्यापक उपयोग के रूप में समझा जा सकता है। इसका उद्देश्य केवल कार्यों को ऑनलाइन करना नहीं बल्कि व्यवसाय के पूरे संचालन तंत्र में सुधार करना है।

उदाहरण के लिए, यदि कोई व्यापारी केवल अपनी दुकान का सामान वेबसाइट पर प्रदर्शित करता है तो यह डिजिटल उपस्थिति है। लेकिन यदि वह वेबसाइट, मोबाइल ऐप, ऑनलाइन भुगतान, ग्राहक डेटा, AI आधारित सुझाव, डिजिटल मार्केटिंग और डिजिटल सप्लाई-चेन को एक साथ जोड़कर व्यवसाय चलाता है, तो यह डिजिटल परिवर्तन का उदाहरण है।

डिजिटल परिवर्तन के प्रमुख तत्व

1. डिजिटल ग्राहक अनुभव: ग्राहक अब मोबाइल फोन से उत्पाद खोज सकता है, तुलना कर सकता है, ऑनलाइन ऑर्डर कर सकता है और डिजिटल भुगतान कर सकता है।

2. डिजिटल व्यवसाय प्रक्रिया: कागजी कार्यों की जगह डिजिटल रिकॉर्ड, ऑनलाइन बिलिंग, डिजिटल इनवॉइस और स्वचालित प्रक्रियाओं का उपयोग बढ़ा है।

3. डेटा आधारित निर्णय: व्यवसाय ग्राहक के व्यवहार और बिक्री के आँकड़ों का विश्लेषण करके निर्णय ले सकते हैं।

4. डिजिटल व्यापार मॉडल: Subscription model, marketplace model, platform business model और direct-to-consumer जैसे नए मॉडल विकसित हुए हैं।

5. डिजिटल संचार: ई-मेल, सोशल मीडिया, वीडियो कॉन्फ्रेंसिंग और मैसेजिंग प्लेटफॉर्म ने व्यवसायिक संचार को तेज बनाया है।

6. डिजिटल भुगतान: UPI, इंटरनेट बैंकिंग, मोबाइल वॉलेट, कार्ड और अन्य डिजिटल माध्यमों से भुगतान आसान हुआ है।

भारत में डिजिटल भुगतान की वृद्धि को RBI ने देश के डिजिटल परिवर्तन का महत्वपूर्ण हिस्सा माना है। डिजिटल भुगतान से लेन-देन की सुविधा, दक्षता और वित्तीय समावेशन में सुधार हुआ है।

5. डिजिटल परिवर्तन के प्रमुख आयाम

5.1 डिजिटल ग्राहक अनुभव

डिजिटल परिवर्तन का सबसे महत्वपूर्ण आयाम ग्राहक अनुभव है। ग्राहक अब 24×7 उत्पादों एवं सेवाओं की जानकारी प्राप्त कर सकता है।

व्यवसाय चैटबॉट, मोबाइल ऐप, सोशल मीडिया और व्यक्तिगत सुझावों के माध्यम से ग्राहकों से संपर्क बनाए रखते हैं।

5.2 डिजिटल मार्केटिंग

पारंपरिक विज्ञापन की तुलना में डिजिटल मार्केटिंग अधिक लक्षित एवं मापनीय है।

इसके अंतर्गत—

- सोशल मीडिया मार्केटिंग
- सर्च इंजन ऑप्टिमाइजेशन
- ई-मेल मार्केटिंग
- कंटेंट मार्केटिंग
- इन्फ्लुएंसर मार्केटिंग
- वीडियो मार्केटिंग
- मोबाइल मार्केटिंग

आदि शामिल हैं।

5.3 ई-कॉमर्स

ई-कॉमर्स ने वस्तुओं एवं सेवाओं की खरीद-बिक्री को डिजिटल प्लेटफॉर्म पर स्थानांतरित किया है। इससे ग्राहक भौगोलिक सीमाओं के बिना खरीदारी कर सकते हैं।

5.4 डिजिटल भुगतान

UPI, QR Code, इंटरनेट बैंकिंग और कार्ड भुगतान ने व्यापारिक लेन-देन को सरल बनाया है। RBI के अनुसार 2023-24 में भारत में डिजिटल भुगतानों की मात्रा में 44.3% तथा मूल्य में 16.4% की वृद्धि हुई।

5.5 डिजिटल आपूर्ति श्रृंखला

डिजिटल तकनीकों के माध्यम से inventory, warehousing, logistics और delivery को अधिक प्रभावी बनाया जा सकता है।

5.6 डेटा आधारित प्रबंधन

आज व्यवसाय ग्राहक डेटा, बिक्री डेटा और बाजार संबंधी जानकारी का विश्लेषण करके अधिक सटीक निर्णय ले सकते हैं।

5.7 डिजिटल मानव संसाधन

Recruitment, training, attendance, performance management और employee communication में भी डिजिटल तकनीकों का उपयोग बढ़ रहा है।

6. डिजिटल परिवर्तन को सक्षम बनाने वाली प्रमुख तकनीकें

6.1 इंटरनेट और ब्रॉडबैंड

इंटरनेट डिजिटल व्यवसाय की मूलभूत आधारभूत संरचना है। वेबसाइट, ई-कॉमर्स, ऑनलाइन बैंकिंग, सोशल मीडिया और डिजिटल सेवाएँ इंटरनेट के माध्यम से संचालित होती हैं।

6.2 स्मार्टफोन और मोबाइल तकनीक

स्मार्टफोन ने व्यवसाय को ग्राहक की जेब तक पहुँचा दिया है। मोबाइल कॉमर्स के कारण ग्राहक कहीं से भी उत्पाद एवं सेवाएँ खरीद सकता है।

6.3 क्लाउड कंप्यूटिंग

क्लाउड कंप्यूटिंग के माध्यम से व्यवसाय इंटरनेट के माध्यम से computing power, software और data storage का उपयोग कर सकते हैं। World Bank के अनुसार cloud और data infrastructure डिजिटल अर्थव्यवस्था एवं नवाचार की महत्वपूर्ण आधारभूत संरचना बन चुके हैं।

इसके लाभ हैं—

- कम infrastructure cost
- scalability
- remote access
- data backup
- flexible computing

6.4 आर्टिफिशियल इंटेलिजेंस

AI व्यवसाय में ग्राहक सेवा, demand forecasting, fraud detection, recommendation systems और marketing automation में उपयोगी है।

AI के माध्यम से कंपनियाँ ग्राहक की पसंद को समझकर व्यक्तिगत उत्पाद सुझाव दे सकती हैं।

World Bank के 2025 के अध्ययन के अनुसार AI उत्पादकता बढ़ाने, नए बाजार एवं उद्योग विकसित करने और आर्थिक परिवर्तन को गति देने की क्षमता रखता है।

6.5 मशीन लर्निंग

Machine Learning AI की एक प्रमुख तकनीक है जो उपलब्ध डेटा से पैटर्न सीखकर भविष्यवाणी करने में सहायता करती है।

उदाहरण—

- ग्राहक खरीदारी की संभावना
- बिक्री का अनुमान
- fraud detection
- customer segmentation

6.6 बिग डेटा एनालिटिक्स

बड़ी मात्रा में डेटा को एकत्रित करके उसका विश्लेषण करने की प्रक्रिया Big Data Analytics कहलाती है। इससे व्यवसाय ग्राहकों के व्यवहार और बाजार की प्रवृत्तियों को समझ सकते हैं।

6.7 इंटरनेट ऑफ थिंग्स (IoT)

IoT में इंटरनेट से जुड़े उपकरण आपस में डेटा का आदान-प्रदान करते हैं। इसका उपयोग inventory management, logistics, smart warehouse और manufacturing में किया जा सकता है।

6.8 ब्लॉकचेन

Blockchain एक वितरित डिजिटल रिकॉर्ड प्रणाली है, जिसमें लेन-देन को सुरक्षित एवं सत्यापित तरीके से रिकॉर्ड किया जा सकता है। इसका उपयोग वित्तीय लेन-देन, supply chain tracking और digital contracts में किया जा सकता है। Digital technologies में blockchain, AI, IoT और cloud computing जैसे क्षेत्र महत्वपूर्ण तकनीकी आधार माने जाते हैं।

6.9 डिजिटल भुगतान तकनीक

UPI, QR Code, मोबाइल बैंकिंग, कार्ड और डिजिटल वॉलेट ने व्यवसायिक भुगतान को तेज बनाया है। भारत का UPI आधारित भुगतान तंत्र डिजिटल भुगतान परिवर्तन का प्रमुख उदाहरण है।

6.10 साइबर सुरक्षा तकनीक

जैसे-जैसे व्यवसाय डिजिटल हो रहे हैं, cyber security का महत्व भी बढ़ रहा है। Encryption, authentication, firewalls और fraud monitoring जैसी तकनीकें डिजिटल व्यवसाय को सुरक्षित रखने में महत्वपूर्ण हैं।

7. डिजिटल परिवर्तन के अवसर

डिजिटल परिवर्तन व्यवसाय एवं वाणिज्य के लिए अनेक अवसर प्रदान करता है।

7.1 नए बाजारों तक पहुँच

डिजिटल माध्यमों से छोटे व्यवसाय भी राष्ट्रीय एवं अंतरराष्ट्रीय बाजार तक पहुँच सकते हैं।

7.2 लागत में कमी

ऑनलाइन प्रक्रियाओं और automation से कागजी कार्य, कार्यालयी लागत और कुछ परिचालन लागतों में कमी की संभावना रहती है।

7.3 ग्राहक संख्या में वृद्धि

ई-कॉमर्स और सोशल मीडिया के माध्यम से व्यवसाय बड़ी संख्या में संभावित ग्राहकों तक पहुँच सकते हैं।

7.4 व्यक्तिगत ग्राहक सेवा

AI और data analytics के माध्यम से ग्राहक की जरूरत के अनुसार उत्पाद और सेवाएँ उपलब्ध कराई जा सकती हैं।

7.5 छोटे व्यवसायों के लिए अवसर

डिजिटल प्लेटफॉर्म छोटे व्यापारियों को बड़े बाजार से जोड़ सकते हैं।

7.6 नवाचार

डिजिटल तकनीक नए उत्पादों, सेवाओं और business models के विकास को बढ़ावा देती है।

7.7 वित्तीय समावेशन

Digital payments और fintech सेवाओं के माध्यम से अधिक लोगों को औपचारिक वित्तीय व्यवस्था से जोड़ा जा सकता है।

7.8 रोजगार के नए अवसर

Digital marketing, e-commerce management, data analysis, software development, cybersecurity और content creation जैसे क्षेत्रों में नए रोजगार अवसर विकसित हुए हैं।

World Bank भी डिजिटल अर्थव्यवस्था को रोजगार, नवाचार और सतत विकास के लिए महत्वपूर्ण मानता है।

8. डिजिटल परिवर्तन की चुनौतियाँ

डिजिटल परिवर्तन के अनेक लाभों के साथ कई चुनौतियाँ भी हैं।

8.1 साइबर सुरक्षा

ऑनलाइन व्यवसाय cyber attack, phishing, identity theft और financial fraud के जोखिम से प्रभावित हो सकते हैं।

8.2 डेटा गोपनीयता

ग्राहकों से संबंधित बड़ी मात्रा में व्यक्तिगत एवं वित्तीय डेटा एकत्रित होने के कारण privacy एक महत्वपूर्ण मुद्दा बन गया है।

8.3 डिजिटल विभाजन

शहरी एवं ग्रामीण क्षेत्रों तथा विभिन्न आय वर्गों के बीच इंटरनेट, डिजिटल उपकरण और डिजिटल कौशल की उपलब्धता में अंतर डिजिटल असमानता पैदा कर सकता है। World Bank के अनुसार डिजिटल प्रगति असमान रही है और digital divide विकास के अंतर से जुड़ता जा रहा है।

8.4 तकनीकी लागत

छोटे व्यवसायों के लिए software, cybersecurity, cloud infrastructure और skilled employees पर प्रारंभिक निवेश चुनौती बन सकता है।

8.5 कुशल मानव संसाधन की कमी

AI, data analytics, cybersecurity और digital marketing जैसी तकनीकों के लिए प्रशिक्षित कर्मचारियों की आवश्यकता होती है।

8.6 डिजिटल धोखाधड़ी

डिजिटल भुगतान के विस्तार के साथ fraud और cybercrime से संबंधित जोखिम भी बढ़ते हैं। RBI ने डिजिटल भुगतान से संबंधित cybersecurity risks को महत्वपूर्ण चुनौती के रूप में रेखांकित किया है।

8.7 तकनीक पर अत्यधिक निर्भरता

तकनीकी खराबी, server failure या network disruption से व्यवसायिक गतिविधियाँ प्रभावित हो सकती हैं।

9. डिजिटल परिवर्तन के आर्थिक प्रभाव

डिजिटल परिवर्तन का अर्थव्यवस्था पर व्यापक प्रभाव पड़ता है।

9.1 उत्पादकता में वृद्धि

Automation और data-based decision making से व्यवसाय अपनी कार्यक्षमता बढ़ा सकते हैं।

9.2 लेन-देन लागत में कमी

Digital payments और online transactions से समय तथा लेन-देन की लागत कम हो सकती है। RBI के अनुसार डिजिटल भुगतान से transaction costs में कमी और ease of doing business में सुधार हुआ है।

9.3 ई-कॉमर्स का विस्तार

ऑनलाइन बाजार के विस्तार से व्यापारियों के लिए नए ग्राहक एवं बाजार उपलब्ध होते हैं।

9.4 उद्यमिता को बढ़ावा

Digital platforms के माध्यम से कम पूंजी वाला व्यवसाय भी बाजार में प्रवेश कर सकता है।

9.5 वित्तीय समावेशन

Digital banking और payment systems ने बैंकिंग एवं वित्तीय सेवाओं की पहुँच को बढ़ाने में योगदान दिया है।

9.6 आर्थिक विकास

डिजिटल तकनीकों से innovation, productivity, entrepreneurship और trade को बढ़ावा मिलता है। World Bank डिजिटल अर्थव्यवस्था को रोजगार एवं आर्थिक परिवर्तन के महत्वपूर्ण साधन के रूप में देखता है।

10. डिजिटल परिवर्तन के सामाजिक प्रभाव

डिजिटल परिवर्तन का प्रभाव केवल अर्थव्यवस्था तक सीमित नहीं है, बल्कि समाज पर भी इसका व्यापक प्रभाव है।

सकारात्मक प्रभाव

- ऑनलाइन शिक्षा की सुविधा
- डिजिटल बैंकिंग
- सरकारी सेवाओं तक आसान पहुँच
- दूरस्थ क्षेत्रों में डिजिटल सेवाएँ
- रोजगार के नए अवसर
- महिलाओं एवं छोटे उद्यमियों के लिए नए बाजार अवसर
- सूचना तक तेज पहुँच
- डिजिटल संचार में वृद्धि

नकारात्मक प्रभाव

- डिजिटल असमानता
- साइबर अपराध
- व्यक्तिगत डेटा की सुरक्षा का खतरा
- ऑनलाइन धोखाधड़ी
- कुछ पारंपरिक रोजगारों पर automation का प्रभाव
- तकनीक पर अत्यधिक निर्भरता
- डिजिटल कौशल की कमी

इसलिए डिजिटल परिवर्तन का लाभ तभी व्यापक रूप से प्राप्त किया जा सकता है जब डिजिटल infrastructure के साथ digital literacy, skills, cybersecurity और उचित regulatory framework भी विकसित किए जाएँ।

11. भविष्य में संभावनाएँ

व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन की भविष्य की संभावनाएँ अत्यंत व्यापक हैं।

11.1 AI आधारित व्यवसाय

भविष्य में AI ग्राहक सेवा, marketing, forecasting, product development और business decision-making में अधिक महत्वपूर्ण भूमिका निभाएगा।

11.2 Hyper-Personalization

व्यवसाय ग्राहक के व्यवहार और पसंद के आधार पर अत्यधिक व्यक्तिगत उत्पाद एवं सेवाएँ प्रदान कर सकेंगे।

11.3 Intelligent E-commerce

AI, voice search, augmented reality और automated recommendation systems ई-कॉमर्स को और अधिक interactive बना सकते हैं।

11.4 डिजिटल रुपया एवं डिजिटल भुगतान

भारत में Central Bank Digital Currency अर्थात **Digital Rupee (e₹)** का retail एवं wholesale क्षेत्रों में pilot testing की जा रही है, जिससे भविष्य में डिजिटल भुगतान के नए स्वरूप विकसित होने की संभावना है।

11.5 Smart Supply Chain

IoT, AI और real-time data के माध्यम से supply chain को अधिक intelligent एवं responsive बनाया जा सकेगा।

11.6 Social Commerce

भविष्य में social media और e-commerce का एकीकरण और अधिक बढ़ने की संभावना है।

11.7 Green Digital Commerce

Digital technologies के माध्यम से logistics optimization, paperless transactions और resource efficiency को बढ़ावा देकर sustainable business practices विकसित की जा सकती हैं।

11.8 डिजिटल सार्वजनिक अवसंरचना

Digital Public Infrastructure भविष्य के डिजिटल व्यवसाय और वित्तीय सेवाओं का महत्वपूर्ण आधार बन सकती है। World Bank ने भी digital public infrastructure और AI को डिजिटल भविष्य को आकार देने वाली महत्वपूर्ण प्रवृत्तियों के रूप में रेखांकित किया है।

12. निष्कर्ष (Conclusion)

व्यवसाय एवं वाणिज्य में डिजिटल परिवर्तन वर्तमान आर्थिक व्यवस्था का एक महत्वपूर्ण और अनिवार्य परिवर्तन बन चुका है। इंटरनेट, स्मार्टफोन, ई-कॉमर्स, डिजिटल भुगतान, क्लाउड कंप्यूटिंग, AI, Machine Learning, Big Data, IoT और Blockchain जैसी तकनीकों ने व्यापार करने के पारंपरिक तरीकों में व्यापक बदलाव किया है।

डिजिटल परिवर्तन ने व्यवसायों को कम समय में अधिक ग्राहकों तक पहुँचने, लागत को नियंत्रित करने, ग्राहक अनुभव को बेहतर बनाने और डेटा आधारित निर्णय लेने के अवसर प्रदान किए हैं। विशेष रूप से भारत में UPI और

डिजिटल भुगतान ने व्यापारिक लेन-देन को अधिक सुविधाजनक बनाया है। RBI के अध्ययन के अनुसार डिजिटल भुगतान ने वित्तीय समावेशन, आर्थिक दक्षता और उद्यमिता को समर्थन दिया है।

हालाँकि डिजिटल परिवर्तन केवल तकनीक अपनाने की प्रक्रिया नहीं है। इसके लिए संगठनात्मक संस्कृति, कुशल मानव संसाधन, डिजिटल साक्षरता, सुरक्षित डिजिटल infrastructure और प्रभावी नीतियों की भी आवश्यकता है। साइबर सुरक्षा, डेटा गोपनीयता, डिजिटल विभाजन और तकनीकी कौशल की कमी जैसी चुनौतियों का समाधान करना आवश्यक है।

भविष्य में AI, डिजिटल भुगतान, डिजिटल कॉमर्स, automation, IoT और data analytics व्यवसाय के विकास में और अधिक महत्वपूर्ण भूमिका निभाएँगे। अतः यह कहा जा सकता है कि **डिजिटल परिवर्तन व्यवसाय एवं वाणिज्य के लिए केवल एक तकनीकी परिवर्तन नहीं बल्कि आर्थिक, सामाजिक और संगठनात्मक परिवर्तन की व्यापक प्रक्रिया है।**

13. संदर्भ / References

1. Bala, M., & Verma, D. (2018). A critical review of digital marketing. *International Journal of Management, IT & Engineering, 8*(10), 321–339.
2. Chaffey, D., & Ellis-Chadwick, F. (2019). *Digital Marketing: Strategy, Implementation and Practice*. Pearson.
3. Kannan, P. K., & Li, H. A. (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing, 34*(1), 22–45.
4. Laudon, K. C., & Traver, C. G. (2021). *E-Commerce: Business, Technology, Society*. Pearson.
5. Tuten, T. L., & Solomon, M. R. (2018). *Social Media Marketing*. Sage Publications.
6. World Bank. (2021). *Digital Technologies for Development*. World Bank.
7. World Bank. (2024). *Advancing Cloud and Data Infrastructure Markets*. World Bank.
8. World Bank. (2025). *Digital Economy*. World Bank.
9. World Bank. (2025). *Digital Progress and Trends Report 2025: Strengthening AI Foundations*. World Bank.
10. Reserve Bank of India. (2024). *Report on Currency and Finance 2023–24: India's Digital Revolution—Opportunities and Challenges*. RBI.
11. Reserve Bank of India. (2024). *Annual Report 2023–24: Payment and Settlement Systems and Information Technology*. RBI.
12. Reserve Bank of India. (2025). *RBI–Digital Payments Index for September 2024*. RBI.
13. Reserve Bank of India. (2025). *Digital Rupee (e₹) – Frequently Asked Questions*. RBI.
14. World Bank. (2023). *Digital Technologies Enabling Technological Transformation for Jobs*. World Bank.
15. Reserve Bank of India. (2022). *Payments Vision 2025*. RBI.

लिंग एवं क्षेत्र के संदर्भ में उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों के मानसिक स्वास्थ्य का अध्ययन

श्रीमती सरिता ताम्रकार

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सारांश

प्रस्तुत अध्ययन "लिंग एवं क्षेत्र के संदर्भ में उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों के मानसिक स्वास्थ्य का अध्ययन" पर आधारित है। इस अध्ययन का मुख्य उद्देश्य उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों के मानसिक स्वास्थ्य की वर्तमान स्थिति का अध्ययन करना तथा लिंग (छात्र एवं छात्राओं) एवं क्षेत्र (ग्रामीण एवं शहरी) के आधार पर तुलनात्मक अध्ययन करना है। अध्ययन की सीमा दुर्ग जिले तक निर्धारित की गई है।

प्रस्तुत शोध अध्ययन में दुर्ग जिले के उच्चतर माध्यमिक विद्यालयों से 100 विद्यार्थियों का चयन न्यादर्श के रूप में किया गया है, जिन्हें लिंग एवं क्षेत्र के आधार पर वर्गीकृत किया गया है। अध्ययन में विद्यार्थियों के मानसिक स्वास्थ्य के मापन हेतु अरुण कुमार सिंह एवं अल्पना सेन गुप्ता द्वारा निर्मित मानसिक स्वास्थ्य प्रश्नावली (Mental Health Battery) का प्रयोग किया गया है। प्राप्त आँकड़ों का सांख्यिकीय विश्लेषण करने के लिये 'T' परीक्षण का प्रयोग किया गया हैं विश्लेषण के आधार पर यह निष्कर्ष प्राप्त हुआ हैं कि विद्यार्थियों के मानसिक स्वास्थ्य को प्रभावित करने वाले प्रमुख कारकों को समझने, विद्यार्थी कल्याण एवं मानसिक स्वास्थ्य संबंधी योजनाओं के निर्माण, विद्यालयों में सकारात्मक वातावरण विकसित करने तथा गुणवत्तापूर्ण शिक्षण को प्रोत्साहित करने में सहायक होंगे। साथ ही, यह अध्ययन विद्यार्थियों शैक्षिक मनोविज्ञान एवं मानसिक स्वास्थ्य के क्षेत्र में भविष्य के अनुसंधानों के लिए एक उपयोगी आधार एवं संदर्भ सामग्री प्रदान करेगा।

मुख्य शब्द बिंदु : मानसिक स्वास्थ्य, लिंग एवं क्षेत्र ।

प्रस्तावना

शिक्षा का प्रमुख केंद्र बिंदु बालक होता है, और बालक अपने शैक्षिक लक्ष्य को तभी पूर्ण कर सकता है। जब वह मानसिक रूप से स्वस्थ होगा । मानसिक स्वास्थ्य का अर्थ अर्थात ऐसा स्वस्थ मन जो स्वतंत्र रूप से अपनी इच्छाओं को व्यक्त करके प्रत्येक क्षेत्र में स्थिति के अनुरूप सामंजस्य कर लेता है। मानसिक स्वास्थ्य एक ऐसी स्थिति होती है। जिसमें एक व्यक्ति अपने कार्य को सफलतापूर्वक पूर्ण कर पाता है। अतः मानसिक स्वास्थ्य समायोजन की ऐसी प्रक्रिया होती है। जिसमें समझौता शामिल होता है। मानसिक रूप से स्वस्थ व्यक्ति अपने दैनिक दिनचर्या में सहन करने की क्षमता विकसित कर सकता है। मानसिक रूप से स्वस्थ व्यक्ति अपने व्यवहार में भावनात्मक परिपक्वता के आधार पर आक्रमकता भाई ईर्ष्या जैसी भावनाओं को नियंत्रित करने में सक्षम हो जाता है। इसी के संदर्भ में **कुप्पूस्वामी** के अनुसार 1964 मानसिक स्वास्थ्य का अर्थ दैनिक जीवन में भावनाओं इच्छा महत्वाकांक्षाओं आदर्श भी संतुलन रखने की योग्यता इसका अर्थ है। जीवन की वास्तविकताओं का सामना करने और उनको स्वीकार करने की योग्यता इस प्रकार मानसिक स्वास्थ्य एक व्यक्ति को समाज के साथ रचनात्मक और सामंजस्य पूर्ण संबंध स्थापित करने में

सक्षम बनाता है। इसी संबंध में विद्यार्थियों का मानसिक स्वास्थ्य उसके व्यक्तित्व के प्रकार और गुणवत्ता को दर्शाता है। जिसके आधार पर वह अपने व्यक्तित्व का सर्वांगीण विकास को पूर्ण करने में होता सहायक है।

शोध अध्ययन

शर्मा, आर., एवं कुमार, ए. (2021). उच्चतर माध्यमिक स्तर पर विद्यार्थियों के मानसिक स्वास्थ्य में लिंग आधारित अंतर का अध्ययन करने पर यह पाया गया कि छात्राओं में अवसाद (Depression) और चिंता (Anxiety) का स्तर छात्रों की तुलना में अधिक दर्ज किया गया। **कौर, एम., एवं सिंह, जे**. (2022). शहरी एवं ग्रामीण क्षेत्रों के उच्चतर माध्यमिक विद्यार्थियों के मानसिक स्वास्थ्य के तुलनात्मक अध्ययन में यह स्पष्ट हुआ कि शहरी क्षेत्र के विद्यार्थियों में प्रतिस्पर्धा माहौल और शैक्षणिक दबाव के कारण मानसिक तनाव अधिक पाया जाता है। **पटेल, एस., एवं वर्मा, पी.** (2023). कोविड-19 महामारी के बाद के प्रभाव का अध्ययन करते हुए यह निष्कर्ष निकाला गया कि महामारी के पश्चात शहरी क्षेत्र की छात्राओं के मानसिक कल्याण (Mental Wellbeing) में अपेक्षाकृत अधिक गिरावट दर्ज की गई। **अरिफ़्फ़ा, एस. महदूम.** (2025). किशोर छात्राओं के मानसिक स्वास्थ्य एवं शैक्षणिक उपलब्धि के तुलनात्मक अध्ययन के निष्कर्षों से यह स्पष्ट हुआ कि बेहतर मानसिक स्वास्थ्य का विद्यार्थियों की शैक्षणिक उपलब्धि के साथ सकारात्मक संबंध (Positive Correlation) होता है। **कुमार, राकेश.** (2025). उच्चतर माध्यमिक विद्यालय के ग्रामीण एवं शहरी विद्यार्थियों के मनोवैज्ञानिक कल्याण में महत्वपूर्ण अंतर पाया गया, जिससे यह सिद्ध होता है कि क्षेत्रीय व भौगोलिक परिस्थितियाँ विद्यार्थियों के मानसिक स्वास्थ्य एवं मनोवैज्ञानिक विकास को प्रत्यक्ष रूप से प्रभावित करती हैं। **क्रिस्चिसन, एस. एम., एवं सहयोगी**. (2025). किशोर विद्यार्थियों के मानसिक स्वास्थ्य में लिंग आधारित अंतर का अध्ययन करने पर यह निष्कर्ष प्राप्त हुआ कि छात्र एवं छात्राओं के मानसिक स्वास्थ्य में सार्थक अंतर मौजूद है तथा छात्राओं में मानसिक स्वास्थ्य संबंधी समस्याएँ अपेक्षाकृत अधिक देखी गईं। **रज़ा, नेहा.** (2025). लिंग, निवास क्षेत्र तथा शैक्षणिक संकाय के आधार पर विद्यार्थियों के मानसिक स्वास्थ्य का विश्लेषण करने पर पाया गया कि विद्यार्थियों के मानसिक स्वास्थ्य पर लिंग एवं निवास क्षेत्र दोनों का प्रभाव पड़ता है, साथ ही विभिन्न शैक्षणिक संकायों (Streams) के विद्यार्थियों के मानसिक स्वास्थ्य स्तर में भी भिन्नता पाई गई। **शर्मा, वी., एवं शर्मा, पी.** (2025). उच्चतर माध्यमिक विद्यालयी विद्यार्थियों पर किए गए अध्ययन के निष्कर्षों से ज्ञात हुआ कि ग्रामीण एवं शहरी विद्यार्थियों की शैक्षणिक चिंता (Academic Anxiety) में अंतर पाया जाता है। तथा शैक्षणिक चिंता विद्यार्थियों के मानसिक स्वास्थ्य को प्रभावित करने वाला एक महत्वपूर्ण कारक है। **सुरेश, के., एवं राव, बी.** (2025). किशोरों के मानसिक स्वास्थ्य और समायोजन रणनीतियों पर किए गए शोध से यह दर्शित होता है कि ग्रामीण क्षेत्रों के विद्यार्थियों में मानसिक स्वास्थ्य के प्रति जागरूकता, मार्गदर्शन एवं परामर्श सुविधाओं का अभाव है।

अध्ययन का उद्देश्य :-

1) उच्चतर माध्यमिक विद्यालय के विद्यार्थियों का लिंग के आधार पर अध्ययन करना।

2) उच्चतर माध्यमिक विद्यालय के विद्यार्थियों का क्षेत्र के आधार पर अध्ययन करना।

अध्ययन के की परिकल्पनाएं :-

1) उच्चतर माध्यमिक विद्यालय के छात्र एवं छात्राओं के मानसिक स्वास्थ्य में सार्थक अंतर नहीं पाया जाएगा।

2) ग्रामीण एवं शहरी क्षेत्र के उच्चतर माध्यमिक विद्यालय विद्यार्थियों के मानसिक स्वास्थ्य में सार्थक अंतर नहीं पाया जाएगा।

अध्ययन की परिसीमाएं:-

1) प्रस्तुत शोध अध्ययन दुर्ग जिले तक सीमित है।

2) प्रस्तुत शोध अध्ययन में उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों का चयन किया गया है।

3) न्यादर्श के लिए 100 विद्यार्थियों का चयन किया गया है।

4) विद्यार्थियों का चयन ग्रामीण एवं शहरी क्षेत्र के आधार पर किया गया है।

न्यादर्श

प्रस्तुत शोध अध्ययन में शोधकर्ता के द्वारा दुर्ग जिले के उच्चतर माध्यमिक विद्यालयों के 100 विद्यार्थियों का चयन किया गया है। जिसे लिंग और क्षेत्र के आधार पर विभाजित किया गया है।

उपकरण

प्रस्तुत शोध अध्ययन में उपकरण के रूप में मानसिक स्वास्थ्य के मापन के लिए अरुण कुमार सिंह एवं अल्पना सेन गुप्ता द्वारा निर्मित प्रश्नावली का प्रयोग किया गया है।

निष्कर्ष एवं विश्लेषण

$H0_1$उच्चतर माध्यमिक विद्यालय के छात्र एवं छात्राओं के मानसिक स्वास्थ्य में सार्थक अंतर नहीं पाया जाएगा। प्रस्तुत परिकल्पना की जांच हेतु उच्चतर माध्यमिक विद्यालय के छात्र एवं छात्राओं के मानसिक स्वास्थ्य में अंतर ज्ञात किया गया है। जिसे नीचे तालिका क्रमांक 1 में दर्शाया गया है।

तालिका क्रमांक 1

उच्चतर माध्यमिक विद्यालय के छात्र एवं छात्राओं के मानसिक स्वास्थ्य की सांख्यिकी विश्लेषण

लिंग	संख्या	मध्यमान	प्रमाणिकविचलन	टी -मूल्य
छात्रा	50	77.2	9.98	1.38
छात्र	50	79.76	8.58	
df=98,p<0.05 सार्थक अंतर नही हैं।				

उपरोक्त तालिका क्रमांक 1 अवलोकन से ज्ञात होता है की दोनों समूह में छात्रों का मध्यमान 77.20 तथा प्रामाणिक विचलन 9.98 हैं तथा छात्राओं का मध्यमान 79.76 तथा प्रमाणिक विचलन 8.58 हैं दोनों के मध्य टी मूल्य का मान t=1.38 पाया जो कि 0.05 स्तर पर df=98 के लिये टी मूल्य 1.98 से काम हैं अतः दोनों समूहों के बीच मध्यमानो में सार्थक अंतर नही हैं।

परिणाम

लिंग के संदर्भ में उच्चतम माध्यमिक विद्यालय के विद्यार्थियों के मानसिक स्वास्थ्य पर सार्थक अंतर नहीं पाया गया अतः परिकल्पना स्वीकृत होता है।

$H0_2$ ग्रामीण एवं शहरी क्षेत्र के उच्चतर माध्यमिक विद्यालय के विद्यार्थियों के मानसिक स्वास्थ्य में सार्थक अंतर नहीं पाया जाएगा।

प्रस्तुत परिकल्पना की जांच हेतु ग्रामीण एवं शहरी क्षेत्र के उच्चतर माध्यमिक विद्यालय के विद्यार्थियों के मानसिक स्वास्थ्य के आधार पर अंतर ज्ञात किया गया जिसे तालिका क्रमांक 2 में दर्शाया गया है।

तालिका क्रमांक 2

क्षेत्र	संख्या	मध्यमान	प्रमाणिक विचलन	टी मूल्य
ग्रामीण	50	79.08	10	0. 79
शहरी	50	77.58	8.9	
df=98,p<0.05 सार्थक अंतर नहीं हैं।				

उपरोक्त तालिका क्रमांक 2 के अवलोकन से दोनों समूह में ग्रामीण समूह का मध्यमान 79.08 तथा प्रमाणिक विचलन10.00 तथा शहरी समूह का मध्यमान 77.58 और प्रमाणिक विचलन 8.90 है। दोनों के मध्य टी मूल्य का मान 0.79 पाया गया। जोकि 0.05 स्तर पर df=98 के लिए टी मूल्य 1.98 से कम है अतः दोनों समूह के बीच मध्यमानो में सार्थक अंतर नहीं है।

परिणाम

ग्रामीण एवं शहरी क्षेत्र के उच्चतर माध्यमिक विद्यालय के विद्यार्थियों के मानसिक स्वास्थ्य में सार्थक अंतर नहीं पाया जाएगा। अतः परिकल्पना स्वीकृत होता है।

शैक्षिक उपादेयता

प्रस्तुत अध्ययन की शैक्षिक उपादेयता अत्यंत महत्वपूर्ण है। इस अध्ययन के माध्यम से उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों के मानसिक स्वास्थ्य की वास्तविक स्थिति का आकलन किया जाएगा। इसी प्रकार ग्रामीण एवं शहरी क्षेत्रों के विद्यार्थियों के मानसिक स्वास्थ्य की तुलना करके उनकी विशिष्ट समस्याओं, चुनौतियों तथा आवश्यकताओं को समझा जा सकता है। अध्ययन के निष्कर्षों के आधार पर विद्यार्थियों के मानसिक स्वास्थ्य में सुधार हेतु प्रभावी प्रशिक्षण, परामर्श एवं सहायता कार्यक्रम तैयार किए जा सकें। इसके अतिरिक्त विद्यालयों में सकारात्मक, तनावमुक्त एवं स्वस्थ कार्य वातावरण के निर्माण को बढ़ावा मिलेगा। यह अध्ययन शिक्षा विभाग को छात्र कल्याण एवं मानसिक स्वास्थ्य संबंधी नीतियों के निर्माण और उन्हें अधिक प्रभावी बनाने के लिए उपयोगी जानकारी प्रदान करेगा। मानसिक रूप से स्वस्थ विद्यार्थी अधिक प्रभावी एवं गुणवत्तापूर्ण शिक्षण ग्रहण करने में सक्षम होंगे, जिससे विद्यार्थियों के शैक्षिक विकास और सीखने के स्तर में भी वृद्धि होगी। साथ ही, यह अध्ययन भविष्य में मानसिक स्वास्थ्य, तथा विद्यार्थियों के कल्याण से संबंधित अन्य शोधों के लिए आधार सामग्री एवं संदर्भ के रूप में भी उपयोगी सिद्ध होगा।

संदर्भ ग्रंथ सूची:-

1. **अरिफ़फ़ा, एस. एम., एवं राजा, एम. टी.** (2025). ए कंपेरेटिव स्टडी ऑफ मेंटल हेल्थ एंड एकेडमिक अचीवमेंट ऑफ एडोलसेंट गर्ल्स. *इंटरनेशनल जर्नल ऑफ इंडियन साइकोलॉजी,* 13(3), 594–607. https://doi.org/10.25215/1303.053
2. **कौर, एम., एवं सिंह, जे.** (2022). शहरी एवं ग्रामीण उच्चतर माध्यमिक विद्यार्थियों के मानसिक स्वास्थ्य का तुलनात्मक अध्ययन. *इंटरनेशनल जर्नल ऑफ एजुकेशनल रिसर्च एंड डेवलपमेंट,* 15(1), 88–97.
3. **कुमार, आर.** (2025). ग्रामीण एवं शहरी उच्चतर माध्यमिक विद्यालय के विद्यार्थियों के मनोवैज्ञानिक कल्याण का तुलनात्मक अध्ययन. *इंटरनेशनल जर्नल ऑफ इंडियन साइकोलॉजी,* 13(4), 1283–1287.
4. **क्रिस्टिसन, एस. एम., एवं सहयोगी**. (2025). जेंडर डिफरेंसेस इन मेंटल हेल्थ अमंग एडोलसेंट स्टूडेंट्स. *जर्नल ऑफ एडोलसेंट हेल्थ, 76*(2), 142–150.

5. **गुप्ता, एन., शर्मा, आर., एवं पटेल, के**. (2024). लिंग तथा विद्यालय के प्रकार के संदर्भ में उच्चतर माध्यमिक विद्यालयी विद्यार्थियों का मनोवैज्ञानिक कल्याण (साइकोलॉजिकल वेलबीइंग). *एशियन जर्नल ऑफ साइकियाट्री एंड हेल्थ*, 12(2), 145–158. https://doi.org/10.1016/j.ajph.2024.101234
6. **पटेल, एस., एवं वर्मा, पी.** (2023). कोविड-पश्चात किशोरों के मानसिक स्वास्थ्य पर क्षेत्र एवं लिंग का प्रभाव. *इंडियन जर्नल ऑफ क्लिनिकल साइकोलॉजी*, 50(3), 210–219.
7. **रज़ा, एन. (2025**). लिंग, निवास क्षेत्र तथा शैक्षणिक संकाय के आधार पर विद्यार्थियों के मानसिक स्वास्थ्य का अध्ययन. *इंटरनेशनल जर्नल ऑफ इंडियन साइकोलॉजी,* 13(2), 5376–5392.
8. **शर्मा, आर., एवं कुमार, ए.** (2021). माध्यमिक विद्यालय के विद्यार्थियों के मानसिक स्वास्थ्य में लिंग आधारित भिन्नताएं. *जर्नल ऑफ साइकोसोशल रिसर्च,* 16(2), 301–312. https://doi.org/10.32381/JPR.2021.16.02.8
9. **शर्मा, एवं शर्मा**. (2025). उच्चतर माध्यमिक विद्यालय के विद्यार्थियों की शैक्षणिक चिंता का अध्ययन. *इण्डियन जर्नल ऑफ एजुकेशनल स्टडीज.*
10. **सामंत, ए., मुखर्जी, एस., घोष, एस., एवं दासगुप्ता, ए.** (2012). मेंटल हेल्थ, प्रोटेक्टिव फैक्टर्स एंड वायलेंस अमंग मेल एडोलसेंट्स: ए कंपैरिजन बिटवीन अर्बन एंड रूरल स्कूल स्टूडेंट्स इन वेस्ट बंगाल. *इंडियन जर्नल ऑफ पब्लिक हेल्थ,* 56(2), 155–158. https://doi.org/10.4103/0019-557X.99916
11. **सिसोदिया, एस., पांडे, ई., एवं गंगराड़े, जे.** (2024). ए कंपैरेटिव स्टडी ऑन मेंटल हेल्थ प्रॉब्लम्स ऑफ एडोलसेंस बिटवीन सिलेक्टेड रूरल एंड अर्बन स्कूल्स ऑफ रतलाम डिस्ट्रिक्ट. *इंटरनेशनल जर्नल ऑफ इंजीनियरिंग एंड कंप्यूटर साइंस,* 6(1), 67–70. https://doi.org/10.33545/26633582.2024.v6.i1a.116
12. **सुरेश, के., एवं राव, बी.** (2025). किशोरों की मानसिक स्वास्थ्य स्थिति एवं समायोजन रणनीतियाँ: एक क्रॉस-सेक्शनल अध्ययन. *जर्नल ऑफ इंडियन एसोसिएशन फॉर चाइल्ड एंड एडोलसेंट मेंटल* हेल्थ, 21(1), 42–53.

"जिल्हा प्रशासनातील जनसंपर्काची कार्यपद्धती, भूमिका आणि त्यामुळे प्रशासनात झालेले बदल – एक चिकीत्सक अभ्यास "

प्रा. डॉ. संतराम मुंढे

(लोकप्रशासन विभाग प्रमुख)

संजीवनी महाविद्यालय चापोली, ता.चाकुर,जिल्हा लातूर.

Abstract

"महाराष्ट्र राज्यातील लातूर जिल्ह्यातील माहिती व जनसंपर्क विभागातील विविध अधिकारी व या विभागाशी सम्बंधीत असलेल्या सर्व घटकांना भेटी देवुन प्रत्यक्श स्वरुपात कार्याची पाहणी करुन तसेच घेवुन प्रत्यक्श स्वरुपात प्रश्नावलीच्या सहाय्याने मिळविलेल्या तथ्यांच्या आधारे "जिल्हा प्रशासनातील जनसंपर्काची कार्यपद्धती, भूमिका आणि त्यामुळे प्रशासनात झालेले बदलांचा शोध घेण्यात आला. सदरिल संशोधन अध्ययनांती सारांशरुपाने असे स्पष्टपणे नमुद करता येते की, आधुनिक जनसंपर्क साधनांमुळे व कार्यपध्यती मुळे प्रशासनात पारदर्शकता आणि गतिशीलता निर्माण होत आहे, जनतेशी थेट संवाद साधला जात असून जनतेच्या तक्रारीचे निवारण होत आहे, सेवांचे सुलभीकरण, आपत्कालीन व्यवस्थापनात सुधारणा, लोकसहभाग आणि जनजागृती या स्वरुपाचे बदल होत असल्याचे दिसून येतात. तसेच प्रशासन अधिक जबाबदार (Accountable), लोकाभिमुख (People-centric) आणि कार्यक्षम बनले आहे.

सदरील संशोधन लेख शैक्षणिक नियोजन व विकास विभाग, स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड यांनी , Minor Research Project साठी मान्यता दिलेल्या "जिल्हा प्रशासनातील जनसंपर्काची कार्यपद्धती,भूमिका आणि त्यामुळे प्रशासनात झालेले बदल – एक चिकीत्सक अभ्यास" या विषयासाठीच्या लघू शोध प्रकल्पाकरिता पकाशित करण्यात येत आहे.

प्रस्तावना:

आधुनिक काळात लोकप्रशासनाचे यश हे जनसंपर्क यंत्रणेवर अवलंबून आहे. प्रशासनास जनसंपर्काची जोड दिली असता जनतेच्या कल्याणाचे विविध कार्यक्रम गतीने आणि कार्यक्षमतेने राबविता येतात. लोक कल्याणकारी राज्यात लोकांचा सर्वांगीण विकास करण्याची जबाबदारी शासन व्यवस्थेवर असते त्यामुळे अशा प्रशासनात जनसंपर्क कार्यालय विशेष महत्त्व आहे. कल्याणकारी योजनांचे यशस्वीता ही लोकसहभागावर अवलंबून असते कारण विकासाच्या प्रक्रियेत लोकांना सामावून घेणे विकास योजनांचा पाठपुरावा करणे आणि लोकांना परिवर्तनासाठी सिद्ध करणे अशी तिहेरी स्वरूपाचे कार्य जनसंपर्क विभागाद्वारे केली जातात. भारतामध्ये केंद्रात ज्याप्रमाणे माहिती व जनसंपर्क मंत्रालय आहे त्याच धर्तीवर महाराष्ट्रात माहिती व जनसपर्क मंत्रालयाची स्थापना केली जाते. या मंत्रालयामार्फत जनसंपर्क अधिकारी याची नियुक्ती करून देशाच्या ग्राम स्तरापर्यंत लोकांसोबत जनसंपर्क प्रस्थापित केला जातो. जनसंपर्क ही एक निरंतर आणि सुनियजित व्यवस्थापकीय असे कार्य आहे. सार्वजनिक तसेच खाजगी संघटना जनसंपर्काद्वारे जनतेला योजनाबद्ध सर्व व्यापक माहिती पुरवून त्यांचे सकारात्मक सहकार्य मिळवतात. जनसंपर्काद्वारे लोकांमध्ये विश्वास सहानुभूती व सहकार्य संपादित केले जाते. जिल्हास्तरावर जिल्हाधिकारी कार्यालयाद्वारे शासन व जनता यांच्यामध्ये सुसंवाद स्थापन केला जातो आणि लोकांच्या भावनाना प्राधान्य देऊन शासनाला लोकाभिमुख बनविले जाते. शासनाला विश्वास सार्थ जपण्यासाठी जनसंपर्क प्रस्थापित करणे याला विशेष अशा स्वरूपाचे महत्त्व आहे.

संशोधन अध्ययनाचे उद्देश :

१)जनसंपर्क संकल्पना समजून घेणे

२)जनसंपर्क कार्यपद्धतीचा अभ्यास करणे

३)जनसंपर्क अधिकाऱ्याची नवीन भूमीका अभ्यासने.

४) आधुनिक जनसंपर्कामुळे प्रशासनात झालेल्या बदलाचा शोध घेणे.

गृहीतके

१) लोकप्रशासनाचे यश हे जनसंपर्कावरच अवलंबून आहे.

२) जनसंपर्क शिवाय कार्यालयीन कामाचे स्वरूप व कार्यपद्धती चा व्यवस्थित निपटारा होऊ शकत नाही.

संशोधन पद्धती

प्रस्तुत संशोधन अध्ययनाच्या सखोल आणि शास्त्रोक्त मांडण्यासाठी संशोधनाच्या विविध पद्धती पैकी वर्णनात्मक आणि विश्लेषणात्मक संशोधन पद्धतीचा आधार घेण्यात आला आहे.

संशोधन अध्ययन क्षेत्र:

सदरील विषयावरील संशोधन अध्ययन करण्यासाठी लातूर जिल्ह्यातील जिल्हा प्रशासनाचा आधार घेण्यात आला आहे. लातूर जिल्ह्याचा विशेष अभ्यास करीत असताना अशी माहिती मिळते की, लातूर जिल्ह्याची निर्मिती झाल्यापासून लातूर जिल्ह्यात प्रशासनाच्या दृष्टीने जिल्हाधिकारी कार्यालयाची भूमिका महत्त्वाची राहिली आहे. लातूर जिल्ह्यात मुख्य जिल्हाधिकारी कार्यालय आहे. प्रत्येक तालुक्यात स्वतंत्र तहसील असून, गाव पातळीवरील महसूल कार्य करण्यासाठी तलाठ्याची नियुक्ती करण्यात आलेली आहे. तसेच काही गावांसाठी सज्जा आहे. तसेच या सर्व प्रशासकीय यंत्रणेत जनसंपर्काचे स्थान महत्त्वाचे राहिले आहे. सुसंवाद, समन्वय आणि सुसूत्रिकरण हे या कार्यालयाच्या जनसंपर्काचे वैशिष्टे आहे.

जनसंपर्काची संकल्पना:

जनसंपर्क ही संकल्पना व्यापक असून, या संकल्पनेचा वापर सार्वत्रिक केला जातो. प्रचार, प्रसिद्धी, लोकव्यवहार, माहिती दणे, जाहिरात, कला या सर्वांचे एकत्रित सुद्यवस्थित रूप म्हणजे जनसंपर्क होय. प्रो. जे. डी. मिलेट यांच्या मतानुसार जनसंपर्क म्हणजे जनतेच्या इच्छा, अपेक्षा जाणून घेणे आणि त्या इच्छा अपेक्षांची पूर्ती प्रशासनाकडून कशी होते हे स्पष्ट करणे होय. तर जे. एल. मॅकॅमी यांच्या मतानुसार जनसंपर्क म्हणजे शासनातील अधिकारीवर्ग व नागरिक यांच्या दरम्यान असलेली सर्व प्राथमिक व दुय्यम स्वरूपाचे संबंध आणि त्याद्वारे प्रस्थापित झालेले सर्व प्रभाव व प्रवृत्ती या सर्वांच्या परस्पर प्रतिक्रियांचे मिश्रण जनसंपर्कात असते.

जनसंपर्क हे एक निरंतर आणि सुनियोजित व्यवस्थापकीय कार्य आहे. जनसंपर्काद्वारे सार्वजनिक व खाजगी संघटना आणि संस्था जनतेला योजनाबद्ध सर्वव्यापक माहिती पुरवून सकारात्मक सहकार्य मिळवतात. प्रशासन आपल्या जनतेच्या समान हितांना सक्षमपणे अबाधित ठेवते आणि जनेच्या मतांचा आदर करून आपल्या ध्येय धोरणांची बांधणी करते. लोकांत विश्वास, सहानुभूती व सहकार्य जनसंपर्कोद्वारे संपादित करण्यात येते.

जनसंपर्काची कार्यपद्धती :

प्रत्येक जिल्ह्याला जिल्हा माहिती व जनसंपर्क अधिकारी हे लोकसेवा आयोगाकडून नेमले जातात. नियुक्तीनंतर त्यांना योग्य ते प्रशिक्षण दिले जाते. अशा अधिकाऱ्यांना विद्यापीठाची जनसंवाद व वृत्तपत्रविद्या पदवी आवश्यक असते. सेवा ग्रहन केल्यानंतर हे अधिकारी विकासाच्या विविध कार्याबाबत माहिती करून घेतात आणि जिल्हाधिकारी कार्यालयाशी संपर्क करून विविध विकास योजनांबाबत सातत्याने प्रसार माध्यमांना माहिती पुरवितात,

जिल्हा माहिती व जनसंपर्क अधिकारी हे प्रादेशिक संचालक किंवा उपसंचालक यांच्या मार्गदर्शनाखाली कार्य करतात. शिवाय त्यांना राज्याच्या केंद्रस्थानी असलेल्या महासंचालकाकडून सातत्याने मार्गदर्शन केले जाते. जिल्हा

माहिती अधिकाऱ्यास साह्य करण्यासाठी दोन माहिती सहाय्यक नियुक्त केलेले असतात. हे माहिती सहाय्यक मंत्री, अधिकारी यांचे दौरे तसेच विकासाच्या योजना, त्यांची अंमलबजावणी याबाबत सातत्याने मार्गदर्शनपर माहिती देत असतात. शिवाय शासनाचे विविध उपक्रम लोकांपर्यंत पोहोचविण्यासाठी प्रकाशित साहित्याचे प्रसारण करणे व हे साहित्य यंत्रणेद्वारे लोकांपर्यंत पोहोचवणे ही कामेही केली जातात. वेळोवेळी प्रदर्शन भरवून, उत्सव व समारंभांचे आयोजन करून परिसंवाद व चर्चासत्रे आखून सुद्धा या मोहीमांना गती दिली जाते. अलीकडे ग्रंथ उत्सव, तालुका संपर्क मेळावे, प्रदर्शने, लघु चित्रपट यांचा उपयोग करून सुद्धा विकासाचे कार्यक्रम लोकांपर्यंत पोहोचविले जातात.

आजच्या काळातील जनसंपर्क अधिकाऱ्याची महत्वपूर्ण भूमिका :

शासन, अधिकारी आणि जनता हे विकासाच्या प्रक्रियेतील समान भागीदार आहेत. शासकीय विकासाच्या योजना खरोखर सामान्य माणसापर्यंत पोहोचवावयाच्या असतील तर शासनाला लोकाभिमूख झाले पाहिजे आणि वृत्तपत्रे तसेच दृकश्राव्य माध्यमे यांचा उपयोग करून विकास विषयक माहितीचे मुक्त व समतोल प्रवाह सामान्य माणसापर्यंत नेऊन पोहोचविले पाहिजेत. या बाबतीत जिल्हाधिकारी कार्यालय सुद्धा काही विशेष बाबीवर भर देवून महत्त्वपूर्ण भूमिका बजावत असल्याचे दिसून येते.

१) शासन व्यवस्थेची प्रतिष्ठा उंचावण्यासाठी जनसंपर्काला व्यवस्थापन कार्यावर अधिकाधिक भर द्यावा लागत आहे. त्यामुळे जनसंपर्क अधिकाऱ्याला नवीन व्यवस्थापन ज्ञानशाखेची ओळख होते. त्याद्वारे जनसंपर्क अधिकारी अधिक चांगल्यारितीने भूमिका बजावतो.

२) आजचे युग हे तंत्रज्ञानाचे युग आहे आणि शासकीय स्तरावरील तसेच सामाजिक स्तरावरील परिस्थीती बदलण्यासाठी चांगले उपक्रम राबविणे ही ची जनसंपर्क अधिकाकाऱ्याची जबाबदारी बनलेली आहे.

३) जनसंपर्काची क्षेत्रे बदलत आहेत तसेच उपक्रमही बदलत आहेत. आपला वाचक, श्रोता, त्याच्या आवडीनिवडी लक्षात घेऊन कॉर्पोरेट उद्योग विविध लोकप्रिय कार्यक्रमांचे प्रायोजकत्व स्वीकारत आहेत. अशावेळी कार्यक्रमाचा आशय किती दर्जेदार आहे यावर अधिक भर दिला जात आहे.

४) जनसंपर्कातील अर्थसंकल्पाचे नियोजन करताना साधन सामग्रीची बचत करण्यावर भर दिला जात आहे. भांडवली खर्चाचे नियोजन तसेच वर्षभरातील होणारा खर्च व त्याचे नियोजन, पुढील कार्यासाठी खर्चाची तरतूद करताना कामगिरी सुधारण्यावर कसा भर द्यावयाचा या बाबीकडे अधिक लक्श द्यावे लागत आहे.

५) कॉर्पोरेट ओळख जपण्यासाठी प्रदर्शने, सजावट तसेच संशोधन व पाहणी यांच्या आधारे नवे उपक्रम आखून उत्सवांचे नियोजन केले जात आहे. याद्वारे जनसंपर्कात 'इव्हेंट मॅनेजमेंट' या कल्पनेचा प्रवेश झाला आहे.

६) विशिष्ट आव्हानांना सामोरे जात असताना नव्या तंत्रांचा स्वीकार आवश्यक ठरला आहे. चित्रवाणी, माध्यमातील जाहिराती तसेच आंतरराष्ट्रीय पत्रिकांतील जाहिराती यांचे महत्त्व प्रगत माहिती तंत्रज्ञानामुळे वाढले आहे. प्रदर्शन व सजावटीची नवीन तंत्रे समोर येत आहेत.

आधुनिक जनसंपर्क साधनांमुळे प्रशासनात झालेले बदल :

आजच्या काळात सोशल मीडिया, डिजिटल पोर्टल्स, मोबाईल ॲप्स यासारख्या अनेक आधुनिक जनसंपर्क साधनांमुळे शासकीय प्रशासनात अत्यंत महत्त्वाचे आणि सकारात्मक बदल झाले आहेत. आधुनिक जनसंपर्कमुळे प्रशासन आणि नागरिक यांच्यातील अंतर कमी झाले असून कामकाजात मोठी गतिशीलता आली आहे. प्रशासनात झालेले मुख्य बदल खालीलप्रमाणे आहेत :

1) पारदर्शकता आणि गतिशीलता

शासकीय निर्णय, योजना आणि परिपत्रके काही सेकंदांत नागरिकांपर्यंत पोहोचतात. त्यामुळे माहितीचा जलद प्रसार होत आहे. ई-गव्हर्नन्स आणि डिजिटल माध्यमांमुळे दलालांची गरज संपली आहे तसेच प्रत्येक फाईल आणि अर्जाची स्थिती (Status) नागरिकांना ऑनलाईन ट्रॅक करता येते. त्यामुळे पारदर्शकता आणि गतिशीलता येत असुन भ्रष्टाचाराला आळा बसला आहे.

2)थेट संवाद आणि तक्रार निवारण

ट्विटर , फेसबुक आणि इंस्टाग्रा या सोशल मीडियाचा वापर करुण त्याद्वारे नागरिक थेट मंत्री किंवा सनदी अधिकाऱ्यांशी संपर्क साधू शकत आहेत. तसेच 'आपले सरकार' सारख्या पोर्टल्समुळे नागरिकांच्या तक्रारींचे वेगाने झटपट निवारण होत आहे. प्रशासकीय योजनांवर जनता थेट आणि त्वरित आपल्या प्रतिक्रिया नोंदवू शकत आहेत.

3)सेवांचे सुलभीकरण :

नागरिकाना जे हवे ते दाखले, परवाने, आणि विविध कागदपत्रे आता ऑनलाईन घरबसल्या मिळताहेत. सरकारी कार्यालयांमध्ये चकरा मारण्याची आणि लांब रांगेत उभे राहण्याची गरज उरलेली नाही. त्यामुळे वेळेची बचत होत आहे. प्रशासकीय सेवा आणि माहिती नागरिकांसाठी कधीही उपलब्ध असल्याने सेवांचे सुलभीकरण झाले आहे.

4)आपत्कालीन व्यवस्थापनात सुधारणा

ज्यावेळेस पूर, वादळ किंवा महामारी यासारख्या आपत्ती येतात त्यावेळेस सोशल मीडिया आणि एस.एम.एसद्वारे नागरिकांना वेगाने सतर्क केले जाते, त्वरित पूर्वसूचना दिल्या जातात. तसेच डिजिटल संपर्क माध्यमाद्वारे आपत्तीग्रस्त आशा गरजू लोकांपर्यंत मदत कार्य अधिक जलदपणे पोहोचवले जाते. आजच्या काळात आपत्तीच्या वेळी आधुणिक जनसम्पर्क साधनामुळे आपत्कालीन व्यवस्थापनात सुधारणा दिसुन येत आहेत.

5)लोकसहभाग आणि जनजागृती

आजच्या काळातील जनसम्पर्कामुळे पल्स पोलिओ, स्वच्छता अभियान किंवा कर भरणा यासारख्या मोहिमांची प्रभावी जनजागृती केली जाते. शासन नविन कायदे तसेच धोरणांवर नागरिकांकडून डिजिटल साधनाद्वारे सूचना मागवते आणि शसकीय कार्यात तसेच धोरण निर्मितीत नागरिकाना सहभागी करुन घेते.

थोडक्यात सांगायचे तर, आधुनिक जनसंपर्क साधनांमुळे प्रशासन अधिक जबाबदार (Accountable), लोकाभिमुख (People-centric) आणि कार्यक्षम बनले आहे.

निष्कर्ष

1. नागरिक व अधिकारी कर्मचारी यांच्यात सुसंवाद व सैहार्दपूर्ण संबंध प्रस्थापित करण्यासठी जनसंपर्क साधनाने प्रभावशाली भुमिका पार पाडली आहे.
2. जनसंपर्काशिवाय कार्यालयीन कामाचे स्वरूप, कार्यपद्धती चा व्यवस्थित निपटारा होऊ शकत नाही. त्यासाठी विशेष प्रयत्नांची गरज आहे.
3. लोकप्रशासनाचे यश हे जनसंपर्कावरच अवलंबून आहे.
4. शासकीय ध्येय व धोरण ठरविण्यासाठी व त्याची प्रभावी अंमलबजावणी करण्यासाठी जनसंपर्कीय संवाद महत्त्वाचा ठरतो.
5. जनसम्पर्क साधनामुळे आपत्कालीन व्यवस्थापनात सुधारणा झाल्याचे दिसुन येते.
6. नागरिकाना सर्व माहिती ऑनलाईन घरबसल्या मिळत आहे. प्रशासकीय सेवांचे सुलभीकरण झाले आहे.
7. जनसंपर्क प्रस्थापीत करण्यासाठी वर्तमानपत्र या साधनाचा ज्यास्तित ज्यास्त उपयोग केला जातो असे दिसते.
8. जनसंपर्काचि संकल्पणा एका नव्या दिसेने विकसीत होत आहे.

शिफारशी

1. प्रभावी जनसंपर्कासाठी अधिकाऱ्यांना व कर्मचाऱ्यांना निरंतर प्रशिक्षण देणे व जनतेतील सहभागीता वाढविणे आवश्यक आहे.
2. जनसंपर्काच्या क्षेत्रात अधिकाधिक युवकांनी व तज्ञांनी सहभागी व्हावे यासाठी शासनाने आशा जनसंपर्क कर्मचाऱ्यांसाठी, अधिकाऱ्यांसाठी विशेष सेवा आणि सुविधा निर्माण करून द्याव्यात.

3. जनसंपर्काच्या प्रभाविकतेवर शासनाच्या ध्येय धोरणाचे यश अवलंबून असते. त्यामुळे प्रशासकीय यंत्रणेची उदासीनता दूर करून नागरिकामध्ये जाणीव जागृती निर्माण करणे आवश्यक आहे.
4. जिल्हाधिकारी कार्यालय तसेच माहिती व जनसंपर्क सेवा यामध्ये समन्वयासाठी यंत्रणा स्थापन करणे आवश्यक आहे.
5. सामान्य जनतेचा फीडबॅक वाढविण्यासाठी प्रयत्न केला जाणे आवश्यक आहे. ६) नागरिक आणि अधिकारी यांचा अधिकाधिक सम्पर्क व्हावा यासाठी प्रशासन कार्यालयाने जनसंपर्काच्या सर्वच साधनाचा आधार घ्यावा.

अभ्यासांती असे मांडता येते की, आधुनिक काळात जनसंपर्क अधिकऱ्याच्या भूमिकेमुळे आणि अत्याधुनिक साधनांमुळे प्रशासनात अत्यंत महत्त्वाचे आणि सकारात्मक बदल झाले आहेत. प्रशासन आणि नागरिक यांच्यातील अंतर कमी झाले असून कामकाजात मोठी गतिशीलता आली असल्याचे दिसुन येते. प्रशासन व्यवस्था अधिक पारदर्शक, उत्तरदायी आणि लोकाभिमुख बनवण्यासाठी जनसंपर्क अधिकऱ्याच्या भूमिका आणि कार्यपध्यती प्रभावी ठरते. विशेषत: जनतेच्या सहभागाशिवाय कोणतेही लोकप्रशासन यशस्वी होऊ शकत नाही, आणि हा सहभाग जनसंपर्कामुळेच शक्य होतो. तसेच २१ व्या शतकातील सुशासनासाठी (Good Governance) माहिती तंत्रज्ञानावर आधारित गतिमान जनसंपर्क अत्यंत आवश्यक आहे.

सदर्भ सुची :

1) धारूरकर वि.ल. जनसंपर्क मीमांसा रामराज्य प्रकाशन औरंगाबाद 1985

2) जाधव तुकाराम, महाराष्ट्र वार्षिकी, 2012 युनिक अकॅडमी , पुणे 2012

3) पंत एन.सी., द्विवेदी मनीषा, पत्रकारिता जनसंपर्क, कनिष्क पब्लिशर्स, नवी दिल्ली, 2006.

4) जाधव सौदागर जनसंपर्का आणि स्थानिक स्वराज्य संस्था, अखिल भारतीय स्वराज्य संस्था, मुंबई, ऑगस्ट 2000.

5) सौ. वनिता मोरे जनसंपर्काचे साधने, लघु प्रबंध मार्च 1993

6) कित्ता पृष्ठ कृ.131

7) https://oldgrt.lbp.world

8) https://geeksforgeeks.org

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प्रस्तावना-

एकूण लोकसंख्येच्या जवळपास निम्मी लोकसंख्या असलेल्या महिलांचे आर्थिक, सामाजिक, कौटुंबिक, कृषी, उद्योग, सेवा अशा विविध घटकांमध्ये अनन्यसाधारण असे महत्त्व आहे. ग्रामीण अर्थव्यवस्थेमध्ये तर शेती व शेतीपूरक व्यवसाय, प्रक्रिया उद्योग, पशुपालन, घरगुती उद्योग, अन्नप्रक्रिया आणि कुटुंब व्यवस्थेमध्ये महिलांची भूमिका अत्यंत महत्त्वाची आहे असे असले तरी निर्णय प्रक्रियेत त्यांचा सहभाग आजही मर्यादित स्वरूपाचाच आहे. बदलत्या काळानुसार विविध शासकीय योजना नियम कायदे व आर्थिक घटकांचे वाढलेले महत्त्व यामुळे महिला सक्षमीकरणाची वाटचाल हळुवार का होईना परंतु होत असल्याचे दिसून येत आहे ग्रामीण भागातील महिला देखील बँके च्या माध्यमातून आर्थिक व्यवहार करीत आहेत. स्वयंसहायता बचत गटांच्या(SHG)माध्यमातून महिलांना पैशाची बचत, कर्ज मिळविणे, स्वयंरोजगार आणि उद्योजकतेच्या पर्यायाने स्वावलंबनाच्या संधी उपलब्ध होत आहेत. त्यामुळे महिलांच्या आर्थिक विकासाबरोबरच सामाजिक सक्षमीकरणालाही गती मिळत आहे.

संशोधनाची उद्दिष्टे:

1. ग्रामीण महिलांच्या आर्थिक स्थितीचा अभ्यास करणे.
2. ग्रामीण महिलांच्या सक्षमीकरणांमध्ये बचत गटांची भूमिका अभ्यासणे.
3. ग्रामीण महिलांच्या उत्पन्नातील बदलांचा अभ्यास करणे.
4 रोजगार निर्मितीत स्वयंसहायता बचत गटांची परिणामकारकता तपासणे.
5. ग्रामीण विकासामध्ये बचत गटांचे महत्त्व अभ्यासणे.

संशोधनाची गृहीतके-

1. स्वयंसहायता बचत गटामुळे ग्रामीण महिलांच्या आर्थिक स्थितीत सुधारणा झाली आहे.
2. स्वयंसहायता बचत गटांमुळे महिलांमध्ये आर्थिक स्वावलंबन घडून येत आहे
3. बचत गटांमुळे बचत, व्याज ,अनुदान ,कर्ज इत्यादी घटकाबद्दल ग्रामीण महिलांमध्ये आर्थिक साक्षरता वाढत आहे.
4. स्वयंसहायता बचत गटामुळे ग्रामीण महिलांच्या आर्थिक व सामाजिक स्थितीमध्ये सुधारणा होत आहे.
5. स्वयंसहायता बचत गटामुळे ग्रामीण महिलांमध्ये उद्यमशीलता वाढून रोजगार निर्मिती घडून येत आहे.

स्वयंसहायता बचत गटाची संकल्पना-

स्वयंसहायता बचत गट (Self Help Group - SHG) म्हणजे समान आर्थिक व सामाजिक परिस्थिती असलेल्या साधारणतः 10 ते 20 व्यक्तींचा स्वेच्छेने तयार झालेला लहान गट होय. या गटातील सदस्य नियमित बचत करतात, त्या बचतीतून परस्परांना कर्ज देतात आणि नंतर बँकेशी जोडले जाऊन (SHG–Bank Linkage) आर्थिक व सामाजिक विकास साधतात.

बचत गटाची व्याख्या:

नाबार्ड (NABARD) - -स्वयंसहायता बचत गट हा समान सामाजिक-आर्थिक पार्श्वभूमी असलेल्या लोकांचा लहान, अनौपचारिक व स्वेच्छेने स्थापन झालेला गट आहे, जो नियमित बचत करून सामूहिक निधी तयार करतो आणि सदस्यांच्या गरजेनुसार त्यातून कर्जपुरवठा करतो.

बचत गटाचा इतिहास:

जागतिक पार्श्वभूमी-

स्वयंसहायता गटाची आधुनिक संकल्पना बांगलादेशातील ग्रामीण बँकेचे संस्थापक प्रा. मुहम्मद युनूस यांनी 1970 च्या दशकात विकसित केली.

1975–76 मध्ये ग्रामीण बँकेच्या माध्यमातून गरीबांना तारणाशिवाय कर्ज देण्याची कल्पना यशस्वी ठरली आणि सूक्ष्म वित्त (Microfinance) चळवळीला चालना मिळाली.

भारतातील इतिहास-

1980 च्या दशकात MYRADA आणि SEWA सारख्या स्वयंसेवी संस्थांनी बचत गटांची संकल्पना प्रत्यक्षात राबविण्यास सुरुवात केली. 1986–87 मध्ये नाबार्ड (NABARD) ने भारतात बचत गट संकल्पनेला प्रोत्साहन देण्यास सुरुवात केली.

- 1992 मध्ये नाबार्डने SHG–Bank Linkage Programme (SHG-BLP) सुरू केला. या योजनेमुळे बचत गटांना औपचारिक बँकिंग व्यवस्थेशी जोडण्यात आले.
- 1993 मध्ये भारतीय रिझर्व्ह बँकेने (RBI) बचत गटांना बँकेत बचत खाते उघडण्यास आणि कर्ज मिळविण्यास परवानगी दिली.

पुढे स्वर्णजयंती ग्राम स्वरोजगार योजना (SGSY) आणि राष्ट्रीय ग्रामीण आजीविका अभियान (NRLM/DAY-NRLM) यांच्या माध्यमातून बचत गट चळवळीचा देशभर मोठ्या प्रमाणावर विस्तार झाला.

ग्रामीण महिलांच्या आर्थिक विकासात स्वयंसहायता बचत गटांचे महत्त्व :

1. बचतीची सवय निर्माण करणे-

बचत गटामधील नियमित बचतीमुळे महिलांमध्ये आर्थिक शिस्त निर्माण होते. अगदी कमी रकमेपासून बचत सुरू करून गटाचा सामूहिक निधी तयार केला जातो. या निधीचा उपयोग सदस्यांच्या तातडीच्या आर्थिक गरजा पूर्ण करण्यासाठी करता येतो.

2. संस्थात्मक कर्जाची उपलब्धता-

पूर्वी ग्रामीण महिलांना अनेक वेळा सावकारांकडून कर्ज घ्यावे लागत असे. SHGमुळे महिलांना बँका आणि इतर औपचारिक वित्तीय संस्थांशी जोडले जाण्याची संधी मिळते. यामुळे तुलनेने सुरक्षित व संस्थात्मक कर्जव्यवस्थेचा वापर वाढतो.

3. स्वयंरोजगाराला चालना-

SHGच्या माध्यमातून मिळणारे कर्ज महिलांना विविध लघु व कुटीर उद्योगासाठी वापरता येते.

ज्यामध्ये

1. दुग्धव्यवसाय
2. शेळीपालन
3. कुक्कुटपालन
4. किरकोळ व्यवसाय
5. शिवणकाम

6. अन्नप्रक्रिया

7. मसाले उत्पादन

8. पापड, लोणची, चटणी निर्मिती

9. अगरबत्ती उत्पादन

10. हस्तकला

11. कृषीपूरक व्यवसाय इत्यादी

यामुळे महिलांना कुटुंबाच्या उत्पन्नात थेट योगदान देता येते.

4. महिलांच्या उत्पन्नात वाढ-

उत्पन्ननिर्मितीचे उपक्रम सुरू झाल्यानंतर महिलांच्या वैयक्तिक तसेच कौटुंबिक उत्पन्नात वाढ होण्याची शक्यता असते. उत्पन्नाचे विविधीकरण झाल्यामुळे ग्रामीण कुटुंबांची आर्थिक असुरक्षितता कमी होण्यास मदत होते.

5. आर्थिक स्वावलंबन-

बचत गटामुळे महिलांना केवळ कर्ज मिळते असे नाही तर स्वतःच्या आर्थिक निर्णयांमध्ये सहभागी होण्याची त्यामुळे संधी मिळते.स्वतःच्या बचतीचा आणि उत्पन्नाचा अनुभव महिलांमध्ये आर्थिक आत्मविश्वास निर्माण करतो.

6. आर्थिक साक्षरता-

बचत, कर्ज, व्याज, परतफेड, बँक खाते, विमा, डिजिटल पेमेंट, सरकारी योजना आणि आर्थिक नियोजन याबाबत महिलांना अनुभव मिळतो.

यामुळे महिलांची आर्थिक साक्षरता वाढण्यास मदत होते.

7. वित्तीय समावेशन-

SHGs ग्रामीण महिलांना औपचारिक बँकिंग व्यवस्थेशी जोडण्याचे महत्त्वपूर्ण माध्यम आहेत. बँक खाते, कर्ज, विमा, पेन्शन आणि डिजिटल वित्तीय सेवांचा वापर वाढण्यास मदत होते.

8. महिलांच्या निर्णयक्षमतेत वाढ-

आर्थिक व्यवहारांमध्ये महिलांचा सहभाग वाढल्यामुळे घरातील खर्च, मुलांचे शिक्षण, आरोग्य, बचत आणि व्यवसायाशी संबंधित निर्णयांमध्ये त्यांचा सहभाग वाढू शकतो.

9. सामूहिक शक्ती निर्माण-

एकटी महिला बाजारपेठ, बँक किंवा सरकारी यंत्रणेशी व्यवहार करताना अनेक अडचणींना सामोरी जाऊ शकते. परंतु सामूहिक गटामुळे महिलांची सौदेबाजीची क्षमता वाढते.

10. सामाजिक सक्षमीकरण-

बचत गटाच्या बैठका महिलांना घराबाहेर येऊन सामूहिक चर्चा करण्याची संधी देतात. त्यामुळे नेतृत्वगुण, संवादकौशल्य आणि सार्वजनिक संस्थांशी संपर्क वाढतो.

असे अनेक प्रत्यक्ष-अप्रत्यक्ष लाभ महिलांना स्वयंसहायता बचत गटाच्या माध्यमातून मिळतात.

स्वयंसहायता बचत गटाची काही महत्त्वाची आकडेवारी (2023–24) पुढीलप्रमाणे

√ बँकांमध्ये बचत खाते असलेले बचत गटांची एकूण संख्या

144.22 लाख

√ महिला बचत गटांची एकूण संख्या

120.44 लाख (83.52%)

√ बचत रक्कम-

65,089.15 कोटी रुपये

√ वर्षभरात कर्ज मिळालेले बचत गट-

54.82 लाख

√ वितरित कर्जाची रक्कम-

2,09,285.87 कोटी रुपये

√ 31 मार्च 2024 रोजी प्रलंबित कर्ज असलेले बचत गटांची संख्या

77.42 लाख

√ प्रलंबित कर्जाची रक्कम-

2,59,663.73 कोटी रुपये

स्वयंसहायता बचत गटांचा ग्रामीण अर्थव्यवस्थेवर परिणाम-

स्वयंसहायता बचत गट प्रभाव केवळ महिलांपुरता मर्यादित राहत नाही. महिलांच्या आर्थिक सहभागामुळे कुटुंबाच्या उत्पन्नात वाढ होऊ शकते आणि त्याचा परिणाम स्थानिक अर्थव्यवस्थेवर होतो.

महिलांनी तयार केलेल्या वस्तूंची विक्री स्थानिक बाजारात झाल्यामुळे ग्रामीण भागातील उत्पादन, रोजगार आणि व्यापाराला चालना मिळते. त्यामुळे स्वयंसहायता बचत गट हे ग्रामीण अर्थव्यवस्थेतील सूक्ष्म स्तरावरील आर्थिक क्रियाशीलता वाढविणारे साधन ठरू शकतात.

स्वयंसहायता बचत गट आणि सरकारी योजनांचा संबंध-

ग्रामीण महिलांना आर्थिकदृष्ट्या सक्षम करण्यासाठी विविध सरकारी योजनांचा उपयोग होतो. DAY-NRLM हे ग्रामीण गरीब कुटुंबांना स्वयं-सहायता गटांमध्ये संघटित करण्यासाठी महत्त्वाचे राष्ट्रीय अभियान आहे.

याशिवाय महिलांना कौशल्यविकास, वित्तीय समावेशन, उद्योजकता, कृषीपूरक व्यवसाय आणि बाजारपेठेशी जोडण्यासाठी विविध शासकीय कार्यक्रम राबविले जातात.

महाराष्ट्रातील स्वयंसहायता बचत गट

महाराष्ट्रात ग्रामीण महिलांच्या आर्थिक सक्षमीकरणासाठी बचत गटांचे मोठे जाळे विकसित झाले आहे. ग्रामीण आजीविका, महिला आर्थिक विकास महामंडळ (MAVIM), महाराष्ट्र राज्य ग्रामीण जीवनोन्नती अभियान आणि बँकिंग संस्थांच्या माध्यमातून महिलांना बचत गटांशी जोडले जाते.

विशेषतः मराठवाड्यासारख्या ग्रामीण व कृषिप्रधान प्रदेशात बचत गट महिलांना कृषीपूरक व्यवसाय, पशुपालन, अन्नप्रक्रिया, लघुउद्योग आणि सेवा क्षेत्रातील उपक्रम सुरू करण्यासाठी मदत करू शकतात.

प्रमुख निष्कर्ष

1. स्वयंसहायता बचत गट ग्रामीण महिलांच्या आर्थिक समावेशनाचे महत्त्वपूर्ण माध्यम आहेत.
2. नियमित बचतीमुळे महिलांमध्ये आर्थिक शिस्त निर्माण होते.
3. बँक कर्जाशी जोडणीमुळे संस्थात्मक वित्तीय साधनांचा वापर वाढतो.
4. SHGs स्वयंरोजगार व सूक्ष्मउद्योगांना चालना देऊ शकतात.
5. महिलांच्या आर्थिक निर्णयक्षमतेमध्ये वाढ होण्यास मदत होते.
6. आर्थिक साक्षरता व बँकिंग व्यवहारांचे ज्ञान वाढते.
7. सामूहिक कृतीमुळे महिलांची सौदेबाजीची क्षमता वाढते.
8. SHGsचा प्रभाव कुटुंबाच्या आर्थिक स्थितीबरोबरच ग्रामीण स्थानिक अर्थव्यवस्थेवरही पडतो.
9. कर्ज उपलब्धतेबरोबर बाजारपेठ, कौशल्य आणि तंत्रज्ञानाची जोड आवश्यक आहे.

10. स्वयंसहायता बचत गटाच्या आर्थिक परिणामकारकतेसाठी बचत → कर्ज → उत्पादन → मूल्यवर्धन → बाजारपेठ या संपूर्ण साखळीचा विकास आवश्यक आहे.

संदर्भसूची

1. NABARD – Status of Microfinance in India, विविध वर्षे.
2. NABARD – SHG-Bank Linkage Programme संबंधित अहवाल.
3. Ministry of Rural Development, Government of India – DAY-NRLM संबंधित अहवाल.
4. Ministry of Rural Development – Annual Report, Government of India.
5. Government of India – Economic Survey of India, विविध वर्षे.
6. महिला आर्थिक विकास महामंडळ (MAVIM), महाराष्ट्र – वार्षिक अहवाल.
7. महाराष्ट्र राज्य ग्रामीण जीवनोन्नती अभियान – वार्षिक अहवाल.

ग्रंथ, वृत्तपत्रे व सोशल मिडियाचा नंदुरबार जिल्ह्यातील आदिवासी जनजीवनावर सकारात्मक परिणाम

श्री. किशोर रामदास माळी

ग्रंथपाल- हस्ती पब्लिक स्कूल अँड जू. महाविद्यालय, दोंडाईचा, ता. शिंदखेडा. जि. धुळे

प्रस्तावना-

आदिवासी समाज म्हणजे "अगदी प्राचीन काळातील समाज" किंवा 'अगदी मूळचे रहिवासी' असा अर्थ मानवशास्त्रज्ञ करीत नाही. ऐतिहासिक दृष्टीने पाहता इतर कोणत्याही समाजाला जेवढा दीर्घकालीन इतिहास लाभलेला आहे. तेवढाच इतिहास आदिवासी समाजाच्या वाटेला आलेला आहे. तेव्हा आदिवासी समाज म्हणजे कोणत्याही देशातील आधीपासून वास्तव्य असलेला समाज नाही. तसेच इतर कोणत्याही समाजापेक्षा गौण व निकृष्ट असणाऱ्या समाजाला उद्देशूनही 'आदिवासी समाज' म्हणत नाही. विविध विचारवंतानी आदिवासी समाजाच्या निरनिराळ्या व्याख्या केल्या आहेत.

1) गिलिन व गिलिन यांच्या मते, " एका विशिष्ट भूप्रदेशावर राहणारा, समान बोलीभाषा बोलणारा व समान सांस्कृतीक जीवन जगणारा, पण अक्षर ओळख नसलेला स्थानीय गटांच्या समुच्चयाला 'आदिवासी समाज' म्हणतात.
2) डब्लू जे. पेरी यांनी आदिवासी समाजाची कमीत–कमी वैशिष्ट्ये सांगितलेली आहेत. ते म्हणतात, "समान बोलीभाषा बोलणाऱ्या व एकाच समान भूप्रदेशावर वास्तव्य करणाऱ्या समाजाला 'आदिम समाज' म्हणतात.
3) डॉ. रिव्हर्स म्हणतात,"ज्या समूहातील सदस्य एक समान बोलीभाषा बोलतात, युद्ध वगैरे सारख्या उद्दिष्ट्य पूर्तीकरिता एक होऊन झटतात, अशा सरळ व साध्या सामूहिक समाजाला 'आदिवासी समाज' म्हणतात.
4) इ. स. 1962 साली शिलॉंग येथे भरलेल्या आदिवासी परिषदेत खालील प्रमाणे आदिवासी समाजाची व्याख्या करण्यात आली आहे.

   "एका समान भाषेचा वापर करणाऱ्या एकाच पूर्वजापासून उत्पत्ती सांगणारा, एका विशिष्ट भू-प्रदेशात वास्तव्य करणाऱ्या, तंत्र शास्त्रीय ज्ञानाच्या दृष्टीने मागासलेला, अक्षर ओळख नसलेल्या व रक्तसंबंधावर आधारित, सामाजिक व राजकीय रीतीरिवाजांचे प्रामाणिकपणे पालन करणाऱ्या एक जिन्सी गटाला "आदिवासी समाज" म्हणतात.

आदिवासी ही काय विशीष्ट जात नव्हे. तर समान वैशिष्ट्ये धारण करणाऱ्या अनेक जमातींचा तो समूह आहे. त्यामुळे आदिवासी हा समूहदर्शक शब्द आहे. भारतातील अनेक जमाती त्यात मोडतात. महाराष्ट्रातील गोंड, भिल्ल, कोरकू, कोलाम, पारधी, हलबा-हलबी, परधान, कोकणा, महादेव कोळी, वारली अशा इतर अनेक जमातींच्या बोलीभाषा वेगवेगळ्या व बोलण्याच्या लकबी निरनिराळ्या आहेत. ह्या आदिवासी जमाती महाराष्ट्राच्या गोंडवाना, सह्याद्री आणि सातपुडा भागात वेगवेगळ्या प्रदेशात वास्तव्यात आहेत.

स्वातंत्र्यपूर्वी अज्ञान, अविद्या व अंधश्रद्धा यांच्या जाळयात आदिवासी समाज अडकून पडला होता. या काळात आदिवासी समाजाची स्थिती फारच दयनीय व शोचनीय होती. मात्र स्वातंत्र्यानंतर आपल्या विविध राजकीय, सामाजिक घडामोडी आदिवासींकरिता शासनाने योजलेल्या कल्याणकारी योजना, सर्वांसाठी मोफत शिक्षण, मुलींसाठी वसतीगृहे, आश्रम शाळा याचा परिणाम म्हणून आदिवासी समाज मोठ्या वेगाने जागरूक झालेला आहे. परिस्थितीशी संघर्ष करून वृत्तपत्रे, ग्रंथ तसेच सोशल मिडियाचा अनुकूल प्रभावामुळे आज नंदुरबार सारख्या संपूर्ण आदिवासी जीवनावर सकारात्मक परिणाम झालेला दिसून येतो. नवशिक्षित आदिवासी तरुण ऊच्चशिक्षित तर

झालेलाच आहे. पण थेट गल्लीपासून ते दिल्लीपर्यन्त नंदुरबार सारख्या आदिवासी समाजाने धडक मारलेली आहे. जिल्ह्यातील आदिवासी साहित्य निर्मितीही करू लागला आहे. क्रीडा क्षेत्रातही आदिवासी समाजाने चांगलीच झेप घेतलेली आहे.

1998 साली धुळे जिल्ह्यापासून स्वतंत्र आदिवासी बहुल जिल्हा म्हणून नंदुरबार जिल्ह्याची निर्मिती झाली आहे. नंदुरबार जिल्ह्याची निर्मिती झाल्यापासून ते आज 2026 या अठ्ठावीस वर्षात येथील आदिवासींच्या शैक्षणिक, सामाजिक, आर्थिक प्रगतीत मोठी भर पडलेली आहे. यामध्ये वृत्तपत्रे, ग्रंथ तसेच सोशल मिडिया यांची भूमिका अतिशय महत्वाची आहे. वृत्तपत्रे आणि सोशल मिडियामुळे देश परदेशातील सर्व इत्यंभूत माहीती उपलब्ध होत असल्याने, येथील आदिवासी समाज इतर सुसंस्कृत समाजाशी स्पर्धा करू लागला आहे. आज मराठा, कुणबी, तेली, माळी या समाजांच्या बरोबरीने नंदुरबार जिल्ह्यातील आदिवासी समाज खांद्याला खांदा लावून काम करत आहे.

नंदुरबार जिल्ह्याचे भौगोलिक स्थान-

महाराष्ट्रातील सर्वात उत्तरेकडील जिल्हा असे या जिल्ह्याचे वर्णन केले जाते. महाराष्ट्र राज्याच्या वायव्य सीमेवर असलेल्या या जिल्ह्याच्या पश्चिमेस गुजरात व उत्तरेस मध्यप्रदेश या राज्यांचा भाग आहे. जिल्ह्याच्या उत्तर भागात सातपुडयाची पर्वत रांग असून या पर्वत रांगामुळे नंदुरबार हा जिल्हा मध्यप्रदेश व गुजरात राज्यापसून वेगळा झाला आहे. एकूण आदिवासी लोकसंख्येचा विचार करता राज्यात नंदुरबार जिल्ह्याचा महाराष्ट्रात प्रथम क्रमांक लागतो.

आदिवासी जमाती- एकूण लोकसंख्येशी आदिवासींचे असलेले प्रमाण राज्यातील इतर कोणत्याही जिल्हयापेक्षा नंदुरबार जिल्ह्यात अधिक आहे. म्हणून नंदुरबार जिल्ह्याला आदिवासी जिल्हा म्हणून ओळखले जाते. मावची, पावरा, भिल्ल, कोकणा, धानका, गावीत यासारख्या आदिवासी जमाती येथे बहुसंखेने राहतात.

साक्षरतेचे प्रमाण- 2011 सालच्या जनगणनेनुसार नंदुरबार जिल्ह्याची लोकसंख्या 1646177 इतकी होती. त्यावेळी जिल्ह्यात एकूण साक्षरतेचे प्रमाण 55.78% होते; ज्यामध्ये पुरुष साक्षरतेचे प्रमाण 66.16% तर स्त्री साक्षरतेचे प्रमाण 45.18% इतके होते.

पारंपारिक शेतीऐवजी आधुनिक शेतीकडे वाटचाल-

आजच्या विज्ञान युगात परंपरागत शेती शेतकऱ्यांना परवडणारी नाही. त्यामुळे आज नंदुरबार सारख्या आदिवासी जिल्ह्यातही आदिवासी शेतकऱ्यांकडून शेतीत आधुनिक प्रयोग केले जात आहेत. जिल्ह्यातील बहुतेक भाग हा डोंगराळ व खडकाळ आहे. जिल्ह्यातील बहुसंख्य आदिवासी शेतकरी हे अल्पभूधारक आहेत. जिल्ह्यातील शहादा, तळोदा, अक्कलकुवा आणि धडगाव या तालुक्यांचा काही भाग सातपुडा पर्वतात येत असल्याने या ठिकाणी आजच्या आधुनिक काळात आदिवासी समाजाकडूनही आधुनिक शेती केली जाते. आज जिल्ह्याच्या जवळपास सर्वच भागात टेलिव्हीजन, मोबाईल, वृत्तपत्रे पोहचत आहेत. यामुळे जिल्ह्यातील आदिवासी समाज जगाशी जोडला गेलेला आहे. त्यामुळे आधुनिक शेतीच्या विविध पद्धती जिल्ह्यातील आदिवासी समाज आत्मसात करू लागला आहे. नंदुरबार जिल्ह्यातील अक्कलकुवा तालुक्यात तर अनेक शेतकरी स्ट्रॉबेरीची लागवड करत असतात. नंदुरबार हा आदिवासी अतिदुर्गम भाग, मागासलेला जिल्हा अशी ओळख असणाऱ्या भागातही शासनाच्या कृषी विभागाच्या मार्गदर्शनातून शेतकरी शेतीत स्ट्रॉबेरीची लागवड करून आपले जीवनमान सुधारण्याचा प्रयत्न करत आहेत. येथील आदिवासी शेतकरी विविध माध्यमाचा उपयोग करून आधुनिक तंत्रज्ञानाच्या पद्धतीने शेती उत्पादनात भरीव उत्पन्न मिळवतांना दिसून येत आहे.

आरोग्यविषयक जनजागृती आणि पारंपारिक अंधश्रद्धांचे निर्मुलन –

आज 21 व्या शतकात विज्ञानाने मोठी क्रांती घडवून आणलेली आहे. या क्रांतीमुळे नंदुरबार जिल्ह्यातील आदिवासी समाजातही मोठ्या प्रमाणावर बदल घडताना दिसत आहेत. परिणामी त्यांचे जीवनमान आणि दृष्टीकोन अधिक आधुनिक होत चालले आहे. अलीकडच्या काळात ग्रंथ, वृत्तपत्रे आणि सोशल मिडिया यांसारख्या प्रसारमाध्यमांच्या व्यापक प्रसारामुळे आदिवासी समाजाच्या आरोग्यविषयक दृष्टीकोनात आणि जीवनशैलीत क्रांतिकारक व सकारात्मक बदल घडून आला आहे. वृत्तपत्रातील विशेष आरोग्य पुरवण्या, आरोग्यविषयक शासकीय

जाहिराती आणि स्थानिक भाषेत तयार केलेले डिजिटल संदेश यांच्याद्वारे कुपोषण, सिकलसेल, संसर्गजन्य आजारांविषयी अचूक माहिती थेट लोकांपर्यंत पोहचत आहे. सोशल मिडियावरील स्थानिक डॉक्टर्स आणि सामाजिक संस्थांचे व्हिडिओ पाहिल्यामुळे लोकांच्या मनातील आधुनिक उपचाराबाद्दलची भीती आणि गैरसमज दूर झाले आहेत. पूर्वी आजारपणात भगताकडे जाऊन वेळ वाया घालवणारा समाज, आता आजारपणाच्या सुरवातीच्या टप्प्यातच प्राथमिक आरोग्य केंद्रामध्ये (PHC) किंवा शासकीय रुग्णालयांमध्ये उपचारासाठी जातांना दिसून येत आहे. याशिवाय मातृत्व आरोग्य, बालकांचे लसीकरण आणि स्वच्छता या विषयांवर सोशल मिडिया गृप्स आणि वृत्तपत्रांद्वारे नियमित जनजागृती केली जात आहे. यामुळे उपचारास विलंब होण्याचे प्रमाण कमालीचे घटले असून अंधश्रद्धा मोठ्या प्रमाणावर कमी झालेली दिसून येत आहे. टेलिव्हीजन, मोबाईल यांसारख्या आधुनिक माध्यमांतून होणाऱ्या जनजागृतीमुळे आदिवासी समाजाने अनिष्ट रूढी-परंपराना फाटा दिला आहे. अनेक सण – उत्सव साजरे करतांना तसेच विविध आजारपण घालवण्यासाठी मुक्या प्राण्याची बळी देण्याची प्रथा आज नष्ट झालेली दिसून येत आहे. माहिती आणि तंत्रज्ञानाच्या योग्य वापरामुळे आदिवासी समाजात वैज्ञानिक दृष्टीकोन रुजण्यास सुरवात झाली असून आरोग्याबाबतची ही जागरुकता त्यांचा जीवनमानाचा दर्जा उंचावण्यात अत्यंत महत्वाची ठरत आहे.

शैक्षणिक क्षेत्रात उत्तुंग भरारी –

पूर्वी आदिवासींच्या दयनीय जीवनात निरक्षर हे महत्वाचे कारण होते. निरक्षरतामुळे अनेक हितसंबंध जोपासणारे त्यांचा गैरफायदा घेत. आजघडीला आदिवासींच्या विकासात शिक्षण मोलाची भूमिका बजावत आहे. आदिवासींच्या नवीन पिढीला शिक्षण मिळावे व त्याचबरोबर व्यावसायीक शिक्षण उपलब्ध व्हावे म्हणून नंदुरबार जिल्ह्यात अनेक भागात आदिवासी आश्रम शाळा काढण्यात आलेल्या आहेत. आश्रमशाळेत मुलांना राहणे- खाणे, वह्या- पुस्तके, कपडे या सर्व गोष्टी मोफत पुरविल्या जातात. पूर्वी आदिवासी कुटुंब चांगल्या आर्थिक परिस्थिती अभावी आपल्या मुलांना शाळेत पाठवत नसत. परंतु आज नंदुरबारसारख्या अतिदुर्गम व डोंगराळ भागात वृत्तपत्रे, सोशल मिडिया आणि विविध प्रसार माध्यमांद्वारे शासनाने आदिवासींसाठी लागू केलेल्या सर्व योजनांची माहिती आदिवासी समाजापर्यंत प्रभावीपणे पोहचत आहे. त्यामुळे आदिवासी समाजातील सर्वच वंचित-दुर्लक्षित घटक आज शासकीय योजनांचा लाभ घेऊन शैक्षणिक क्षेत्रात भरारी मारतांना दिसून येत आहे. जिल्ह्यातील आदिवासी समाजातील व्यक्ती आज अनेक शैक्षणिक संस्था, जिल्हा परिषद शाळा तसेच विविध शासकीय-निमशासकीय कार्यालयांमध्ये कार्यरत दिसून येत आहेत. तसेच अनेक बांधव स्पर्धा परीक्षेद्वारे आज मोठ्या पदांवर सेवा बजावत आहेत.

स्पर्धा परीक्षेकरिता ग्रंथालयाचा उपयोग करून घेणारा समाज-

आज नंदुरबार जिल्ह्यात सर्वच महविद्यालयांमध्ये सुसज्ज असे ग्रंथालये आहेत. तसेच 80 सार्वजनिक वाचनालयेही जिल्ह्यात उपलब्ध आहेत. अनेक आदिवासी मुले वरिष्ठ महाविद्यालयात प्रवेश घेतल्यापासून म्हणजे पदवीच्या प्रथम वर्षापासून स्पर्धा परीक्षेची तयारी करतांना दिसून येतात. म्हणजे पदवी पूर्ण होईपर्यंत चांगल्या प्रकारे स्पर्धा परीक्षेची तयारी पूर्ण करण्यासाठी महाविद्यालयातील तसेच सार्वजनिक वाचनालय असेल यासारख्या ग्रंथालयांचा उपयोग आदिवासी विद्यार्थी करतांना दिसत आहेत. खासकरून अशा ग्रंथलयामध्ये स्पर्धा परीक्षेच्या साहित्यासोबत मराठी व इंग्रजी भाषेचे ज्ञान समृद्ध करणाऱ्या पुस्तकांचा लाभ विद्यार्थी घेतांना दिसून येतात. आज नंदुरबार सारख्या आदिवासी जिल्ह्यात स्पर्धा परीक्षेबद्दल असलेली भीती हळू–हळू कमी झाली आहे. ग्रामीण भागातील विद्यार्थी आज स्पर्धा परीक्षांद्वारे लोकसेवा आयोगाच्या सेवेत कार्यरत आहेत. जिल्ह्यातील शैक्षणिक व सार्वजनिक ग्रंथलयांचा उपयोग करून आज अनेक आदिवासी तरुण सरकारी सेवेत रुजू झाल्याचे पाहावयास मिळते.

वृत्तपत्र क्षेत्रामुळे झालेला विकास-

आज नंदुरबार सारख्या आदिवासी डोंगराळ व दुर्गम भागातही विविध माध्यमांच्या साहाय्याने आज घरपोच वृत्तपत्र पोहचत आहे. मग यामध्ये टपालाने येणारे अंक असोत किंवा सोशल मीडियावरील ऑनलाईन पेपर असेल. जिल्ह्यातील प्रत्येक आदिवासीला आज वृत्तपत्राच्या माध्यमातून जगातील सर्व घडामोडी वाचायला मिळत आहेत. शिवाय विद्यार्थ्यांसाठी शिष्यवृत्ती योजना, शेतकऱ्यांसाठी फळबाग योजना, ठिबक सिंचन योजना, पिकविमा योजना,

पिक कर्ज या सर्व गोष्टींची माहीती वृत्तपत्राच्या माध्यमातून सर्व आदिवासींपर्यंत पोहचत आहे. परिणामी या योजनांसाठी पात्र असलेले आदिवासी बांधव योग्य माहिती मिळाल्यामुळे योजनांचा लाभ घेऊन आपल्या कुटुंबाचा आर्थिक व सामाजिक विकास साधतांना दिसत आहे. या माहितीतून मिळालेल्या ज्ञानामुळे समाजात शिक्षणाचे महत्व वाढले आहे. एवढेच नाही तर, अनेक आदिवासी बांधव आता केवळ वाचक राहिले नसून ते स्वतः वृत्तपत्र बातमीदार म्हणूनही उत्कृष्ट काम करत आहेत. ज्यामुळे त्यांच्या समुदायातील समस्यांना मुख्य प्रवाहात आवाज मिळत आहे.

भौतिक सुविधांमध्ये बदल-

पूर्वी नंदुरबार जिल्ह्यातील आदिवासी समाज प्रामुख्याने मातीच्या तूरीच्या किंवा कापसाच्या काड्यांनी बनवलेल्या कच्च्या घरांमध्ये राहत असे. काही ठिकाणी घरे बांबूच्या काड्या उभ्या चिरून त्यांच्या भिंती तयार करून त्यावर शेणाचा लेप लावला जात असे. मात्र आज तंत्रज्ञानाचा प्रसार आणि सामाजिक जनजागृतीमुळे परिस्थितीत मोठा बदल झाला आहे. जिल्ह्यातील बहुतांश आदिवासी समाज आता सिमेंटच्या घरामध्ये वास्तव्य करत आहे. माहिती प्रसार माध्यमांमुळे जगभरातील जीवनशैलीशी संपर्क आल्याने त्यांच्या राहणीमानातही आधुनिकता आली आहे. आज घरोघरी टी. व्ही. मोबाईल, फ्रीज, कूलर यांसारख्या आधुनिक भौतिक सुविधांचा वापर वाढतांना दिसत आहे. ग्रंथ, वृत्तपत्रे आणि सोशल मीडियाद्वारे मिळालेल्या ज्ञानामुळे आदिवासी समाजाची जीवनशैली अधिक समृद्ध झाली असून ते आधुनिक सुख-सुविधांचा योग्य आणि सकारात्मक वापर करत मुख्य प्रवाहात आपले स्थान निर्माण करत आहेत.

आर्थिक स्थिती आणि आधुनिक शेतीवर प्रसारमाध्यमांचा प्रभाव -

नंदुरबार जिल्ह्यातील आदिवासी हा प्रामुख्याने स्थायिक झालेला शेतकरी समाज आहे. सामाजिक दृष्टीने हा पितृवंशीय समाज असून परंपरेने ही निष्णात तिरंदाजाची जमात समजली जाते. सुरवातीला जिल्ह्यातील आदिवासी समाज कुदळीने खणून 'स्थानपालट' पद्धतीने शेती करत असे. परंतु कालांतराने आदिवासी समाजाने एकाच जागी स्थिर होऊन लाकडी औजारांच्या साहाय्याने नांगरट करून शेती करण्यास सुरवात केली. आता ही जुनी पद्धत मागे पडली असून आदिवासी समाज सध्या आधुनिक तंत्रज्ञानाचा वापर करून शेती करू लागला आहे. कृषिविषयक ग्रंथ, पुस्तके व मासिकांमुळे नंदुरबार मधील आदिवासी शेतकरी आता पारंपारिक शेतीकडून आधुनिक शेतीकडे वळले आहेत. दैनिक वृत्तपत्रे आणि युट्यूब आणि इतर सोशल मिडीयाच्या माध्यमातून आधुनिक खते, सुधारित बियाणे, ठिबक सिंचन तंत्रज्ञान आणि बाजारभावाची माहिती त्वरित मिळते. यामुळे शेतीतील उत्पन्न वाढून आदिवासी समाजाची आर्थिक स्थिती भक्कम होत आहे.

ईतर जगाशी संपर्क-

पूर्वी नंदुरबार जिल्ह्यातील दुर्गम व डोंगराळ भागात दळणवळणाच्या आणि माहितीच्या पुरेशा सुविधा उपलब्ध नव्हत्या. त्यामुळे येथील आदिवासींचा बाह्य जगाशी संपर्क कितीतरी वर्षे तुटलेला होता. मात्र आज वृत्तपत्रे, ग्रंथ तसेच सोशल मिडीयाच्या प्रसारामुळे दुर्गम भागातील समस्यांना वाचा फुटली आहे. माध्यम जनजागृतीमुळे आज या दुर्गम भागात बहुतांश ठिकाणी चांगल्या रस्त्यांची कामे झाली असून घराघरात वीज पोहचली आहे. दूरदर्शन आणि मोबाईलचा वापर घरोघरी वाढल्यामुळे जगभरात काय चालले आहे, याची माहिती आदिवासी बांधवाना तात्काळ मिळत आहे. ग्रंथ आणि वृत्तपत्रातील ज्ञानामुळे त्यांच्यातील विचारसरणी समृद्ध झाली आहे, तर सोशल मीडियामुळे ते आपल्या संस्कृतीची व समस्यांची माहिती जगासमोर मांडू शकत आहेत. एकूणच वृत्तपत्र, ग्रंथ आणि सोशल मिडियाच्या माद्यमातून नंदुरबार जिल्ह्यातील आदिवासी जनजीवनाचा इतर जगाशी संपर्क वाढला असून त्याचा सकारात्मक परिणाम त्यांच्या विकासावर दिसून येत आहे.

सारांश-

पूर्वी नंदुरबार जिल्ह्यातील आदिवासी समाजाची स्थिती अतिशय बिकट होती. मात्र काळाच्या ओघात ग्रंथ, वर्तमानपत्रे आणि डिजिटल सोशल मिडीयाच्या व्यापक प्रसारामुळे या स्थितीत सकारात्मक बदल घडून आलेला आहे. विविध प्रसार माध्यमांमुळे मिळणारे आधुनिक ज्ञान आणि शासकीय योजनांची माहिती यामुळे येथील आदिवासी बांधव पारंपारिक अंधश्रद्धा व जुन्या पद्धती मागे टाकून प्रगतीच्या दिशेने वाटचाल करत आहेत. ग्रंथालयाच्या सुविधा, वृत्तपत्रे आणि सोशल मिडीयाचा योग्य वापर करून आज नंदुरबार जिल्ह्यातील आदिवासी समाज ईतर समाजाच्या

बरोबरीने पुढे येत आहे. थोडक्यात सांगायचे तर माहिती आणि दळणवळणाच्या आधुनिक साधनांनी आदिवासी जनजीवनाच्या सामाजिक, आर्थिक, शैक्षणिक व आरोग्यविषयक स्थितीत क्रांतिकारक बदल घडवून आणले आहेत.

संदर्भ-

1) गारे,गोविंद(2010).आदिवासी लोककथा,पुणे:कॉन्टिनेन्टल प्रकाशन.
2) नाडगोंडे,गुरूनाथ(2012).भारतीय आदिवासी,पुणे:कॉन्टिनेन्टल प्रकाशन.
3) गारे,गोविंद(2012).महाराष्ट्रातील आदिवासी जमाती,पुणे:कॉन्टिनेन्टल प्रकाशन.
4) मस्के,दिपक (विना वर्ष).नंदुरबार जिल्हा विशेष,नागपूर:श्री गुरुकुल मस्के प्रकाशन.
5) मोरे,विजय(2019).आदिवासी विकास आणि आरोग्य समस्या,जळगाव: प्रशांत पब्लिकेशन.
6) https://www.allresearchjournal.com/archives
7) https://saamtv.esakal.com/maharashtra
8) https://anvpublication.org/Journals

"महिलांच्या आरोग्य विकासात आशा स्वयंसेविकांची कार्यभूमिका व त्यांच्या समोरील आव्हाने" एक अभ्यास

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Abstract

"महाराष्ट्र राज्यातील लातूर जिल्ह्यातील काही प्राथमिक आरोग्य केंद्रास भेटी देऊन तसेच तेथील आशा ASHA स्वयंसेवकाकडून प्रश्नावलीच्या माध्यमातून मिळविलेल्या तथ्यांच्या आधारे ग्रामीण महिलांच्या आरोग्य विकासात अशा स्वयंसेविकांची भूमिका आणि त्यांच्या समोरील आव्हानांचा शोध घेण्यात आला. प्राथमिक आरोग्य केंद्र आणि गाव यांच्यातील एक दुवा म्हणून आशाASHA स्वयंसेविका गरोदर माता, लहान मुले,किशोरवयीन मुलींच्या आरोग्य सेवा, लसीकरण, पोषण आणि सुरक्षित बाळंतपणासाठी प्रत्यक्ष जनतेशी संपर्क प्रस्थापित करून समाजामध्ये आरोग्य विषयक जाणीव जागृती निर्माण करीत आहे. सदरिल संशोधन अध्ययनांती सारांशरुपाने असे स्पष्टपणे नमुद करता येते की, आशा च्या भूमिकेमुळे राष्ट्रीय ग्रामीण आरोग्य अभियानास मूर्त स्वरूप प्राप्त झाल्याचे दिसून येते. महिलांना आरोग्य विषयी शिक्षित करून जागृत करून महिलाना सक्षम बनविण्यात आशा ASHA स्वयंसेविका मौल्यवान योगदान देत आहेत. विशेषतः ग्रामीण पातळीवरील बालमृत्यू रोखणे, माता मृत्यू दर कमी करणे, शासकीय संस्थेत प्रसूतीचे प्रमाण वाढविणे इत्यादी बाबत आशाASHA स्वयंसेविका समर्पित भावनेतून राष्ट्र उभारणीसाठी योगदान देत आहे. मात्र शासकीय कर्मचाऱ्याप्रमाणे आशाASHA ना नोकरीत स्थिरता नाही, पगार नाही, सोई सवलती दिल्या जात नाहीत त्यामुळे आशाचे मानसिक खच्चीकरण होत आहे. त्यांना अनेक समस्यांना तोंड द्यावी लागते. या सर्व बाबींचा अभ्यास प्रस्तुत संशोधन लेखात करण्यात आलेला आहे."

सदरील संशोधन लेख शैक्षणिक नियोजन व विकास विभाग, स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड यांनी , Minor Research Project साठी मान्यता दिलेल्या "लातूर जिल्ह्यातील आशा स्वयंसेविकांच्या भूमिकांचा चिकित्सक अभ्यास" या विषयासाठीच्या लघू शोध प्रकल्पाकरिता पकाशित करण्यात येत आहे.

प्रस्तावना :

निरोगी जीवन हे मनुष्य प्राण्यांची मूलभूत गरज आहे. चांगल्या आरोग्याशिवाय कोणतीही व्यक्ती जीवनाचा आनंद घेऊ शकत नाही. जागतिक आरोग्य संघटनेच्या(डब्ल्यू.एच.ओ) मार्गदर्शनानुसार केंद्र सरकार आरोग्य विषयक धोरणांची आखणी करून त्यांची अंमलबजावणी करीत आहे. केंद्र स्तरावरील आरोग्य विभागाने देशातील सर्व जनतेचे आरोग्य चांगले राहावे म्हणजेच समाज निरोगी तर देश निरोगी या भावनेने काही राष्ट्रीय आरोग्य धोरण निर्माण करण्यात आलेली आहेत. या धोरणांच्या माध्यमातून सर्वसामान्य जनतेला आरोग्यविषयक मोफत सुविधा आणि त्या सुविधा रास्त दरात उपलब्ध करून देणे, तसेच कमीत कमी अंतरावर ती उपलब्ध झाली पाहिजे या दृष्टीने प्रयत्न केलेली दिसून येतात. कारण देशातील बालमृत्यूचे प्रमाण, माता मृत्यूचे प्रमाण, जन्मदर, मृत्युदर, वेगवेगळे जीवघेणे आजार यावर मात करून आरोग्य संपन्न समाज निर्माण करण्यासाठी काही ठोस पाऊले उचले जाणे अत्यंत आवश्यक होते. परंतु आजही या धोरणांची फलनिष्पत्ती काय आहे? असा प्रश्न सर्वसामान्य जनतेला पडल्याशिवाय राहत नाही. कारण अजूनही बऱ्याच मोठ्या प्रमाणात आरोग्याच्या समस्या आ वासून उभ्या आहेत. त्यामुळे भारतातील आरोग्य

यंत्रणा बळकट करण्यासाठी १२ एप्रिल २००५ रोजी राष्ट्रीय ग्रामीण स्वास्थ्य मिशन (NRHM) अंतर्गत भारत सरकारच्या आरोग्य व कुटुंब कल्याण मंत्रालयाद्वारे आशा (ASHA-Accredited Social Health Activist) योजनेची सुरुवात करण्यात आली. ग्रामीण भागातील शेवटच्या घटकापर्यंत आरोग्य सेवा पोहोचवण्यासाठी आणि माता-बाल मृत्यू दर कमी करण्यासाठी या योजनेची आखणी करण्यात आली. आज ही यंत्रणा जगातील सर्वात मोठ्या समुदाय आरोग्य कार्यक्रमांपैकी एक आहे. राष्ट्रीय आरोग्य अभियानाचा एक अत्यंत महत्त्वाचा भाग असलेली "आशा " ही मान्यताप्राप्त सामाजीक आरोग्य कार्यकर्ता आहे. ग्रामीण भागातील आरोग्य यंत्रणा आणि स्थानिक नागरिक यांच्यात आशा एक महत्त्वाचा दुवा म्हणून काम करते. 2005 मध्ये सुरू झालेली ही योजना ग्रामीण व शहरी भागातील सीमांतर्गत समुदायांना सार्वजनिक आरोग्य व्यवस्थेशी जोडण्याचे काम करते. ग्रामीण भागातील आरोग्याची स्थिती सुधारण्याच्या दृष्टीने आशा स्वयंसेवकाची भूमिका अतिशय महत्त्वपूर्ण आहे.

संशोधन अध्ययनाचे उद्दिष्टे :

1) महिलांच्या आरोग्य विकासाच्या द्रष्टीने "आशा" ASHA स्वयंसेविकेच्या भूमिका अभ्यासणे.

2) "आशा" ASHA स्वयंसेविकांना सामोरे जावे लागणाऱ्या समस्यांचा शोध घेणे.

संशोधन अध्ययनाचे गृहीतके :

1) राष्ट्रीय ग्रामीण आरोग्य अभियानात अशा आरोग्य सेविका म्हणून चांगल्या प्रकारे आपली भूमिका पार पाडत असून महिला आरोग्याच्या विकासात त्यांचे फार मोठे योगदान निर्माण झाले आहे.

2) मानधनावर आधारित नेमणूक आणि तुटपुंजे मानधन या समस्येमुळे अशा स्वयंसेवकात नैराश्याची भावना निर्माण होते.

संशोधन पध्यती :

सदरील विषयावर संशोधन अध्ययनासाठी वर्णनात्मक संशोधन पद्धतीचा आधार घेण्यात आला आहे. माहिती संकलनासाठी शासकीय अहवाल तसेच संदर्भ ग्रंथ, वर्तमानपत्र, संशोधन पत्रिका, संकेत स्थळ व मासिके यांचा आधार घेण्यात आला आहे.

महिलांच्या आरोग्य विकासात आशा स्वयंसेविकेची भूमिका:

राष्ट्रीय ग्रामीण आरोग्य अभियानांतर्गत आशा ASHA स्वयंसेविका ही एक महत्वपूर्ण घटक म्हणून समोर आलेली आहे. मुळात ग्रामीण भागातील माता मृत्यू व बालक मृत्यू तसेच गरोदर माता व स्तनदा माता आणि संस्थात्मक प्रसूती या सर्व घटकांना नजरेसमोर ठेवून ASHA आशा स्वयंसेविकांवर महत्त्वपूर्ण जबाबदाऱ्या सोपविण्यात आलेल्या आहेत. ग्रामीण भागात उद्भवणाऱ्या आरोग्यविषयक समस्यांना प्रतिबंधात्मक प्राथमिक उपचार व सेवा पुरविण्यासाठी महत्त्वाचे कार्य करण्याच्या दृष्टीने आशा ASHA स्वयंसेविकांना महत्त्वपूर्ण भूमिका बजावाव्या लागतात. साधारणता आशांना ASHA गाव पातळीवर 42 प्रकारचे कार्य पार पाडावी लागते. "महिलांच्या आरोग्य विकासात आशा ASHA स्वयंसेविकांच्या भूमिकांचा अभ्यास " सदरील विषयावर संशोधन अध्ययन करीत असताना असे दिसून येते की, महिला विकासात आणि ग्रामीण आरोग्य व्यवस्थेत 'आशा' (ASHA) स्वयंसेविकाना अनेक महत्त्वपुर्ण भूमिका पार पादाव्या लागतात.

1) संस्थात्मक प्रसूतीला प्रोत्साहन :

गरोदरपणाच्या सुरुवातीपासूनच महिलेची नोंद करणे, प्रसूतीपूर्व तपासण्या आणि लसीकरणाबद्दल मार्गदर्शन करणे तसेच जननी सुरक्षा योजनेअंतर्गत ग्रामीण महिलांच्या सुरक्षित प्रसूती च्या दृष्टीने महिलांना प्राथमिक आरोग्य केंद्र किंवा शासकीय रुग्णालयात प्रसूतीसाठी प्रवृत्त करणे हे महत्त्वपूर्ण कार्य आशा ASHA चे आहे. महिलांना जननी सुरक्षा योजनेचा फायदा मिळवून देवुन माता व बाल आरोग्याच्या दृष्टीने आशा ASHA महत्वपुर्ण भुमिका बजावते.

2) जागरूकता व सक्षमीकरण :

साधारणता दारिद्र्यरेषेखालील महिलाना व अनुसूचित जाती जमातीच्या महिलांना खासकरून कुटुंब नियोजनासाठी प्रोत्साहित करण्याची जबाबदारी आशा ASHA यांच्यावर सोपविलेली आहे. या महिलांचे जीवन सुखी व समाधानाचे राहण्यासाठी गावपातळीवरील शिक्षित अशिक्षित महिलांना कुटुंब नियोजनासाठी ची माहिती देणे व कुटुंब नियोजनासाठी त्यांना प्रोत्साहित करणे तसेच लैंगिक आरोग्याविषयी शिक्षित करणे या स्वरूपाचे कार्य आशा ASHA द्वारे पार पाडले जाते.

3) शौचालय बांधकामासाठी प्रोत्साहन :

ग्रामीण भागात आजही मोठ्या प्रमाणावर उघड्यावर शोच्यास जाण्याचे प्रमाण अधिक आहे परिणामी यामुळे वेगवेगळे व साथीचे आजार पसरू शकतात त्यामुळे त्याविषयी ग्रामीण समुदायाला शौचालय बांधण्यासाठी प्रेरित करणे व त्याविषयीची जाणीव जागृती समाजामध्ये घडवून आणणे ही महत्त्वपूर्ण जबाबदारी अशा यांना पार पाडावयाची असते आणि त्या आशा यशस्वीरित्या आपली जबाबदारी पूर्ण करताना दिसून येतात.

4) नवजात बालकांची जन्म नोंद ठेवणे :

गाव पातळीवर जन्मलेल्या बाळांची नोंद ठेवण्याचे कार्य आशा ASHA ना करावयाचे असते. यामुळे जन्म मृत्यूची नोंद ही मुख्यतः वस्तुनिष्ठ स्वरूपात मिळू शकते. यामुळेच बालमृत्यू आणि जन्मदर व मृत्युदर किती व कसा आहे हे निश्चित स्वरूपात समजते.

5) आरोग्य सेवांची उपलब्धता :

तळागाळातील लोकांपर्यंत आरोग्यविषयक सेवा आणि औषधे सहज पोहोचवणे. गावात एखादा आजार पसरल्यास (उदा. मलेरिया, डेंग्यू), किंवा एखादी साथ आल्यास आरोग्य विभागाला त्वरित माहिती देणे तसेच ताप, जुलाब किंवा किरकोळ जखमांवर प्राथमिक औषधोपचार म्हणजेच प्राथमिक आरोग्य सेवा मिळवून देण्याचे कार्य आशा ASHA या योजनेद्वारे केले जाते.

6) लसीकरण आणि आजाराबाबत जनजागृती :

टीबी, मलेरिया, कुष्ठरोग आणि साथीच्या रोगांविरुद्ध जनजागृती करणे. लहान मुलांचे आणि गरोदर महिलांचे लसीकरण वेळेवर पूर्ण करून घेणे. ग्रामीण भागात संसर्गजन्य व असंसर्गजन्य आजार उद्भवू नये तसेच त्याचा प्रसार होऊ नये यासाठी योग्य ती काळजी घेणे.

7) समुदाय सशक्तीकरण :

गावातील लोकांना पोषण, वैयक्तिक स्वच्छता, शुद्ध पिण्याचे पाणी आणि कुटुंब कल्याण यासारख्या चांगल्या आरोग्याच्या सवयी अंगीकारण्यासाठी प्रवृत्त करणे त्यांच्यात जागरूकता निर्माण करणे तसेच नवजात शिशु संगोपनासाठी नवजात बालकाचे वजन, आरोग्य आणि स्तनपानाबाबत मातांना योग्य समुपदेशन करणे.

8) शासकीय योजनांचा प्रचार :

प्रधानमंत्री मातृ वंदना योजना, जननी सुरक्षा योजना यासारख्या माता आणि बालकांसाठी असलेल्या शासकीय योजनांचा लाभ मिळवून देण्याच्या दृष्टीने माहिती देणे आणि पात्र लाभार्थ्यांना योजनांचा लाभ मिळवून देणे हे "आशा" योजनेद्वारे महत्त्वपूर्ण कार्य पार पाडले जाते.

9) वार्षिक लसीकरण :

गावपातळीवर वर्षभरात जन्मलेल्या बाळाचे पूर्ण लसीकरण राबविणे आणि एकही बाळ या लसीकरणापासून वंचित राहणार नाही याची खबरदारी घेण्याचे महत्त्वपूर्ण कार्य अशा करीत आहे. गाव पातळीवर 100% लसीकरण पूर्ण करणाऱ्या अशांना प्रोत्साहन पर एक हजार रुपये मोबदला अदा केला जातो.

10) सामाजिक बदल :

ग्रामीण भागात आजही अनेक ठिकाणी अंधश्रद्धा ला प्राध्यान्य दिले जाते. मात्र त्या अंधश्रद्धामुळे जीवावर बेतु शकते. त्यासाठी ग्रामीण भागातील महिलांमधील अंधश्रद्धा कमी करून आरोग्याविषयी शास्त्रीय दृष्टिकोन रुजवणे हे महत्त्वपूर्ण कार्य आशा स्वयंसेविकेद्वारे पार पाडले जाते.

अशाप्रकारे अनेक व महत्त्वपूर्ण कार्य गाव पातळीवर आशा ASHA पार पाडत असते निश्चितपणेच या सर्व कार्याचा आवाका पाहता ते अभिनंदनच पात्र आहेत कारण एका स्वयंसेवीकेस जवळपास 42 प्रकारची कामे करावयास देणे व ती स्वयंस्फूर्तीने स्वीकारणे आणि त्यासाठी उत्तरदायी बनणे खरोखरच फार मोलाचे व महत्त्वाचे कार्य आहे. एकंदरीत आशा ASHA स्वयंसेविकेच्या भूमिकेमुळे ग्रामीण भागात आरोग्यात्मक जनजागृती व प्रसार वाढलेला आहे असे दिसते. ग्रामीण पातळीवर टीकासाठी सेवा देण्यास आशा ASHA तत्पर असतात म्हणूनच त्या आशा ASHA स्वयंसेविका असूनही समाजमान्य आरोग्य कार्यकर्ती म्हणून आशाना ओळखले जाते.

(ASHA) आशाच्या भूमिकेमुळे झालेले बदल :

- **पारंपारिक मानसिकतेत बदल :**

पारंपारिक चालत आलेली मानसिकता बदलविण्याची मुख्य कार्य आशा ASHA ग्रामीण पातळीवर करीत आहे. समाजातील पारंपरिक रूढी चालीरीती ह्या अशा घातक आहेत त्यामुळे कोणती इजा होऊ शकते जीवावर कसं बेतू शकतं याबाबत सर्व माहिती अशा स्वयंसेवीकेद्वारे ग्रामीण महिलांना दिली जाते, घरीच प्रसूती होण्याचे दुष्परिणाम महिलांना सांगितले जातात, महिलांना जागृत केले जाते. आणि शासकीय संस्थेत प्रसूतीसाठी महिलांना प्रोत्साहित केले जाते. त्यामुळे शासकीय संस्थेत प्रसूती होण्याचे प्रमाण वाढत असल्याचे दिसून येते. असे असले तरी आशाचे म्हणणे असे आहे की, वाडी वस्ती अतिदुर्गम भागात रूढी परंपरा म्हणावी तितकीशी कमी झालेली नाही.

- **बालमृत्यू व माता मृत्यू रोखण्यात यश**

मुळात हाच एकमेव उद्देश समोर ठेवून राष्ट्रीय ग्रामीण आरोग्य अभियान सुरू केलेले आहे आणि हा उद्देश पूर्ण करण्यासाठी ग्रामीण पातळीवर आशा ASHA स्वयंसेविका ह्या महिलांच्या प्रसुती शासकीय संस्थेत होण्याच्या दृष्टीने भूमिका बजावित असल्याने संस्थात्मक प्रसूतीच्या प्रमाणात वाढ झाली असून बालमृत्यू व माता मृत्यू रोखण्यात यश मिळाले आहे.

- **महिलांच्या सहभागात वाढ**

आशा ASHA स्वयंसेविका ह्या ग्रामीण भागात महिलांना शासकीय योजनेबाबत अभियानाबाबत शिक्षित, जागरूक करीत आहे, प्रोत्साहित करीत आहे. त्यामुळे शासनाच्या कोणत्याही योजना, कार्यक्रम, अभियान यामध्ये सहभागी होण्याच्या दृष्टीने चांगला प्रतिसाद मिळत आहे. आशा ASHA स्वयंसेविकेच्या भूमिकेमुळे ग्रामीण भागात महिलाच महिलांच्या आरोग्यविषयक समस्या सोडविण्यासाठी आज पुढाकार घेताना दिसत आहेत. त्यामुळे शासनाच्या अभियानामध्ये महिलांच्या सहभागात वाढ झाल्याचे दिसते.

आशा स्वयंसेविका (ASHA Workers) समोरील प्रमुख समस्या :

आशा स्वयंसेविका (ASHA Workers) समोरील प्रमुख समस्यांमध्ये अपुरे व वेळेवर न मिळणारे मानधन, कामाचा वाढता ताण आणि सामाजिक सुरक्षिततेचा अभाव या सर्वात गंभीर अडचणी आहेत. ग्रामीण आणि शहरी भागातील आरोग्य यंत्रणेचा कणा असलेल्या या महिलांना अत्यंत प्रतिकूल परिस्थितीत आपले कर्तव्य बजावावे लागते. त्यांच्यासमोरील सविस्तर समस्या खालीलप्रमाणे आहेत:

1) आर्थिक समस्या :

आशा ASHA स्वयंसेविकाना शासकीय कर्मचाऱ्यांप्रमाणे निश्चित पगार मिळत नसून कामावर आधारित प्रोत्साहन भत्ता (Incentives) मिळतो, जो अत्यंत कमी असतो. तसेच अनेकदा मिळनारे तुटपुंजे मानधन ही वेळेवर मिळत नाही त्यामुळे त्याना त्यांचे कुटुंब चालवणे कठीण होते.

2) कामाचा वाढता ताण आणि अतिरिक्त जबाबदाऱ्या :

आशा ASHA स्वयंसेविकाना प्रसूती किंवा आपत्कालीन परिस्थितीत त्यांना रात्री-अपरात्री आरोग्य केंद्रात जावे लागते. तसेच मूळ जबाबदाऱ्या व्यतिरिक्त विविध आजारांचे सर्वेक्षण, मतदार याद्या किंवा इतर शासकीय कामांचा ताण त्यांच्यावर टाकला जातो.

3) सामाजिक आणि वैद्यकीय सुरक्षिततेचा अभाव:

आशा ASHA स्वयंसेविकाना कायमस्वरूपी नोकरीचा दर्जा देण्यात आला नसल्याने त्यांना सरकारी कर्मचाऱ्यांचे हक्क मिळत नाहीत. तसेच त्यांना भविष्य निर्वाह निधी (PF), पेन्शन, हक्काची सुटी किंवा प्रसूती रजा यांसारखे कोणतेही सामाजिक सुरक्षा बाबतचे लाभ मिळत नाहीत. याशिवाय दुर्गम भागात फिरताना किंवा रात्री प्रवास करताना त्यांच्या सुरक्षेची कोणतीही हमी नसते.

4) सामाजिक आणि मानसिक आव्हाने :

अनेकवेळेस ग्रामीण किंवा अशिक्षित भागात " आशा ASHA स्वयंसेविका " आरोग्याविषयी माहिती देताना त्याना नागरिकांकडून सुरुवातीला विरोध केला जातो, लोकांचे सहकार्य मिळत नाही, अपमानास्पद वागणूक मिळते. त्याना मानसिक दडपणाखाली रहावे लागते. कमी मोबदला आणि कामाचा प्रचंड दबाव यामुळे आशा ASHA ना मानसिक त्रासाला (Mental Stress) सामोरे जावे लागते

5) पुरेशा मान्यतेचा अभाव :

आशा ASHA च्या योगदानाला नेहमीच मान्यता मिळत नाही किंवा त्याचे कौतुक केले जात नाही, ज्यामुळे त्यांच्यामध्ये कामाची कदर होत नाही आणि निराशेची भावना निर्माण होते.

6) सहायक पायाभूत सुविधांचा अभाव :

आशा ASHA स्वयंसेविकाना अपुऱ्या पायाभूत सुविधांशी संबंधित आव्हानांचा सामना करावा लागतो, ज्यामध्ये वाहतूक, दळणवळण सुविधा आणि वैद्यकीय पुरवठ्याची मर्यादित उपलब्धता समाविष्ट आहे. यामुळे त्यांना आपली कर्तव्ये प्रभावीपणे पार पाडण्यात अडथळा येतो.

7) भेदभाव :

आशा ASHA प्रामुख्याने वंचित समाजातील महिला आसल्याने त्यांना आरोग्यसेवा प्रणालीमध्ये लिंग आणि जातिभेदाच्या आधारावर भेदभावाला सामोरे जावे लागते.

8) निवडी बाबत राजकीय व सामाजिक हस्तक्षेप :

आशा ASHA ची निवड करताना ती गावातीलच रहिवासी महिला असावी अशी अट आहे आणि गावच्या सरपंचा मार्फत तीन महिलांची नावे तालुका वैद्यकीय अधिकाऱ्याकडे देण्यात येतात व तशी व्यवस्था आहे अणी त्यामधून एका महिलेची निवड केली जाते परंतु सरपंच जे सांगतील त्याच महिलेची निवड झाल्याची मोठी प्रकरणी दिसून येतात. त्यामुळे आशा च्या निवडी बाबत राजकिय हस्तक्षेप होताना दिसुन येतो. शिवाय ज्या जातीचे व धर्माचे प्राबल्य ज्या गावात जास्तीचे आहे त्याचाही प्रभाव आशा निवडीवर मोठ्या प्रमाणात झाल्याचे आढळून येते. त्यामुळे पात्र व कर्यक्शम आशाची निवड होत नस्ल्याचे आढळुन येते.

9) अस्थायी भविष्य :

मुळात आशा ASHA ही स्वयंसेविका आहे. ती समाजसेवेचे वृत्त हाती घेऊन कार्य करत आसते. तिची निवड मानधन तत्वावर म्हणजेच कार्यावर आधारित मोबदला यानुसार झालेली आसते आणि ती पूर्ण वेळ नोकर नसते परंतु

तिचे कार्य व पूर्ण वेळ नोकरांचे कार्य विचारात घेता, जेव्हा ती तुलना करते तेव्हा मात्र तिला आपले कार्य व कार्य मोबदला पाहून भविष्य अस्थायी वाटायला लागते.

शिफारशी : अध्यानांती अभ्यासकद्वारे काही शिफारशी सुचिविण्यात येतात. त्या पुढिल प्रमाणे -

1. नोकरीची सुरक्षितता, नियमित पगार आणि आरोग्य विमा व पगारी रजा यांसारख्या सुविधा मिळण्यासाठी आशा कार्यकर्त्यांना आरोग्य सेवा प्रणालीमध्ये स्वयंसेवी पदांवरून औपचारिक स्थितीमध्ये आणले जावे.
2. आशा ASHA स्वयंसेविकांना सात टप्प्यांमध्ये प्रशिक्षण दिले जाते. मात्र अभ्यासा अंती असे दिसून येते की, जास्तीत जास्त प्रमाणात प्रशिक्षण पूर्ण न केलेल्या आशा ची संख्या जास्त आहे. त्यामुळे त्यांना त्यांच्या कार्याचे पूर्ण प्रशिक्षण दिल्यास ते आपले कार्य अधिक व्यवस्थित व जोमाने पूर्ण करतील. शिवाय त्यांच्या प्रशिक्षणाचा फायदा लाभधारकांना तर होईलच परंतु प्राथमिक उपचार प्रक्रिया देखील गतिमान होईल.
3. आशा ASHA कार्यकर्त्यांना आवश्यक उपकरणे, साहित्य आणि वाहतूक उपलब्ध होईल याची खात्री करण्यासाठी पायाभूत सुविधा, लॉजिस्टिक्स आणि पुरवठा साखळी व्यवस्थापन सुधारण्यात गुंतवणूक करणे गरजेचे आणि महत्त्वाचे आहे.
4. आशा ASHA कार्यकर्त्यांचे योगदान आणि कर्तृत्व मान्य करण्यासाठी प्रशंसापत्रे, सार्वजनिक सन्मान समारंभ किंवा कामगिरीवर आधारित बोनस देणे यासारख़े पुरस्कार कार्यक्रम सुरू करावेत.
5. आशा ASHA स्वयंसेविकाना सध्याच्या आरोग्यसेवा प्रणालीमध्ये करिअरमध्ये त्यांना सहाय्यक परिचारिका - प्रसूती परिचारिका सारखी पदे मिळू शकतील यासाठी प्रगतीच्या संधी उपलब्ध करून दिल्या जाणे आवश्यक आहे.
6. प्राथमिक उपचाराचे साहित्य असलेले एक औषधी किट आशा ASHA स्वयंसेविकांना दिले जाते. मात्र असे आढळूण येते की, आशा ना ASHA देण्यात येणारे किट हे आता नावालाच उरलेली आहे. जर एखाद्या प्रसंगी त्या स्वरूपाच्या किट ची अत्यंत आवश्यकता असते मात्र ते जर आशा ASHA स्वयंसेविकेकडे नसेल तर प्रथमोपचार करणे दुर्लभ होते म्हणून आरोग्य प्रशासनाने अत्यावश्यक औषधी साहित्यासह अद्यावत किट आशा ASHA स्वयंसेवकाकडे पुरविले जाणे आवश्यक आहे.
7. आशा ASHA स्वयंसेविकेची निवड करताना राजकिय हस्तक्षेप होताना दिसुन येतो. त्यामुळे पात्र आणि ज्यांना कार्य करण्याची इच्छा व ज्यांच्याकडे क्षमता आहे ते दुर्लक्षित केले जातात. आणि क्षमता नसलेल्यांची आशा म्हणुन निवद केल्यामुळे आरोग्य विषयक समस्या सोडविल्या जाऊ शकत नाही. याकरिता आशा ASHA स्वयंसेविकाच्या निवडीबाबत राजकिय हस्तक्षेप टाळवा.

सारांश :

आशा ASHA स्वयंसेविकांच्या ग्रामीण पातळीवरील आरोग्यविषयक जनजागृतीमुळे आज माता मृत्यू , बालमृत्यू, जन्मदर व मृत्युदर मोठ्या प्रमाणात कमी झालेला दिसून येतो त्यामुळे राष्ट्रीय ग्रामीण आरोग्य अभियानाचा उद्देश सफल होत असल्याचा दिसून येतो. आशा ASHA ही ग्रामीण भागातील जनतेच्या आरोग्याची समस्या सोडवण्यासाठी सदैव तयार असलेली ती मानधन तत्वावर कार्य करणारी स्वयंसेविका आहे. एक समाजसेवा व राष्ट्रसेवा करण्याच्या विचाराने प्रेरित होऊन सेवा समर्पित भावनेतून राष्ट्र उभारणीसाठी चे योगदान आशा ASHA देत आहे. मात्र तिला तुटपुंज्या स्वरूपाचा काही मोबदला मिळतो. परंतु ती या मोबदल्याचा व परिस्थितीचा विचार बाजूला सारून जनहिताची सेवा करण्याचा उदात्त हेतू समोर ठेवून भूमिका पार पाडत आहे असे दिसून येते. ग्रामीण भागातील जनता व प्रशासन यामध्ये आरोग्य दूत म्हणून आशा स्वयंसेविकेची भूमिका महत्त्वपूर्ण ठरत आहे.

समाजसेवेचे व्रत हाती घेऊन कार्य करीत असलेली आशा ASHA ह्या आरोग्य व्यवस्थेचा कणा आहे त्यामुळे त्यांच्या कामाच्या सन्मानासाठी आणि आर्थिक स्थैर्यासाठी आशाना ASHA अधिक पाठबळाची गरज आहे, याबाबीकडे शासकिय स्तरावरुन लक्ष वेधण्याची आवश्यकता आहे.

संदर्भ ग्रंथ सूची :

१) सामाजिक आरोग्य परिचर्या , लेखक, डॉ. के. पार्क, अनुवादक डॉ. जगन्नाथ दीक्षित,२०२२.

२) सामाजिक आरोग्य व परिचर्या, डॉ. सौ.,सफिया सिराज मोमीन ,२०२५.

3) अशा स्वयंसेविका, गटप्रवर्तक, सार्वजनिक आरोग्य विभाग,महाराष्ट्र शासन निर्णय, मार्च २०२५

४) अलका देशमुख, विविध अंगी आयामातून स्त्री, श्री साईनाथ प्रकाशन नागपूर २०११

५) आशा प्रशिक्षण पुस्तिका, राष्ट्रीय ग्रामीण आरोग्य अभियान, महाराष्ट्र शासन.

६) महाराष्ट्राची आर्थिक पाहणी अहवाल, महाराष्ट्र शासन, अर्थ व सांख्यिकी संचालनालय,नियोजन विभाग, मुंबई.

७) आरोग्य शिक्षण,देशमुख बळवंत, नलिनी प्रकाशन, नागपूर, २०१०

८) राष्ट्रीय आरोग्य धोरण - दशा आणि दिशा, नितीन लवंगारे, समाजवादी प्रबोधन प्रकाशन.२०१३

९) कुपोषन, डॉ.सविता मल्होत्रा , ओम प्रकाशन , नवी, दिल्ली २०१८.

१०) लोकराज्य, अरोग्यम धंन सम्पदा, ऑगस्ट २०१२.

११) https;//nhsrcindia.org

सत्याचा मार्ग – नरेंद्रनाथ

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नरेंद्रनाथाच्या उर्फ स्वामी विवेकानंदांच्या मातोश्री भुवनेश्वर देवी या उदात्त वृत्तीच्या गृहिणी होत्या. स्वामी विवेकानंद नंतरच्या काळात म्हणत असत. "माझ्या बौद्धिक विकासासाठी मी माझ्या आईचा ऋणी आहे". त्यांनी नरेंद्रांना दिलेले शिक्षण वेगळ्या धारणीचे होते. पुढील प्रसंगावरून त्यांची प्रचिती होते. एकदा नरेंद्र शाळेत असताना नरेंद्रना त्यांचा काहीही दोष नसताना शिक्षा झाली होती. भूगोलाच्या शिक्षकांनी त्यांना एक प्रश्न विचारला होता आणि नरेंद्रने ते उत्तर बरोबर दिले होते. परंतु शिक्षकाला ते उत्तर चुकीचे वाटले होते. म्हणून शिक्षकांनी नरेंद्रना शिक्षा केली होती. नरेंद्र बालक असूनही खंबीर होते ते शिक्षकांना म्हणाले "सर माझी काही चूक नाही माझी खात्री आहे की माझे उत्तर बरोबर आहे". या बोलल्याने शिक्षक संतापले आणि नरेंद्रनाथाना शिक्षकांचा मार खावा लागला.

नरेंद्र घरी आले त्यांचे डोळे पाण्याने डबडबलेले होते. त्यांनी आईला घडलेले सगळे काही सांगितले आईने जवळ घेऊन त्यांचे सात्वन केले आणि मनाली "बाळ बरोबर असताना तु का परवा करतोस? दैवत काही झालं तरी खऱ्याची कास कधीही सोडायची नाही. आपल्या आईचा हाच आदर्श गुरु रामकृष्ण परमहंसा मध्ये जाणवत असे. रामकृष्ण परमहंस म्हणत "काहीही झालं तरी सत्याची कास सोडायची नसते या कलियुगात माणूस जर सत्याला चिकटून राहिला तर त्याला खात्रीने ईश्वर लाभ होईल". स्वामीजींच्या प्रत्येक कृतीत जोपासण्यासाठी आग्रह दिसून येते. त्यांचे मूळ त्यांच्या आईचा आणि अध्यात्मिक गुरुच्या सत्या प्रती असलेल्या आढळनिष्ठेने सामावलेले आहे. पुढे जगाला देखील त्यांनी हेच सांगितले ते मनात, "सत्यासाठी सर्वसाचा त्याग करून येत असतो पण सर्व श्वासासाठी सत्याला त्यागता येत नसत".

संकटाला समोरे व्हा

एकदा वाराणसी येते दुर्गा मंदिरातून दर्शन घेऊन परत येत असताना वानराच्या एका टोळीने त्यांचा पाठलाग सुरू केला. माकडापासून सुटका होण्यासाठी स्वामीजी धावायला लागले परंतु माकडे जास्त वेगाने मागे लागली आणि आक्रमक झाली. त्यावेळी एक वृद्ध संन्यासी हे दृश्य बघत होता. तो ओरडून स्वामीजींना म्हणाला, "धावू नका त्यांच्याकडे तोंड करून उभे रहा". स्वामीजींनी तो सल्ला ऐकला व ते माकडाकडे तोंड करून उभे राहिले. तेव्हा माकडाने त्रास देणे थांबवले आणि ती पडून गेली.

हया सारख्या प्रसंगातून स्वामीजींनी फार मोठा धडा घेतला. आपण संकटाला किंवा कसोटीच्या प्रसंगापासून दूर पडायचे नसते तर धिटाइने व धीटाने त्यांना सामोरे जायचे असते हाच तो धडा आहे. या प्रसंगाचा उद्देश त्यांनी न्यूयार्क मध्ये आपल्या भाषणात केला होता. ते म्हणाले, "हया प्रसंगातून मिळालेला धडा सगळ्या जीवनाला लागू पढतो. भयावह प्रसंगांना तोंड द्या. त्यांना समोरे जा. आपण जीवनात पलायन करीत राहिलो तर कठीण प्रसंग वानराप्रमाणे आपला पाठलाग करायला लागतात. आपल्याला परिस्थितीवर विजय मिळवणे क्रमप्राप्त आहे. पलायन करणे योग्य नव्हे भेडयांना विजयीश्री लाभत नसते. आपल्याला जर भय, यातना अज्ञान हया पासून मुक्ती हवी असेल तर आपण त्यांना समोर जाणं अत्यावश्यक आहे.

ब्रह्मचर्याद्वारे स्मरणशक्ती आणि कौशल्यवाढ

हरिपाद मित्र हे बेळगावला सब डिव्हिजनल फॉरेस्ट ऑफिसर होते. स्वामीजींना त्यांना 'डिफेन्स क्लिनीक पेपर्स' मध्ये एक उतारा पाठ म्हणून दाखविला. ते पुस्तक स्वामीजींनी दोनदाच वाचलेले होते. त्यांची स्मरणशक्ती बघून हरिपाद मित्र यांच्या आचार्याला परावर उरला नाही. स्वामीजी हरिपाद मित्र यांना म्हणाले की ब्रह्मचारी आणि एकाग्रता यांनी मेंदू तल्लख होत असतो.

एकदा स्वामीजींच्या वास्तव्य वेल्लूर मठात असताना त्यांची प्रकृती ठीक नव्हती. तेव्हा त्यांचे शिष्य शरदचंद्र चक्रवर्ती त्यांना भेटायला त्यांच्या खोलीत गेले तिथे त्यांना 'एनसायक्लोफिडीया ब्रिटानिका' च्या खंडाचा कोरा संच दिसला. ते म्हणाले, "इतके खंड एका जन्मात वाचून काढायचे म्हणजे फार कठीण काम आहे बुवा!" त्यावर स्वामीजी म्हणाले, "तु हे काय बोलतो आहेस? तुला हया पुस्तकातून काहीही विचारायचं असेल तर विचार मी आत्ताच हे पुस्तक वाचून पूर्ण केली आहेत"

शिष्याने प्रत्येक खंडातून अनेक प्रश्न स्वामीजींना विचारले आणि स्वामीजी त्या परीक्षेत छान उत्तीर्ण झाले आणि काही ठिकाणी त्यांनी पुस्तकातील उतारे जसेच्या तसेच म्हणूनही दाखवले. शेवटी शिष्यामध्ये आत्मविश्वास निर्माण व्हा म्हणून ते म्हणाले, "असं बघ बेटा, तू जर ब्रह्मचार्याचं काटेकोर पालन केलस तर तुला हव्या त्या क्षेत्रात तू कौशल्य प्राप्त करू शकशील आणि अशी स्मरणशक्ती तुलाही लाभू शकेल." स्वामीजींची नेमकी हीच गोष्ट पॉल डायसन या जर्मन तत्त्वज्ञानाला सांगितली होती आणि ते देखील स्वामीजींचे स्मरणशक्ती बघून अवाक झाले होते.

गरीब माणसाचे श्रीमंत हृदय

एकदा राजस्थानात असताना स्वामीजी असेच रेल्वे स्टेशनवर राहत होते. त्यांना भेटायला लोकांची रांग लागली. लोकांच्या मनात बरेच प्रश्न होते. प्रश्न साधारणपणे धार्मिक स्वरूपाचे होते. स्वामीजींनी त्या सर्वांना त्यांच्या प्रश्नांची उत्तरे दिली. त्यासाठी त्यांना तीन दिवस व तीन रात्री लागल्या. तिसऱ्या दिवशी जेव्हा सर्व लोक भेटून निघाले तेव्हा एक गरीब माणूस स्वामीजी जवळ आला आणि तो त्यांना प्रेमाने म्हणाला, "स्वामीजी मी बघतोस की आपण तीन दिवसापासून सतत बोलत असत आपण पाण्याचा थेंबही पोटात टाकला नाही. मला याचं फार वाईट वाटतंय."

त्या गरीब माणसाच्या रूपात ईश्वर अवतरला असे स्वामीजींना वाटले. स्वामीजी त्या माणसाला म्हणाले, "तू कृपा करून मला काही खायला देशील? तो गरीब माणूस जातीने चांभार होता. म्हणून त्याला संकोच वाटत होता. तो म्हणाला, "स्वामीजी आपल्याला काही खायला द्यावे म्हणून माझं मन तीळतीळ करतय! पण मी काय करू? मी तर या अन्नाला स्पर्श केले आहे. आपण जर मला परवानगी दिली तर मी आपल्याला भाकरीचे पीठ आणि डाळ आणून देतो. आपण ते अन्न शिजवून घ्याव." स्वामीजी म्हणाले, "नाही बेटा, तसं नाही तूच भाजलेली भाकरी मला हवी आहे. ती खाण्यातच मला आनंद आहे. तो माणूस घरी गेला आणि गरम भाकरी घेऊन लगेच परतला. त्या दरिद्री माणसाचे दयाळू मन आणि निस्वार्थ प्रेम बघून स्वामीजींच्या डोळ्यात आसणे आली. त्यांना वाटले की अशी कितीतरी माणसे उपेशीतांची जीवन जगत असतात! तरीही ती माणसे मुळात नम्र असतात आणि फार उदार आणि विशाल मनाची असतात.

धनाला चांगल्या कार्यासाठी खर्च करा

अमेरिकेतील प्रसिद्ध करोडपती उद्योजक जॉन डी रॉक फेलर यांना या असामान्य भारतीय संन्यासांची भेट घेण्याची इच्छा झाली. त्यांनी स्वामीजींच्या खोलीचे दार ढकलून खोलीत प्रवेश केला. आत कोण आले हे बघण्यासाठी स्वामीजींनी नजर वरती करूनही बघितले नाही. हयाचे रॉक फेलरला फारच आश्चर्य वाटले. स्वामीजींनी रॉक फेलर यांना त्यांच्या भूतकाळातील अनेक घटनांचे स्मरण करून दिले की, त्यांनी कमावलेला प्रचंड पैसा आणि धन त्यांचे किंवा त्यांचे साठी नव्हतेच! ईश्वराने रॉक फेलरला धनाचे दान करून इतरांना मदत करण्याची संधी बहाल केली होती. त्यामुळे इतरांचे भले करणे हे त्यांचे कर्तव्य होते. रॉक फेलर साहेबांना असे सडे बोल आतापर्यंत कोणीही ऐकवलेले नसल्याने त्यांना ते ऐकून घेण्याची सवयच नव्हती. ते रागाने उठले आणि खोली सोडून चालते झाले. नंतर एका आठवड्याने कुठलीही पूर्व सूचना न देता ते पुन्हा आले आणि स्वामीजींच्या टेबलावर त्यांनी एक कागद टाकला. रॉक फेलर हयांनी त्या कागदावर सार्वजनिक संस्थांना भरघोस आर्थिक सहाय्य करण्याची योजना आखलेली होती. ते स्वामीजींना म्हणाले, "काय आता ठीक आहे ना? आता झालं का तुमचा समाधान? तुम्ही ह्या कामासाठी मला धन्यवाद द्यायला हवेत!."

स्वामीजींनी तो कागद शांतपणे वाचला आणि म्हणाले, "धन्यवाद तर आपणच मला द्यायला हवेत." रॉक फेलर हयांनी समाज कल्याणार्थ दिलेली रक्कम देणगी म्हणून फार मोठी होती. त्यानंतर रॉक फेलर लोक कल्याण करणारे दानशूर म्हणून जगात प्रसिद्ध झाले.

एकाग्रता यशाचे रहस्य

वेस्टन अमेरिकन टाऊन येथील एका अभ्यास वर्गात स्वामीजी म्हणाले की, ज्याला अंतिम सत्य किंवा ज्ञान लाभलेले आहे तो नेहमी शांत असतो आणि बाह्य घटनांनी विचालीत होत नसतो. काही उधट मेंढपाळानी स्वामीजीचे ते भाषाण ऐकले होते आणि त्यांनी स्वामीजींची परीक्षा घेण्याचे ठरविले. स्वामीजी जेव्हा त्यांच्या खेड्यात गेले तेव्हा त्यांना पाण्याच्या उलटया पीपावर उभे राहून त्यांना भाषण देण्यास सांगितले. स्वामीजी उलट्या पिंपावर उभे राहिले आणि पूर्णपणे समारस होऊन त्यांनी भाषण देण्यास सुरुवात केली. त्यावेळी त्या मेंढपाळानी स्वामीजींच्या दोन्हीही कानाजवळून बंदुकीच्या गोळ्या झाडण्यास सुरुवात केली. स्वामीजींवर बंदूकींच्या गोळ्यांचा काही परिणाम झाला नाही. त्यांनी शांत मनाने भाषण पूर्ण केले. त्यांचे भाषण संपल्यावर ती सर्व मेंढपाळांची मुले स्वामीजी भोवती गोळा झाली. आणि त्यांनी स्वामीजींशी हास्य लोन केले ते म्हणाले, "स्वामीजी, आम्ही आपल्याला मानल! आपण खरंच अस्सल आणि सच्चे आहात! तुम्ही जे शिकवितात तेच तुम्ही आहात."

स्वामीजी दुसऱ्यांदा अमेरिकेला गेले असताना हा गमतीदार प्रसंग घडला होता. एके दिवशी ते नदीच्या किनाऱ्याने जात होते. किशोर वयाची काही मुले अंडयाची टरफले पाण्यावर सोडून त्यावर नेमबाजी करीत होती. पण कोणाचाच नेम लागत नव्हता. हे दृश्य पाहून त्यांना गंमत वाटली व हसू आले. ते बघून एक मुलगा स्वामीजींना म्हणला, "सर, हे काम दिसतं तितकं सोपं नाही. घ्या तुम्ही करून दाखवा तर आता." असे म्हणून त्याने स्वामीजींच्या हातात बंदूक दिली. स्वामीजींनी काही न बोलता मुलाच्या हातून बंदूक घेतली आणि एकापाठोपाठ एक अशी बारा टरफले उडवली. ती मुले आचार्याने थक्क झाली. स्वामीजी कसलेले नेमबाज असावेत असेच मुलांना वाटले. स्वामीजी त्यांच्या मनातील विचार ओळखून म्हणाले, "मी हयाच्या आधी कधीच बंदूक हातात घेतली नव्हती आणि नेमबाजीही केली नव्हती." हया यशाचे कारण त्यांच्या एकाग्रतीत होते.

इतरांच्या दु:खांचा अनुभव घ्या

स्वामी तुरीयानंद (हरी महाराज) स्वामीजींची एक आठवण सांगतात. स्वामीजी माउंट आबू स्टेशनवरून मुंबईला जाणार होते. म्हणून स्वामी ब्रह्मानंद समवेत स्वामी तुरीयानंद त्यांना निरोप देण्यासाठी आले त्यावेळी स्वामीजी त्यांना म्हणाले, "हरीभाई, तुम्ही लोक ज्या गोष्टीत धर्म आहे असे मानता, त्या समजण्यास अजूनही मी असमर्थ आहे." त्यावेळी सामाजिक इतके भावविवश झाले होते. त्यांची काया अशी काही थरथरत होती आणि चेहरा दु:खाने मलान झाला होता की त्यांना जे सांगायचे होते ते स्वामीजी सांगू शकत नव्हते. त्यानंतर ते जरा शांत झाले मग त्यांनी त्यांचा हात आपल्या छातीवर ठेवला आणि म्हणाले, "माझं हृदय अतिशय विशाल झालं आहे आणि ती इतरांचं दु:ख व यातना अनुभवते आहे इतर कोणीही जर यातनानी पीडित असलं तर त्या यातनांनी माझं शरीर पिळवून निघत असतं हयावर विश्वास ठेवा!" स्वामीजींना भावनावेग असहय झाल्याने त्यांच्या गालावरून अश्रू व्हायला लागले. स्वामी तुरीयानंद ते पाहून अवाक झाले.

एकदा स्वामीजी काशीपूरला श्री गोपाल लाल यांच्या उद्यानगृहात निवास करीत होते तेव्हा एक तरुण त्यांच्याकडे आला व म्हणाला, "स्वामीजी मी अनेक तीर्थक्षेत्री जाऊन आलो आहे. आणि धर्माच्या अनेक पंथासी माझा जवळचा संबंध आला आहे. परंतु तरीही सत्य काय असतं हे मला अजून कळलेलं नाही. मी रोज दरवाजे बंद करून ध्यान धारणा करीत असतो पण अजूनही मला शांती लाभलेली नाही. स्वामीजी, असं का घडतंय? कृपा करून सांगा!" त्याचं बोलणं ऐकून स्वामीजी शांतपणे म्हणाले, "बेटा तुला जर शांती हवी असेल तर तू आतापर्यंत जे करीत आला आहेस त्याच्या अगदी विरुद्ध कृती तुला आता करावी लागेल. तू तुझ्या घराची दार सनाड उघडी ठेव जरा आजूबाजूला बघत जा म्हणजे तुझी मदत मिळावी म्हणून किती जण किती जण आर्ततेने तुझी वाट

बघत आहेत हे तुला कळेल! त्यांना मदत करीत राहा. त्यांना खायला दे. पीण्यासाठी पाणी दे, यथाशक्ती जी मदत शक्य आहे ती करीत चल. मग तुला हमखास शांती मिळेल हे जाणून असं!."

श्रेष्ठ चारित्र्याचे लक्षण

एखाद्याचे चारित्र्य तुम्हाला खरोखर नीट जोपायचे असेल तर त्याच्या मोठमोठ्या कार्याकडे लक्ष देऊ नका. प्रसंगी विषयी एखाद्या ठोंब्या देखील वीरासारखा शौर्य गाजू शकेल. माणूस अगदी मामुली कामे उरकित असताना त्यांच्यावर लक्ष ठेव बसून त्यांच्यातूनच तुम्हाला थोर पुरुषाच्या खऱ्या चरित्र्याचे दर्शन घडू शकेल. मोठमोठ्या प्रसंगी आवेशाच्या भरात काहीतरी शत्रुत्व करून टाकण्याचा चेव येत असतो. परंतु ज्याच्या चारित्र्याच्या विलोभनीय गौरव सर्वच अवस्थातून निरंतर प्रकट होत असतो तोच खराखुरा थोर पुरुष म्हणावा, खरी श्रेष्ठता त्याच्यात ठायी बसत असते.

नीस्वार्थातच लाभदायक

कोणताही स्वार्थी हेतू मनात न बाळगता कोणी कार्य केल्यास त्याचे काम होईल? त्याला काम काय लागू शकेल? होय त्यालाच तर सर्वापेक्षा अधिक लाभ होत असतो. निस्वार्थातच अधिक लाभदायक असते. फक्त लोकांना ती आचरणात आणण्यासाठी आवश्यक असलेला धीर धरवत नाही. इतकेच सांसारिक दृष्टीनेही तिच्यापासून कितीतरी लाभ आहे. विसप्रेम, सत्यनिष्ठा, निस्वार्थता वगैरे किती तर अलंकारिक शब्दच नव्हे तर ते आमचे सर्वोच्च आदर्श आहेत. कारण शक्तीचा महान विकासाची ही दुसरी नवीच होत. कोणी एखादा जर पाच दिवस नव्हे पाच क्षणच समग्र स्वार्थी हेतुंना तिलांतली देऊन कोणताच भावी उद्देश दृष्टीसमोर न ठेवता, स्वर्ग लाभाची आकांक्षा हृदयात न ठेवता, व कोणत्याही शिक्षेच्या भयाने भयभीत न होता. असल्या कोणत्याच गोष्टी मनात न बाळगता कार्य करून शकेल तर त्याचे ठायी एक लोकोत्तर शक्तिशाली नीतिमान पुरुष बनन्याचे समर्थ बसत आहे असे निर्विवादपणे म्हणता येईल.

तात्पर्य

सत्याचा मार्ग अनुसरण्याने खंबीरपणा, धिटपणा युवकांमध्ये संचारिक संकटाला तोंड देण्याच्या अनुभवातून तरूनांना मध्ये धैर्याचा संसार होईल .ब्रह्मचार्य राहण्याने स्मरणशक्ती आणि कौशल्याचा विकास होण्यास मदत होईल. प्रत्येकाने दया करून अंगी बाळगावी जेणेकरून इतरांसाठी तरुणांच्या हृदयात कनवाळा निर्माण होईल. स्वत:जवळ धन चांगल्या कार्यासाठी खर्च करा जेणेकरून ते केल्याने सुख शांती समाधानाची प्राप्ती होईल. श्रेष्ठ चारित्र्य आणि निस्वार्थता भाव यामुळे लोकांसाठी कार्य करण्याची शक्ती तुम्हाला मिळेल. आणि या सर्व स्वामीजींच्या अनुभवाच्या आदर्शातूनच देशप्रेम निर्माण होईल जे आपल्या देशातील सर्वच समस्या, दु:ख हयावरील प्रभावी उपाय ठरेल. जसे स्वामी विवेकानंदा मध्ये आपल्याला पाहायला मिळते. स्वामीजींच्या देश प्रेमाविषयी भगिनी निवेदिता म्हणतात, "भारतासाठी स्वामीजींच्या भावना तीव्र प्रेमाच्या होत्या... त्यांच्या हृदयात भारताची स्पंदने जाणवत असत. त्यांच्या नसनसातून भारताचे ठोके ऐकायला येत असत. भारत त्यांचे मनोराज्य होते किंवा दिव्यस्वप्न असावे. त्यांना भारताची स्वप्न पडत असत. इतकेच नव्हे तर ते स्वत: भारतच होत असत. स्वामीजी म्हणजे जणू काही रक्त भास देहधारी भारताचे मूर्तीमंत स्वरूप होत! तेच भारत होते, ते इंडिया होते. ते भारताच्या आध्यात्मिकतेचे, पावित्र्याचे, ज्ञानाचे, सामर्थ्याचे, दूरदृष्टीचे आणि विधीलिखिताचे स्वरूप होते. अशा प्रकारच्या आदर्श स्वामीजींना भारतीय तरुणांना समोर ठेवला असल्याचे दिसून येते.

संदर्भ :

१. स्वामी विवेकानंद — चारीत्र — एकनाथ रानडे
२. स्वामी विवेकानंद — रामकृष्ण मठ / रामकृष्ण मिशन प्रकाशीत चरीत्रात्मक साहीत्य.
३. स्वामी विवेकानंद यांचे जीवन व कार्य — मराठी अनुवादीत चरित्र.
४. युगपुरुष स्वामी विवेकानंद — स्वामी विवेकानंद यांच्या जीवनावर आधारीत चरीत्र ग्रंथ.

प्रत्यक्षदर्शी साक्षीदाराच्या अनुपस्थितीत पुराव्याचे पर्याय: भारतीय संविधान आणि वर्तमान फौजदारी कायद्यांच्या संदर्भात एक अभ्यास

कु. वसुंधरा मीना महेशकुमार सोनावणे
संशोधक विद्यार्थिनी, बी. एस्सी ॲग्रीकल्चर,
पी.जी.डी.एम. ॲग्रीबिझनेस मॅनेजमेंट, एल. एल. बी. तृतीय वर्ष, विद्याप्रतिष्ठानचे वसंतराव पवार लॉ कॉलेज, बारामती.
संलग्न: सावित्रीबाई फुले पुणे विद्यापीठ, पुणे.

सारांश

फौजदारी खटल्यांमध्ये प्रत्यक्षदर्शी साक्षीदाराचा जबाब हा नेहमीच सर्वात भक्कम पुरावा मानला जातो, पण प्रत्यक्षात असा साक्षीदार मिळणे हे अपवादानेच घडते. गुन्हा एकांतात घडलेला असेल, साक्षीदारावर धाकदपटशा झालेला असेल किंवा घटनाच मुळी गुप्तपणे घडविली गेलेली असेल, तर पोलिसांच्या हाती डोळ्यांनी पाहणारा कोणीही उरत नाही. अशा वेळी भारतीय कायदा थांबत नाही. परिस्थितीजन्य पुरावा, वैज्ञानिक व फॉरेन्सिक तपासणी, दस्तऐवजी नोंदी आणि कायद्याने मान्य केलेल्या कबुलीजबाबांच्या आधारावरही आरोपीला दोषी ठरविता येते, अट एवढीच की हा सर्व पुरावा मिळून संशयाला जागाच उरणार नाही अशी साखळी तयार व्हायला हवी. प्रस्तुत शोधनिबंधात भारतीय संविधानातील अनुच्छेद १४, २०, २१ व २२ यांचा प्रत्यक्षदर्शी नसलेल्या खटल्यांशी असलेला संबंध, भारतीय साक्ष अधिनियम २०२३ आणि भारतीय नागरिक सुरक्षा संहिता २०२३ या नव्या कायद्यांनी आणलेले बदल आणि शरद बिर्धीचंद सारडा विरुद्ध महाराष्ट्र राज्य या सर्वोच्च न्यायालयाच्या निकालातून घडलेली पंचशील तत्त्वे यांचा एकत्रित आढावा घेतला आहे. शेवटी अभियोजन पक्षाने अशा प्रकरणांत कोणती व्यावहारिक काळजी घ्यावी, यावरही थोडक्यात भाष्य केले आहे.

१. प्रस्तावना

जुन्या भारतीय पुरावा अधिनियम, १८७२ मधील कलम ६० आणि आताच्या भारतीय साक्ष अधिनियमातील तत्सम तरतुदीनुसार मौखिक पुरावा हा प्रत्यक्ष स्वरूपाचा असावा असे सांगितले असले, तरी याचा अर्थ अप्रत्यक्ष किंवा परिस्थितीजन्य पुराव्याला कायद्याने नाकारले आहे असा होत नाही. भारतीय न्यायव्यवस्थेने वारंवार स्पष्ट केले आहे की प्रत्यक्ष पुरावा आणि परिस्थितीजन्य पुरावा यांच्यात मूळचा दर्जाभेद नाही; दोन्ही सारखेच ग्राह्य आहेत, फक्त ते विश्वासार्ह आणि तर्कशुद्ध असावेत ही अट आहे. प्रत्यक्षदर्शी नसणे हे प्रत्यक्षात असामान्य नाही. दुर्गम भागात घडणारे खून, बंद खोलीतील गुन्हे, आर्थिक फसवणुकीची प्रकरणे किंवा रात्रीच्या अंधारात घडणाऱ्या घटना यांमध्ये कोणीही साक्षीदार समोर येत नाही, हे वास्तव आहे. अशा वेळी तपास यंत्रणा आणि अभियोजन पक्ष यांचे लक्ष परिस्थितीजन्य पुराव्यांची भक्कम व सलग साखळी उभी करण्याकडे वळते. यासोबतच संविधानाने दिलेली न्याय्य प्रक्रियेची हमी (अनुच्छेद २१), निर्दोषतेचे गृहितक आणि व्यक्तिस्वातंत्र्याच्या मनमानी हननापासूनचे संरक्षण, हे सर्व मिळून कोणतीही दोषसिद्धी ही केवळ कायदेशीर व विश्वासार्ह पुराव्यावरच आधारलेली असावी, हे तत्त्व अधोरेखित करतात.

२. संशोधनाची उद्दिष्टे

हा लेख प्रामुख्याने तीन उद्दिष्टांभोवती रचला आहे. पहिले म्हणजे प्रत्यक्षदर्शी उपलब्ध नसताना न्यायालयासमोर कोणकोणते वैध पुराव्याचे पर्याय असतात, याची नेमकी मांडणी करणे. दुसरे उद्दिष्ट म्हणजे २०२३

साली अस्तित्वात आलेल्या नव्या फौजदारी कायद्यांनी फॉरेन्सिक आणि डिजिटल पुराव्याच्या वापरावर काय परिणाम घडविला, याचे मूल्यमापन करणे. आणि तिसरे म्हणजे सर्वोच्च न्यायालयाच्या महत्त्वाच्या निकालांतून, विशेषतः शरद बिर्धीचंद सारडा प्रकरणातून, उभी राहिलेली तत्त्वे नेमकी काय सांगतात, याचे तपशीलवार विश्लेषण करणे. विधि विद्यार्थी, प्रॅक्टिस करणारे वकील आणि तपास अधिकारी यांना प्रत्यक्ष उपयोगी पडेल असे व्यावहारिक आकलन देणे, हा या मांडणीमागचा हेतू आहे.

३. संवैधानिक पाया

प्रत्यक्षदर्शी नसलेल्या खटल्यांतील पुराव्याच्या स्वीकार्यतेला संविधानाने घालून दिलेली एक चौकट आहे, आणि ती पुढीलप्रमाणे मांडता येईल.

अनुच्छेद २१: कोणत्याही व्यक्तीचे जीवन किंवा वैयक्तिक स्वातंत्र्य कायद्याने प्रस्थापित प्रक्रियेखेरीज हिरावून घेता येणार नाही, असे हे कलम सांगते. यातूनच न्याय्य तपासाचा, खटल्याचा आणि पुराव्याला आव्हान देऊन बचाव मांडण्याचा अधिकार निघतो. परिस्थितीजन्य पुराव्यावर आधारित खटल्यांत हे कलम विशेष महत्त्वाचे ठरते, कारण इथे आरोपीला संशयाचा फायदा नाकारायचा की द्यायचा, हा प्रश्न वारंवार उभा राहतो.

अनुच्छेद २०: पूर्वलक्षी प्रभावाने शिक्षा, एकाच अपराधासाठी दुहेरी शिक्षा आणि स्वतःविरुद्ध साक्ष देण्याची सक्ती, या तिन्हींपासून हे कलम संरक्षण देते. यामुळेच कबुलीजबाब हा स्वेच्छेने दिलेला असावा लागतो; दबावाखाली घेतलेली कबुली पुरावा म्हणून टिकत नाही.

अनुच्छेद १४: कायद्यापुढे समानतेचे तत्त्व सांगणारे हे कलम पुराव्याच्या मूल्यमापनातही तर्कसंगत वर्गीकरण अपेक्षित असल्याचे सुचवते; म्हणजेच सारख्या स्वरूपाच्या पुराव्याला सारखीच वागणूक मिळायला हवी.

अनुच्छेद २२: अटक झालेल्या व्यक्तीला विनाविलंब दंडाधिकाऱ्यासमोर हजर करणे यासारखी संरक्षणे या कलमात आहेत, आणि यातूनच पुराव्याची सत्यता पडताळली जाण्याची एक औपचारिक संधी निर्माण होते.

या सर्व तरतुदी एकत्रितपणे हे सुनिश्चित करतात की पुरावा गोळा करणे आणि त्याचे मूल्यमापन करणे ही संपूर्ण प्रक्रिया न्याय्य मार्गानेच व्हावी, विशेषतः जिथे प्रत्यक्षदर्शीऐवजी अप्रत्यक्ष पुराव्यावर भिस्त ठेवावी लागते.

४. वर्तमान वैधानिक चौकट

भारतीय साक्ष अधिनियम, २०२३ (Bharatiya Sakshya Adhiniyam) ने जुन्या भारतीय पुरावा अधिनियम, १८७२ ची जागा घेतली असली, तरी त्यातील मूळ तत्त्वे मोठ्या प्रमाणात कायम ठेवली आहेत आणि त्यासोबतच इलेक्ट्रॉनिक पुराव्यासारख्या आधुनिक बाबींना स्पष्ट स्थान दिले आहे.

नव्या अधिनियमांतर्गत एकाच घटनेचा भाग असलेली तथ्ये (res gestae), आरोपीचा हेतू व पूर्वतयारी, त्याचे वर्तन, तसेच बोलू न शकणाऱ्या व्यक्तीचे विधान; उदाहरणार्थ मृत्युपूर्व जबाब, हे सर्व प्रासंगिक पुरावा म्हणून ग्राह्य धरले जातात. परिस्थितीजन्य पुराव्याची कायद्यात नेमकी व्याख्या दिलेली नसली, तरी फॉरेन्सिक अहवाल, वैद्यकीय तपासणी, डिजिटल नोंदी आणि जप्तीसंबंधीचे पुरावे यांचा त्यात सहज समावेश होतो. फॉरेन्सिक, बॅलिस्टिक, हस्ताक्षर आणि वैद्यकीय क्षेत्रातील तज्ज्ञांचे मतही तितकेच महत्त्वाचे मानले जाते, तसेच ईमेल, सीसीटीव्ही फुटेज, कॉल रेकॉर्ड्स आणि जीपीएस डेटा यांसारखा दस्तऐवजी व इलेक्ट्रॉनिक पुरावाही आता खटल्यात नियमितपणे वापरला जातो. आता भारतीय नागरिक सुरक्षा संहिता, २०२३ (BNSS) ने तपास प्रक्रिया अधिक भक्कम केली आहे. सात वर्षांपेक्षा जास्त शिक्षा होऊ शकणाऱ्या गंभीर गुन्ह्यांमध्ये फॉरेन्सिक पथकाची भेट आता बंधनकारक करण्यात

आली आहे, तसेच जबाब आणि खटल्याचे ऑडिओ-व्हिडिओ रेकॉर्डिंग आणि साक्षीदारांच्या संरक्षणासाठी स्वतंत्र यंत्रणा उभारण्याचीही तरतूद आहे. एक बाब लक्षात घेण्यासारखी आहे, कायद्याने साक्षीदारांच्या संख्येचे कोणतेही बंधन घातलेले नाही; एकच विश्वासार्ह आणि सलग परिस्थितीजन्य साखळी दोषसिद्धीसाठी पुरेशी ठरू शकते.

५. परिस्थितीजन्य पुराव्यावर दोषसिद्धीसाठी न्यायिक कसोट्या

परिस्थितीजन्य पुराव्याच्या आधारे शिक्षा देताना नेमकी कोणती काळजी घ्यावी, याविषयीचे सर्वात अधिकृत मार्गदर्शन सर्वोच्च न्यायालयाने शरद बिर्धीचंद सारडा विरुद्ध महाराष्ट्र राज्य (१९८४) या निकालात दिले आहे. यालाच सामान्यतः 'पंचशील चाचणी' म्हणून ओळखले जाते, आणि तिची पाच तत्त्वे साधारणपणे अशी मांडता येतात. दोषाचा निष्कर्ष काढण्याआधी सर्व परिस्थिती पूर्णपणे सिद्ध व्हायला हव्यात; सिद्ध झालेली तथ्ये केवळ आरोपीच्या दोषाशीच सुसंगत असावीत, अन्य कोणत्याही स्पष्टीकरणाला वाव उरू नये; ती तथ्ये आरोपीच्या निर्दोषतेची शक्यता ठामपणे नाकारणारी असावीत; परिस्थितीजन्य साखळी इतकी पूर्ण आणि अखंड असावी की त्यात कुठेही तडा नसावा; आणि जर त्यातून दोन तर्कसंगत निष्कर्ष निघू शकत असतील, तर आरोपीच्या बाजूने असणारा निष्कर्ष स्वीकारायला हवा. या प्रकरणात मृत व्यक्तीने लिहिलेली पत्रे, तिची मृत्युपूर्व विधाने आणि रासायनिक विश्लेषण अहवाल यांची छाननी करताना न्यायालयाने कलम ३२(१) अंतर्गत असे स्पष्ट केले की मृत्युपूर्व जबाब स्वीकारताना त्याचा संदर्भ, तो कोणत्या वेळी नोंदवला गेला आणि प्रत्यक्ष घटनेशी त्याचा किती जवळचा संबंध आहे, हे बारकाईने तपासायला हवे. उपलब्ध पुरावे आत्महत्येची शक्यता पूर्णतः वगळत नसतील, तर तेवढ्यावर शिक्षा देणे योग्य ठरत नाही, असेही न्यायालयाने नमूद केले आहे. म्हणजेच संशयाचा किंचितसा जरी वाव उरला, तरी संपूर्ण साखळी कोसळू शकते.

'शेवटचे एकत्र दिसणे' (Last Seen Theory) हा सिद्धांत एकटाच पुरेसा मानला जात नाही, विशेषतः जर घटना आणि मृत्यू यांच्यामध्ये मोठे वेळेचे अंतर असेल, हे तत्त्व स्टेट ऑफ महाराष्ट्र विरुद्ध सुरेश (२०००) या प्रकरणातून पुढे आले. त्याचबरोबर हेतू, जप्ती केलेल्या वस्तू आणि मृत्युपूर्व विधान यांसारख्या इतर पुराव्यांची त्याला जोड मिळाली, तरच साखळी भक्कम होते, असे हनुमंत विरुद्ध मध्य प्रदेश राज्य (१९५२) आणि बोधराज विरुद्ध जम्मू व काश्मीर राज्य (२००२) या निकालांतूनही स्पष्ट होते. इलेक्ट्रॉनिक पुराव्याच्या स्वीकार्यतेसंदर्भात अन्वर पी.व्ही. विरुद्ध पी.के. बशीर (२०१४) या निकालाने कलम ६५ब अंतर्गत प्रमाणपत्राची अट अधोरेखित केली, जी आजही डिजिटल पुरावा सादर करताना पाळावी लागते.

६. प्रत्यक्षदर्शी नसताना उपलब्ध पुराव्याचे स्वरूप

व्यवहारात प्रत्यक्षदर्शी नसलेल्या खटल्यांत खालील प्रकारचे पुरावे निर्णायक ठरताना दिसतात. फॉरेन्सिक व वैज्ञानिक पुरावा- डीएनए जुळणी, फिंगरप्रिंट आणि शवविच्छेदन अहवाल हे जैविक व वैद्यकीय संबंध सिद्ध करण्यासाठी वापरले जातात. मृत्युपूर्व विधान हे बोलू न शकणाऱ्या व्यक्तीचे शेवटचे शब्द म्हणून विशेष वजन धारण करते, पण त्याची सत्यता व वेळेची निकटता तपासूनच ते स्वीकारले जाते. न्यायदंडाधिकाऱ्यासमोर नोंदवलेली स्वेच्छेने दिलेली कबुली हाही एक भक्कम पुरावा ठरतो. डिजिटल पुराव्यामध्ये कॉल डिटेल रेकॉर्ड्स, बँक व्यवहारांच्या नोंदी आणि सीसीटीव्ही फुटेज यांचा समावेश होतो, जे संवादाचे स्वरूप, आर्थिक मार्ग आणि स्थळ-काळाचा संबंध उलगडण्यास मदत करतात. याशिवाय शत्रुत्वपूर्ण साक्षीदार (Hostile Witness) आणि माफीचा साक्षीदार (Approver) यांचे जबाबही, योग्य पडताळणीनंतर, साखळीचा भाग बनू शकतात. प्रत्येक प्रकारच्या पुराव्याची स्वीकार्यता स्वतंत्र निकषांवर तपासली जाते. डीएनए अहवालासाठी प्रयोगशाळेचे प्रमाणपत्र आणि जतनसाखळी

(chain of custody) आवश्यक असते, तर सीसीटीव्ही फुटेजसाठी टाइमस्टँप आणि ॲक्सेस लॉगचे प्रमाणीकरण गरजेचे ठरते. हे तपशील दुर्लक्षित राहिले, तर अन्यथा भक्कम वाटणारा पुरावाही न्यायालयात टिकत नाही.

७. अभियोजनासाठी व्यावहारिक मार्गदर्शन

प्रत्यक्षदर्शी उपलब्ध नसलेल्या प्रकरणात अभियोजन पक्षाने सुरुवातीपासूनच काही गोष्टींची दक्षता घेतली, तर खटला अधिक भक्कम होतो. गुन्हा उघडकीस येताच फॉरेन्सिक पथकाला तात्काळ पाचारण करून जतनसाखळी अखंड राखणे, सर्व दृश्ये व वस्तुनिष्ठ पुरावे व्हिडिओ रेकॉर्डिंगसह जतन करणे, डिजिटल पुराव्याची हार्ड डिस्क इमेजिंग करून प्रमाणित अहवाल मिळविणे आणि शक्य असेल तिथे मृत्युपूर्व विधान किंवा दंडाधिकाऱ्यासमोरील कबुली वेळेत नोंदवणे, या बाबी विशेष महत्त्वाच्या ठरतात. संशयाच्या पलीकडे पुरावा सिद्ध करण्याची जबाबदारी शेवटी अभियोजन पक्षावरच असते, आणि ही जबाबदारी पूर्ण तपास डायरी व पूर्ण, तुटलेली नसलेली पुराव्याची साखळी सादर केल्यानेच निभावली जाऊ शकते.

८. आव्हाने आणि मर्यादा

नव्या कायद्यांमुळे तंत्रज्ञानाचा वापर वाढला असला, तरी काही धोके कायम राहतात. पुराव्याच्या साखळीत कुठेतरी तूट राहणे, प्रयोगशाळा स्तरावरील त्रुटी, डिजिटल पुराव्यात होणारी छेडछाड आणि जतनसाखळीतील दुर्लक्ष, हे सर्व एकत्र येऊन अन्यथा भक्कम वाटणारे प्रकरणही कमकुवत करू शकते. त्यामुळे तपास यंत्रणा आणि अभियोजन पक्ष यांनी केवळ तंत्रज्ञानावर विसंबून न राहता, प्रत्येक टप्प्यावरची प्रक्रिया काटेकोरपणे पाळणे आवश्यक ठरते.

९. निष्कर्ष

प्रत्यक्षदर्शी साक्षीदार उपलब्ध नसणे हे भारतीय फौजदारी न्यायव्यवस्थेसाठी अडथळा नाही; उलट, परिस्थितीजन्य आणि वैज्ञानिक पुराव्याच्या आधारे न्याय मिळवून देण्याची क्षमता कायद्यात पुरेशी आहे. संविधानाने घालून दिलेली न्याय्यतेची चौकट आणि भारतीय साक्ष अधिनियम २०२३ व भारतीय नागरिक सुरक्षा संहिता २०२३ यांसारख्या नव्या कायद्यांनी दिलेले फॉरेन्सिक व तांत्रिक बळ, या दोन्हींची सांगड घातली गेली, तरच अशा खटल्यांत न्याय मिळणे शक्य होते. अखेरीस, यशाचे गमक तपासाच्या बारकाईत आणि पुरावा सादर करण्याच्या शिस्तीतच दडलेले आहे. कायदा साधने पुरवतो, पण ती साधने योग्य पद्धतीने वापरणे ही तपास यंत्रणेची आणि अभियोजन पक्षाची जबाबदारी उरते.

संदर्भ सूची

1. Sharad Birdhichand Sarda v. State of Maharashtra, AIR 1984 SC 1622.
2. Hanumant v. State of Madhya Pradesh, AIR 1952 SC 343.
3. State of Maharashtra v. Suresh, (2000) 1 SCC 465.
4. Bodh Raj v. State of Jammu & Kashmir, AIR 2002 SC 3164.
5. Anvar P.V. v. P.K. Basheer, (2014) 10 SCC 473.
6. Vilas Pandurang Patil v. State of Maharashtra, (2000) SCC.
7. भारतीय संविधान- अनुच्छेद १४, २०, २१ व २२.
8. भारतीय साक्ष अधिनियम, २०२३ (क्रमांक ४७, वर्ष २०२३).
9. भारतीय नागरिक सुरक्षा संहिता, २०२३.

लोकशाही, निषेध आणि वर्तमान भारतीय परिस्थिती : एक दृष्टिक्षेप

डॉ. जयश्री छगनलाल साळुंखे

(सहयोगी प्राध्यापक)

(डॉ. बाबासाहेब आंबेडकर स्मृती विधी महाविद्यालय,धुळे)

१. प्रस्तावना

लोकशाही ही केवळ निवडणुका घेण्याची किंवा बहुमताच्या आधारे शासन करण्याची व्यवस्था नसून, ती मतभिन्नता, अभिव्यक्तीचे स्वातंत्र्य, विरोध करण्याचा अधिकार आणि शासनाला प्रश्न विचारण्याची नागरिकांची क्षमता यांवर आधारलेली व्यवस्था आहे. लोकशाहीमध्ये सरकार हे जनतेसाठी आणि जनतेच्या उत्तरदायित्वाखाली कार्य करते. त्यामुळे शासनाच्या धोरणांशी किंवा निर्णयांशी असहमती व्यक्त करण्याचा अधिकार हा लोकशाही प्रक्रियेचा अविभाज्य भाग आहे. निषेध किंवा आंदोलन हे नागरिकांच्या असहमतीचे संघटित आणि सार्वजनिक स्वरूप आहे. संसद, न्यायालये आणि निवडणुका या लोकशाहीच्या औपचारिक संस्था असल्या, तरी रस्त्यावर होणारे शांततापूर्ण आंदोलन हे लोकशाहीतील अनौपचारिक परंतु प्रभावी संवादाचे माध्यम आहे. भारताच्या स्वातंत्र्यलढ्यात महात्मा गांधींच्या सत्याग्रह, असहकार आणि शांततामय आंदोलनांनी ब्रिटिश सत्तेविरुद्ध जनमत निर्माण केले. त्यामुळे भारतातील लोकशाही परंपरेमध्ये आंदोलनाला ऐतिहासिक आणि नैतिक अधिष्ठान प्राप्त झाले आहे.

मात्र निषेधाचा अधिकार हा निरंकुश अधिकार नाही. भारतीय संविधान नागरिकांना अभिव्यक्ती व शांततापूर्ण सभा घेण्याचे अधिकार देते; त्याच वेळी सार्वजनिक सुव्यवस्था, सार्वभौमत्व, सुरक्षा आणि इतर नागरिकांच्या अधिकारांचे संरक्षण करण्यासाठी वाजवी निर्बंधांनाही मान्यता देते. त्यामुळे "निषेधाचा अधिकार" आणि "सार्वजनिक सुव्यवस्था" यांच्यात समतोल राखणे हे भारतीय लोकशाहीसमोरील महत्त्वाचे आव्हान आहे.

२. भारतीय लोकशाही

भारतीय संविधानाच्या प्रस्तावनेत भारताला "सार्वभौम, समाजवादी, धर्मनिरपेक्ष, लोकशाही गणराज्य" म्हणून घोषित करण्यात आले आहे. भारतीय लोकशाहीचे मूलभूत उद्दिष्ट नागरिकांना न्याय, स्वातंत्र्य, समानता आणि बंधुता प्रदान करणे हे आहे. भारतीय लोकशाहीची एक महत्त्वाची वैशिष्ट्ये म्हणजे मूलभूत अधिकारांचे संरक्षण. संविधानाच्या भाग III मध्ये नागरिकांना विविध मूलभूत अधिकार देण्यात आले आहेत. त्यामध्ये अनुच्छेद 19 ला विशेष महत्त्व आहे. अनुच्छेद 19(1)(a) नागरिकांना विचार व अभिव्यक्ती स्वातंत्र्याचा अधिकार देतो, तर अनुच्छेद 19(1)(b) नागरिकांना शांततापूर्ण व नि:शस्त्र सभा घेण्याचा अधिकार प्रदान करतो.

लोकशाहीमध्ये अभिव्यक्ती स्वातंत्र्याचा अर्थ केवळ सरकारच्या समर्थनार्थ बोलण्याचा अधिकार असा नसून, सरकारच्या धोरणांवर टीका करणे, पर्यायी विचार मांडणे आणि सार्वजनिक प्रश्नांवर असहमती व्यक्त करणे याचाही त्यात समावेश होतो. त्यामुळे विरोधी मत हे लोकशाहीचे दुर्बलतेचे नव्हे तर सुदृढतेचे लक्षण मानले पाहिजे.

मात्र अनुच्छेद 19(1)(b) अंतर्गत मिळणारा सभेचा अधिकार निरपेक्ष नाही. अनुच्छेद 19(3) नुसार भारताचे सार्वभौमत्व व अखंडता आणि सार्वजनिक सुव्यवस्था यांच्या हितासाठी कायद्याद्वारे वाजवी निर्बंध लावता येतात. याचा अर्थ असा की नागरिकांना आंदोलन करण्याचा अधिकार आहे; परंतु आंदोलनाच्या नावाखाली हिंसा, सार्वजनिक मालमत्तेची नासधूस, नागरिकांच्या हालचालींवर अमर्यादित अडथळा किंवा कायदा व सुव्यवस्थेचा गंभीर भंग करण्याचा अधिकार संविधान देत नाही. सर्वोच्च न्यायालयाने Mazdoor Kisan Shakti Sangathan v. Union of India या प्रकरणात शांततापूर्ण निदर्शनांच्या घटनात्मक संरक्षणाचा विचार केला आणि नागरिकांना आपल्या मागण्या मांडण्यासाठी शांततापूर्ण प्रदर्शन करण्याचा अधिकार असल्याचे अधोरेखित केले.

भारतीय लोकशाही ही केवळ निवडणुकांवर आधारित शासनव्यवस्था नसून जनसहभाग, उत्तरदायित्व, संविधानिक शासन, संस्थात्मक संतुलन आणि सार्वजनिक विवेक यांचा समन्वय असलेली व्यापक व्यवस्था आहे. भारतीय संविधानाने लोकसत्तेला सर्वोच्च स्थान देऊन शासनाच्या अधिकारांना घटनात्मक मर्यादा घातल्या आहेत. त्यामुळे भारतीय लोकशाहीमध्ये सत्ता ही अधिकाराबरोबरच उत्तरदायित्वाची संकल्पनाही घेऊन येते.

भारतीय लोकशाहीचे वैशिष्ट्य तिच्या बहुविध सामाजिक संरचनेत विशेषत्वाने दिसून येते. विविध भाषा, संस्कृती, सामाजिक समूह, आर्थिक स्तर आणि वैचारिक प्रवाह असलेल्या समाजाला एका संविधानिक चौकटीत एकत्र ठेवण्याचे कार्य लोकशाही करते. त्यामुळे भारतीय लोकशाहीचे यश केवळ बहुमताच्या निर्णयावर अवलंबून नसून, विविध मतप्रवाहांना समान सार्वजनिक अवकाश उपलब्ध करून देण्यावर अवलंबून आहे.

लोकशाहीमध्ये मतभिन्नता ही व्यवस्थेतील त्रुटी नसून तिच्या सुदृढतेचे लक्षण आहे. समाजातील सर्व व्यक्ती एखाद्या धोरणाशी किंवा निर्णयाशी सहमत असतीलच असे नाही. त्यामुळे शासनव्यवस्थेने सहमतीबरोबरच असहमतीलाही स्थान देणे आवश्यक ठरते. यामुळे सार्वजनिक धोरणांवर चर्चा, चिकित्सक विचार आणि पर्यायी दृष्टिकोन विकसित होतात.

भारतीय लोकशाहीची आणखी एक महत्त्वाची बाजू म्हणजे लोकशाही संस्थांची परस्पर उत्तरदायित्वाची रचना. विधिमंडळ, कार्यपालिका, न्यायपालिका, निवडणूक आयोग, नियंत्रक व महालेखापरीक्षक यांसारख्या संस्थांमधील परस्पर संतुलनामुळे सत्तेच्या केंद्रीकरणाला मर्यादा येतात. या संस्थांची स्वायत्तता आणि कार्यक्षमता लोकशाहीच्या गुणवत्तेवर थेट परिणाम करते. यासोबतच भारतीय लोकशाहीमध्ये लोकशाही संस्कृती विकसित होणे तितकेच आवश्यक आहे. कायद्याचा आदर, वैचारिक सहिष्णुता, विरोधी मत ऐकण्याची तयारी, सार्वजनिक चर्चेतील सभ्यता आणि तथ्याधारित विचार हे लोकशाही संस्कृतीचे आवश्यक घटक आहेत. केवळ घटनात्मक संस्था अस्तित्वात असणे पुरेसे नसून, त्यामागे लोकशाही मूल्यांची सामाजिक स्वीकार्यता असणे आवश्यक आहे.

आधुनिक काळात लोकशाहीचा अर्थ निष्क्रिय नागरिकत्वापासून सक्रिय नागरिकत्वाकडे झालेला प्रवास असा देखील पाहता येतो. नागरिक मतदान करण्याबरोबरच सार्वजनिक प्रश्नांवर मत व्यक्त करतात, प्रशासनाकडे माहिती मागतात, सामाजिक संस्थांमध्ये सहभागी होतात आणि धोरणनिर्मितीवर सार्वजनिक चर्चा घडवून आणतात. त्यामुळे लोकशाहीमध्ये नागरिक हा केवळ मतदार नसून सार्वजनिक निर्णयप्रक्रियेचा सक्रिय भागीदार आहे.

याच ठिकाणी भारतीय लोकशाही आणि पुढील मुद्दा—"लोकशाहीतील अधिकार म्हणून निषेध"—यांच्यात महत्त्वाचा संबंध निर्माण होतो. नागरिकांचा सहभाग केवळ शासनाला समर्थन देण्यापुरता मर्यादित नसतो; शासनाच्या निर्णयांशी असहमती असल्यास ती शांततामय, संघटित आणि संविधानिक मार्गाने व्यक्त करण्याची क्षमता हीदेखील लोकशाहीच्या कार्यक्षमतेचा भाग आहे. त्यामुळे निषेध हा लोकशाहीच्या बाहेरील संघर्ष नसून, नागरिक आणि शासन यांच्यातील सार्वजनिक संवादाचा पुढील टप्पा म्हणून पाहता येतो.

३. लोकशाहीतील अधिकार म्हणून निषेध

निषेध म्हणजे शासनाच्या, संस्थेच्या किंवा एखाद्या निर्णयाच्या विरोधात असहमती व्यक्त करण्याची सार्वजनिक कृती होय. तो मोर्चा, धरणे, उपोषण, निवेदन, शांततापूर्ण सभा, काळ्या फिती लावणे, प्रतीकात्मक आंदोलन किंवा इतर अहिंसक मार्गांनी व्यक्त होऊ शकतो.

भारतीय संविधानात "right to protest" असा स्वतंत्र शब्दशः मूलभूत अधिकार नमूद केलेला नाही. तथापि, अनुच्छेद 19(1)(a) मधील अभिव्यक्ती स्वातंत्र्य आणि अनुच्छेद 19(1)(b) मधील शांततापूर्ण सभा घेण्याचा अधिकार यांच्या एकत्रित वाचनातून शांततापूर्ण निषेधाचा घटनात्मक आधार निर्माण होतो. सर्वोच्च न्यायालयाने Ramlila Maidan Incident, In Re या प्रकरणात शांततापूर्ण सभा व निदर्शनांच्या अधिकाराला लोकशाही व्यवस्थेतील

महत्त्वपूर्ण स्थान दिले. नागरिकांना आपल्या मागण्या सरकारसमोर मांडण्याचा अधिकार आहे; परंतु हा अधिकार इतर नागरिकांच्या अधिकारांवर अतिक्रमण करण्यासाठी वापरता येणार नाही.

त्याचप्रमाणे Amit Sahni v. Commissioner of Police या प्रकरणात, ज्याचा संबंध Shaheen Bagh आंदोलनाशी होता, सर्वोच्च न्यायालयाने सार्वजनिक ठिकाणे अनिश्चित काळासाठी व्यापून ठेवण्याच्या प्रश्नावर संतुलित दृष्टिकोन स्वीकारला. न्यायालयाने स्पष्ट केले की असहमती व्यक्त करण्याचा अधिकार महत्त्वाचा आहे; परंतु सार्वजनिक मार्गांचा अनिश्चित काळासाठी अडथळा करणे स्वीकारार्ह ठरू शकत नाही.

यावरून एक महत्त्वाचे तत्त्व स्पष्ट होते—लोकशाहीमध्ये आंदोलनाला संरक्षण आहे, परंतु अराजकतेला संरक्षण नाही. शांततापूर्ण आंदोलन हे शासनाला जनतेच्या समस्या समजून घेण्यास भाग पाडते. विशेषतः संसद किंवा प्रशासकीय यंत्रणेकडून एखाद्या विषयावर अपेक्षित प्रतिसाद मिळत नसल्यास लोकशाहीतील आंदोलन हा जनतेच्या आवाजाचा प्रभावी मार्ग ठरतो. मात्र आंदोलनाची वैधता टिकवण्यासाठी त्यामध्ये अहिंसा, सार्वजनिक सुव्यवस्था, कायद्याचे पालन आणि इतरांच्या मूलभूत अधिकारांचा आदर आवश्यक आहे.

निषेध हा लोकशाहीतील नागरिकांच्या असहमतीचा संस्थात्मक आणि वैध मार्ग आहे. तो केवळ शासनविरोधी कृती नसून सार्वजनिक प्रश्नांवर जनमत घडविण्याचे आणि सत्तेला उत्तरदायी ठेवण्याचे साधन आहे. भारतीय संविधानातील अनुच्छेद 19(1)(a) व 19(1)(b) यांच्या संयुक्त प्रभावातून शांततापूर्ण निषेधाला घटनात्मक अधिष्ठान प्राप्त होते. सर्वोच्च न्यायालयाने Mazdoor Kisan Shakti Sangathan v. Union of India मध्ये निषेध हा लोकशाहीतील वैध असहमतीचा महत्त्वपूर्ण भाग असल्याचे स्पष्ट केले आहे. मात्र हा अधिकार इतर नागरिकांच्या अधिकारांना बाधा न आणता वापरला पाहिजे. त्यामुळे निषेधाचे स्वातंत्र्य आणि सार्वजनिक हित यांचा समतोल ही लोकशाहीची खरी कसोटी आहे

४. वर्तमान निषेध आणि भारतीय लोकशाही

अलीकडील भारतीय परिस्थितीकडे पाहिल्यास आंदोलनांचे स्वरूप अधिक व्यापक आणि बहुआयामी झालेले दिसून येते. शेतकरी आंदोलन, नागरिकत्व दुरुस्ती कायद्याविरोधातील आंदोलने, विद्यार्थ्यांची आंदोलने, रोजगार व परीक्षांशी संबंधित आंदोलने, स्थानिक हक्कांचे प्रश्न, पर्यावरणीय प्रश्न आणि विविध सामाजिक मागण्या या माध्यमातून नागरिकांनी आपली असहमती व्यक्त केली आहे.

विशेषतः 2020–21 मधील शेतकरी आंदोलनाने भारतीय लोकशाहीतील शांततापूर्ण सामूहिक आंदोलनाची व्यापक क्षमता दाखवून दिली. हजारो नागरिकांनी दीर्घकाळ आंदोलन करून आपल्या मागण्या केंद्र सरकारसमोर मांडल्या. त्याचप्रमाणे Shaheen Bagh आंदोलनाने नागरिकत्वासंबंधी कायद्याविरोधातील असहमती, महिलांचा सार्वजनिक सहभाग आणि संविधानिक मूल्यांच्या चर्चेला राष्ट्रीय पातळीवर आणले.

आजच्या काळात आंदोलनांचे एक महत्त्वाचे वैशिष्ट्य म्हणजे डिजिटल माध्यमांचा वापर. सोशल मीडिया, ऑनलाइन मोहिमा, डिजिटल याचिका, हॅशटॅग आणि थेट प्रसारण यांमुळे आंदोलनांचा प्रभाव केवळ एका ठिकाणापुरता मर्यादित राहत नाही. एका शहरात सुरू झालेले आंदोलन काही तासांत राष्ट्रीय चर्चेचा विषय बनू शकते. मात्र डिजिटल माध्यमांमुळे काही नवीन समस्या देखील निर्माण झाल्या आहेत. अपप्रचार, चुकीची माहिती, द्वेषपूर्ण भाषण, बनावट बातम्या आणि सामाजिक ध्रुवीकरण यामुळे आंदोलनाच्या मूळ उद्देशावर परिणाम होऊ शकतो. त्यामुळे डिजिटल अभिव्यक्तीचे स्वातंत्र्य आणि जबाबदार नागरिकत्व यांच्यात संतुलन आवश्यक आहे.

वर्तमान परिस्थितीत राजकीय पक्षांकडूनही आंदोलनांचा वापर मोठ्या प्रमाणावर केला जातो. जुलै 2026 मध्ये विद्यार्थ्यांच्या प्रश्नांशी संबंधित आंदोलनाच्या पार्श्वभूमीवर विरोधी राजकीय नेत्यांनी दिल्लीमध्ये आंदोलन केले आणि काही नेत्यांना पोलिसांनी ताब्यात घेतल्याची घटना समोर आली. या घटनेने पुन्हा एकदा विरोध करण्याचा अधिकार, पोलिसांची भूमिका, सार्वजनिक सुव्यवस्था आणि राजकीय आंदोलन यांच्यातील संतुलनाचा प्रश्न चर्चेत आणला.

यातून दोन परस्परविरोधी भूमिका समोर येतात. एका बाजूला शासनाचे म्हणणे असते की आंदोलनामुळे सार्वजनिक सुव्यवस्था आणि नागरिकांचे दैनंदिन जीवन बाधित होता कामा नये; तर दुसऱ्या बाजूला आंदोलकांचे म्हणणे असते की शासनाचे लक्ष वेधण्यासाठी सार्वजनिक आंदोलन अपरिहार्य आहे. लोकशाहीमध्ये या दोन्ही भूमिकांमध्ये संवैधानिक संतुलन साधणे आवश्यक आहे. निषेधाच्या संदर्भात सर्वोच्च न्यायालयाच्या अलीकडील न्यायिक चर्चेतही हे स्पष्ट झाले आहे की शांततापूर्ण आंदोलन आणि गुन्हेगारी कट किंवा हिंसक कृती यांच्यात स्पष्ट फरक करणे आवश्यक आहे. केवळ सरकारविरोधी विचार व्यक्त करणे किंवा आंदोलनात सहभागी होणे याला आपोआप गुन्हेगारी स्वरूप देता येत नाही; मात्र आंदोलनाच्या नावाखाली हिंसाचार, सार्वजनिक मालमत्तेचे नुकसान किंवा गंभीर गुन्हेगारी कट असल्यास घटनात्मक संरक्षणाचा प्रश्न वेगळ्या पद्धतीने तपासला जातो.

त्यामुळे वर्तमान भारतीय लोकशाहीसमोरील मुख्य प्रश्न हा "आंदोलन असावे की नसावे?" असा नसून, "लोकशाहीतील आंदोलन किती शांततापूर्ण, जबाबदार आणि संविधानसुसंगत असावे?" हा आहे.

५. निष्कर्ष

भारतीय लोकशाहीची शक्ती केवळ निवडणुकांमध्ये नसून, नागरिकांना सत्तेला प्रश्न विचारण्याची आणि असहमती व्यक्त करण्याची मिळालेली संविधानिक मुभा यामध्ये आहे. निषेध हा लोकशाहीचा शत्रू नसून तो लोकशाहीतील आवश्यक दुरुस्तीची प्रक्रिया आहे. शासनाच्या निर्णयांवर प्रश्न उपस्थित करणारे नागरिक हे लोकशाही व्यवस्थेला अधिक उत्तरदायी बनवतात. तथापि, निषेधाचा अधिकार जबाबदारीशिवाय वापरला तर तो लोकशाहीला बळकटी देण्याऐवजी सामाजिक संघर्ष, हिंसा आणि अराजकतेस कारणीभूत होऊ शकतो. त्यामुळे अभिव्यक्ती स्वातंत्र्य, शांततापूर्ण सभा, सार्वजनिक सुव्यवस्था आणि इतर नागरिकांचे अधिकार यांच्यात समतोल राखणे आवश्यक आहे. भारतीय संविधानाने नागरिकांना असहमती व्यक्त करण्याचे दार खुले ठेवले आहे; परंतु त्या दारातून हिंसा नव्हे, तर संविधानिक संवाद आत यायला हवा. शासनानेही प्रत्येक विरोधाकडे शत्रुत्वाच्या दृष्टीने न पाहता, त्यामागील लोकशाही संदेश समजून घेण्याचा प्रयत्न केला पाहिजे. त्याचप्रमाणे आंदोलकांनीही संविधानिक मर्यादा, सार्वजनिक सुव्यवस्था आणि इतर नागरिकांच्या अधिकारांचा आदर केला पाहिजे.

अशा प्रकारे, "लोकशाही + निषेध + संविधानिक जबाबदारी" हे त्रिसूत्र भारतीय लोकशाहीला अधिक सशक्त करू शकते. खऱ्या अर्थाने प्रगल्भ लोकशाही तीच असते जिथे सरकारला समर्थन करणाऱ्याचा आवाज जितका महत्त्वाचा असतो, तितकाच विरोध करणाऱ्याचा आवाज ऐकण्याची शासनाची तयारी देखील महत्त्वाची असते.

संदर्भ

1. भारताचे संविधान — अनुच्छेद 19(1)(a), 19(1)(b) व 19(3).
2. *Ramlila Maidan Incident, In Re*, (2012) 5 SCC 1.
3. *Mazdoor Kisan Shakti Sangathan v. Union of India*, (2018) — सर्वोच्च न्यायालय.
4. *Amit Sahni v. Commissioner of Police*, (2020/2021) — Shaheen Bagh संदर्भातील सर्वोच्च न्यायालयाचा निर्णय.
5. *Himat Lal K. Shah v. Commissioner of Police*, (1973) 1 SCC 227.
6. *Kameshwar Prasad v. State of Bihar*, AIR 1962 SC 1166.
7. सर्वोच्च न्यायालयाचे 2024 मधील घटनात्मक अधिकार व राजकीय निषेधासंबंधी न्यायिक विवेचन.
8. सर्वोच्च न्यायालय, 2026 मधील Article 19(1)(a) व 19(1)(b) संदर्भातील न्यायिक चर्चा.

सिम्बॉल ऑफ नॉलेज :- डॉ. बाबासाहेब आंबेडकर

प्रो. डॉ. संजय उत्तम बेंद्रे

वसंतराव नाईक कला, वाणिज्य महाविद्यालय

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प्रास्ताविक:-

महात्मा फुले, राजर्षि शाहू महाराज आणि डॉ. बाबासाहेब आंबेडकर या महामानवांचा आणि त्यांच्या विचारांचा उदघोष सातत्याने कानावर आदळत असतो. या महामानवांचा श्वास म्हणजे समाज परिवर्तनाचा ध्यास हाच होता. देशातील सर्व नागरिकांना सामावून घेणारी आणि सर्वाना समान दर्जा देणारी राज्यघटना डॉ. बाबासाहेबांनी दिली. वास्तविक पाहता ही घटना म्हणजे देशाची मार्गदर्शिका होय व हि सुद्धा बाबासाहेबांच्या ज्ञानाच्या कसोटीवर तयार झाली होती असेच म्हणावे लागते. सर्वकष समाज परिवर्तनाचा ध्यास घेणारे आणि सर्व भारतीयांना समान दर्जा देणे हे हि बुद्धीच्या कसोटीवर घासणारे शिवधनुष बाबासाहेबांनी आपल्या अंगभूत गुणांनी उचलले होते. म्हणूनच त्यांना अफाट ज्ञानाचा सागर असे संबोधले जाते. याचे बोलके उदाहरण द्यावयाचे झाले तर डॉ. बाबासाहेब आपल्या भाषणात भारतात एकात्म स्वरूप निर्माण करण्यासंबंधी सर्वाना आवाहन करताना म्हणतात," मी हे जाणतो कि आज आपण राजकीय, आर्थिक, सामाजिक दृष्ट्या विभाजित आहोत, आपण परस्परामध्ये टोकाच्या प्रतिस्पर्धी गटात विभाजित आहोत "

डॉ. बाबासाहेबांना सिम्बॉल ऑफ नॉलेज का मानतात :-

डॉ. बाबासाहेब आंबेडकर यांना "सिम्बॉल ऑफ नॉलेज " { ज्ञानाचे प्रतिक } म्हणून ओळखले जाते कारण त्यांचे अलौकिक ज्ञान विविध विषयातील गाढा अभ्यास आणि त्यांचे उत्तुंग शैक्षणिक योगदान अजोड आहे. २०११ मध्ये कोलंबिया विध्यापीठाच्या १५० वर्ष्याच्या सोहळ्या प्रसंगी त्यांना जगभरातील गुणवंता मधून "नॉलेज ऑफ सिम्बॉल" म्हणून घोषित करण्यात आले होते. *त्यांना हि उपाधी देण्यामागे प्रमुख करणे*

अथांग आणि अष्ठपैलू शिक्षण :-

वास्तविक पाहता अस्पृश्यांनी शिक्षण घेणे हे पाप समजले जाई पण रामजीबाबा व बाबासाहेबांना ते ज्ञानाचा सागर वाटत होते म्हणून बाबासाहेबांनी प्राथमिक ते माध्यमिक शिक्षण हे झगडत का असेना आपल्या ज्ञानाच्या जीवावर, प्रत्यक्ष वर्गात न बसता उच्चश्रेणीत हे शिक्षण पूर्ण केले. बडोद्याचे सयाजीराव गायकवाड यांच्या २५ रुपये शिषवृत्तीवर ते बी. ए. झाले. सयाजीराव गायकवाड काही विध्यार्थ्यांना उच्च शिक्षणासाठी अमेरेकेला पाठवणार होते. तेथे त्यांनी एम. ए. साठी कोलंबिया विद्यापीठात "अडमिशन एयंड फायनान्स ऑफ इस्ट इंडिया कंपनी" हा प्रबंध सादर करून ते अर्थशास्त्रात एम. ए. झाले.१ तसेच त्यांनी ऑक्टोबर १९२२ मध्ये "द प्रोब्लेम ऑफ रुपी" हा प्रबंध तयार करून लंडन विद्यापिठास सदर करून डी. एसी. पदवी प्राप्त केली. तसेच उच्च शिक्षणातील वाढता खर्च व आपल्याकडील अपूरी पुंजी त्यामुळे अनेक सेमिस्टर एका-एका वर्षात पूर्ण करून आपल्या ज्ञानाची चुणूक दाखवली.

डॉ. बाबासाहेब आंबेडकरांनी अर्थशास्त्र, कायदाशास्त्र, समाजशास्त्र, इतिहास आणि दर्शनशास्त्र या सारख्या अनेक विषयात उच्च पदव्या संपादीत केल्या. त्यांनी एम.ए.पीएच. डी, डी. एसी. या सारख्या कठीण पदव्या मिळवल्या.२

भारतीय संविधानाचे शिल्पकार :-

भारताचे संविधान तयार करण्यात त्यांची भूमिका सर्वोच्च होती. जगातल्या सर्वात मोठ्या लोकशाही देशाचे संविधान लिहिण्यासाठी लागणारे कायदेविषयक ज्ञान, दुरदृष्ठी आणि अभ्यास त्यांच्याकडे होता.

घटनेमध्ये आपल्या बुद्धिमत्येच्या जीवावर आणि काळाची पाऊले ओळखून बाबासाहेबांनी "सार्वभौम, समाजवादी, धर्मातीत, लोकशाही प्रजासत्ताक या तत्वांचा समावेश करण्यात आला. तसेच बाबासाहेबांनी घटनेच्या माध्यमातून देश बौद्धमय कसा होईल याकडे पाहिले होते. तसेच आपला बहुजन समाज हा सामाजिक व आर्थिक दृष्टीने मागास असलेली कल्पना बाबासाहेबांनी फार वर्षा पासून समाजास करून दिली होती. म्हणूनच त्यांनी घटनेत राखीव जागा हे तत्व टाकून मागास समाजाचा उद्धार केला.

अफाट वाचन आणि वयाक्तिक ग्रंथालय:-

बाबासाहेबांचे वाचन हे अफाट होते. दररोज ते १८ ते २० तास सतत वाचन आणि लेखन करत असत. भारतात आणि भारता बाहेरही बाबासाहेबांनी आपले वाचनाचे वेड जपले होते. विविध ग्रंथालयातील आपल्या आवडीची पुस्तके बाबासाहेब एकत्र करून त्याचे वाचन करत असत. त्यांच्या वाचण्यात अर्थशास्त्र, समाजशास्त्र, इतिहास, तत्वज्ञान, मानववंशशास्त्र आणि भाषाशास्त्र या विषयांचा त्यांचा गाढा अभ्यास होता. त्यांना हिंदी, इंग्रजी, मराठी, संस्कृत, पाली, फ्रेंच, जर्मन, गुजराती आणि पर्शियन या भाष्यांचे ज्ञान होते.

बाबासाहेबांचे वाचन अफाट असल्याने आणि त्यांच्याकडे असलेल्या पुस्तकासाठी त्यांनी त्यांच्या "राजगृह" या निवासस्थानी पुस्तकासाठी ग्रंथालय उभे केले होते व या ग्रंथालयात त्यांची ५०००० पेक्षा ज्यास्त पुस्तके संग्रहित होती, जे त्या काळातील जगातील सर्वात मोठे वैयक्तिक ग्रंथालय मानले जाते.

विविध क्षेत्रातील गाढा अभ्यास :-

बाबासाहेब केवळ एखाद्या विषयातच निष्णात होते असे नाही तर त्यांचा अभ्यास व त्यांचा आवाका मोठ्या प्रमाणात होता. डॉ. बाबासाहेबांचे जीवन उच्च शिक्षणासाठी अधिक काळ इंग्लंडमध्ये गेले, त्यामुळे बाबासाहेबांच्या मनावर इंग्लंडच्या पार्लमेंट्री लोकशाहीचा पगडा बसला होता. त्यावर भाष्य करताना बाबासाहेब विरोधी पक्षाचे महत्त्व विशद करताना म्हणतात, लोकशाहीत विरोधी पक्ष असला पाहिजे, विरोधी पक्ष म्हणजे लोकशाहीचा आत्मा असतो.३

अर्थशास्त्र:-

अर्थशास्त्र हा बाबासाहेबांचा आवडीचा विषय होता त्यांनी लिहलेल्या "द प्रोब्लेम ऑफ द रुपी" या ग्रंथातील सिद्धान्तावर "रिजर्व बँक ऑफ इंडिया" या मध्यवर्ती बँकेची स्थापना झाली. यातूनच शेतीचा प्रश्न सोडवण्याचा प्रयत्न केला. म्हणून बाबासाहेब कृषीच्या बाबतीत पुढाकार घेतात.

भारतीय शेती, शेतकरी आणि शेतमजूर या घटकांशी असलेले प्रश्न हे आंबेडकरांचे चिंतनाचे प्रश्न होते. बाबासाहेब म्हणतात शेत जमिनीचे सातत्याने होणारे विभाजन व अपखंडणामुळे धाराण क्षेत्राचा लहान लहान आकार याचाच परिणाम शेतीचे उत्पादन घटते, जमीनदार, सावकार, खोत यांच्या कडून शेतक-यांची होणारी पिळवणूक यावर बाबासाहेब संसदेत आवाज उठवतात.४

जलधोरण आणि वीज निर्मिती:-

भारतात कांही भागात मोठ्या प्रमाणात पाऊस पडतो पण त्याचे पाणी नदीतून समुद्रात मिळते व या पाण्याचा वापर शेतीसाठी केल्यास भारत सुजलाम सुफलाम होऊ शकतो. म्हणून बाबासाहेबांनी धरण बांधणीचा प्रयोग केला त्यांच्याच विचारातून हिराकूड व भाक्रा-नांगल हि धरणे बांधली गेली. जलविकासासाठी दामोदर नदी खोरे महामंडळ स्थापन केले. नेहमी येणाऱ्या पुरामुळे अनेक समस्याना जनतेला तोंड दयावे लागते म्हणून नदीजोड प्रकल्प बाबासाहेबांनी राबवला. नदीजोड प्रकल्पामुळे सिंचन, नौकानयन, औधौगिक, पाणीपुरवठा यासाठी बाबासाहेब सतत प्रयत्नशील होते.५

बाबासाहेब केवळ धरण बांधून थांबले नाहीत तर तेथे वीज निर्मिती कशी करता येईल याकडे त्यांनी लक्ष दिले. दामोदर व्हाली प्रकल्पातून २५०० मेगावॉट पेक्षा जास्त वीज निर्माण होत आहे. हिराकूड प्रकल्पाची जलविधूत निर्मितीक्षमता ३४७ मेगावॉट इतकी आहे. भाक्रा-नांगल या प्रकल्पाची वीज निर्मिती क्षमता १३०० मेगावॉट पेक्षा जास्त आहे.

कायदा आणि कायदेशास्त्र :- बाबासाहेब आंबेडकरांनी लंडनच्या " ग्रेज इन " मधून - बॅरिस्टर ॲट लॉ " ही पदवी प्राप्त केली. ते भारतीय संविधानाच्या मसुदा समितीचे आध्यक्ष होते आणि स्वतंत्र भारताचे पहिले कायदामंत्री होते. म्हणूनच त्यांना भारतीय घटनेचे शिल्पकार मानले जाते.

इतिहास :- बाबासाहेबांचा प्राचीन आणि मध्ययुगीन भारतीय इतिहासाचा आणि विविध सामाजिक प्रवाहांचा त्यांनी सखोल अभ्यास केला होता. " हु वेअर द शूद्रा " या पुस्तकातून त्यांनी एतिहासिक संशोधनाचा उत्कृष्ठ नमुना मांडला. त्यांनी पाली भाषेचा अभ्यास करून " द बुद्ध ॲड हिज धम्म " हा ग्रंथ लिहला.

वृतपत्रे आणि पाक्षिके :- डॉ. बाबासाहेब आंबेडकर यांनी दलित, शोषित आणि वंचित समाजाच्या हक्कांच्या लढ्यासाठी तसेच लोकामध्ये सामाजिक व राजकीय जागृती निर्माण करण्यासाठी वृतपत्रांना अत्यंत महत्वाचे साधन मानले आणि त्यांनी खालील वृतपत्रे व पाक्षिके सुरु केली.

मूकनायक :- हे बाबासाहेबांचे पहिले पाक्षिक होते १९२० मध्ये त्यांनी अस्पृश्य समाजाचे मूळदु:ख व त्यांच्यावरील अन्याय मांडण्यासाठी हे पाक्षिक शाहू महाराजांच्या २५०० रुपयांच्या मदतीवर चालू केले.

बहिष्कृत भारत :- १९२७ च्या महाडच्या सत्याग्रहानंतर बाबासाहेबांनी हे पाक्षिक सुरु केले. दलितांच्या सामाजिक, राजकीय, धार्मिक हक्कांची बाजू मांडणे व दलित चळवळीस दिशा देने हा या पाक्षिकाचा हेतू होता.

समता :- " समाज समता संघ " या संस्थेच्या विचारांचा प्रचार करण्यासाठी हे वर्तमानपत्र सुरुकरून विषमतेवर तीव्र प्रहार केले.

जनता :- समता हे वृतपत्र बंद पडल्यानंतर बाबासाहेबांनी जनता हे वर्तमानपत्र सुरु केले. यातून केवळ दलितच नव्हे तर शेतकरी, कामगार व शोषितांचे प्रश्न मांडले.

संदर्भ साधने

१ गायकवाड रा. का. :- महामानव, रिया पब्लिकेशन, कोल्हापूर २०१३, पृ. २३
२ कीर धनंजय :- डॉ. बाबासाहेब आंबेडकर, पोपुलर प्रकाशन, मुंबई दुसरी आवृत्ती, १९९०
३ खरात शंकरराव :- डॉ. बाबासाहेब आंबेडकरांची पत्रे, प्रकाशन शाम दयार्न व कोपर्डेकर,पुणे३०, पृ. १७९.
४ आल्ते इंद्रजीत :- अर्थशास्त्रज्ञ डॉ. बाबासाहेब आंबेडकर, आंबेडकर नॉलेज मिशन प्रकाशन, औरंगाबाद, २०१६.
५ दुर्गे संपादीत :- डॉ. आंबेडकरांची विध्यार्थ्यांसाठी व्याख्य्याने, १९८७.

पश्चिम विदर्भातील कापूस आणि सोयाबीन उत्पादक शेतकऱ्यांच्या उत्पन्नातील अस्थिरतेचे आर्थिक विश्लेषणः साहित्याचा पद्धतशीर आढावा

रुतिका रवींद्र इंगळे, प्रा. डॉ. एम. के. नन्नवरे

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सारांश (Abstract)

कृषी क्षेत्र हे भारतीय अर्थव्यवस्थेचा मुख्य कणा असून अन्न सुरक्षा, रोजगार निर्मिती आणि ग्रामीण उपजीविकेमध्ये अत्यंत महत्त्वाची भूमिका बजावते. पश्चिम विदर्भातील अकोला आणि वाशीम जिल्ह्यांत कापूस आणि सोयाबीन ही प्रमुख नगदी पिके आहेत. तथापि, बाजारभावातील तीव्र चढ-उतार, वाढता उत्पादन खर्च, अनिश्चित पर्जन्यमान, अपुऱ्या सिंचन सुविधा, विपणन व्यवस्थेतील त्रुटी आणि धोरणात्मक आव्हानांमुळे या पिकांवर अवलंबून असलेल्या शेतकऱ्यांच्या उत्पन्नात मोठी अस्थिरता दिसून येते.

प्रस्तुत शोधनिबंधामध्ये २००५ ते २०२५ या कालावधीत प्रकाशित झालेल्या राष्ट्रीय व आंतरराष्ट्रीय साहित्याचा पद्धतशीर आढावा (Systematic Literature Review) घेण्यात आला आहे. कृषी बाजारभावाचा अंदाज वर्तवण्यासाठी आणि अस्थिरतेच्या मूल्यांकनासाठी वापरल्या जाणाऱ्या ARIMA आणि GARCH या अर्थमितीय (Econometric) मॉडेल्सच्या अभ्यासावर विशेष भर देण्यात आला आहे. आढाव्यातून असे निष्पन्न होते की, पश्चिम विदर्भातील जिल्हा पातळीवर कापूस आणि सोयाबीन या दोन्ही पिकांच्या एकत्रित उत्पन्न अस्थिरतेचा अभ्यास मर्यादित आहे. शेतकरी उत्पादक संस्था (FPOs), सुधारित विपणन पायाभूत सुविधा आणि रिअल-टाइम बाजार माहिती प्रणाली यांमुळे शेतकऱ्यांच्या उत्पन्नातील जोखीम कमी करण्यास मदत होऊ शकते.

महत्त्वाचे शब्द (Index Terms): कृषी अर्थशास्त्र, उत्पन्न अस्थिरता, कापूस, सोयाबीन, बाजारभाव अस्थिरता, ARIMA मॉडेल, GARCH मॉडेल, पद्धतशीर साहित्य आढावा, पश्चिम विदर्भ.

१. प्रस्तावना (Introduction)

भारतीय अर्थव्यवस्थेत कृषी क्षेत्राचा वाटा राष्ट्रीय उत्पन्न, रोजगार निर्मिती आणि शाश्वत ग्रामीण विकासाच्या दृष्टीने अनन्यसाधारण आहे. देशातील बहुसंख्य ग्रामीण लोकसंख्या प्रत्यक्ष वा अप्रत्यक्षपणे शेती आणि पूरक व्यवसायांवर अवलंबून आहे.

महाराष्ट्रातील पश्चिम विदर्भ भागात, विशेषतः अकोला आणि वाशीम जिल्ह्यांमध्ये, कापूस आणि सोयाबीन ही प्रमुख व्यावसायिक पिके आहेत. कापूस हे औद्योगिक दृष्ट्या महत्त्वाचे धागा पीक असून वस्त्रोद्योग व निर्यातीसाठी अत्यंत मोलाचे आहे; तर सोयाबीन हे खाद्यतेल निर्मिती, प्रक्रिया उद्योग आणि पशुखाद्य उद्योगासाठी एक प्रमुख तेलबिया पीक म्हणून ओळखले जाते.

या पिकांचे आर्थिक महत्त्व अधिक असूनही शेतकरी सातत्याने उत्पन्नाच्या असुरक्षिततेला सामोरे जात आहेत. उत्पादन हंगामात बाजारभावात होणारी घसरण, मध्यस्थांची लांब साखळी, हवामानातील तीव्र बदल, वाढता बियाणे व खतांचा खर्च, आणि संस्थात्मक पतपुरवठ्याच्या अडचणी यामुळे शेतकऱ्यांना आर्थिक संकटाचा सामना करावा लागतो.

अभ्यासाची उद्दिष्टे (Objectives of the Study)

- कापूस आणि सोयाबीन उत्पादकांच्या उत्पन्न अस्थिरतेवरील राष्ट्रीय व आंतरराष्ट्रीय साहित्याचा चिकित्सक आढावा घेणे.

- कृषी बाजारभावातील अस्थिरता आणि बाजारातील वर्तणुकीचे पद्धतशीर विश्लेषण करणे.
- कृषी अर्थशास्त्रात ARIMA आणि GARCH मॉडेल्सच्या उपयोगाचा सविस्तर अभ्यास करणे.
- सध्याच्या साहित्यातील संशोधन त्रुटी (Research Gaps) स्पष्ट करणे.
- पश्चिम विदर्भातील क्षेत्रीय व जिल्हास्तरीय संशोधनासाठी आवश्यक दिशा आणि शिफारशी निश्चित करणे.

२. संशोधन पद्धती (Research Methodology)

प्रस्तुत अभ्यास हा पद्धतशीर साहित्य आढावा (Systematic Literature Review - SLR) या संरचित संशोधन पद्धतीवर आधारित आहे. यामध्ये पूर्वग्रहरहित आणि पारदर्शक निकषांचा वापर करून संशोधनांचे संकलन व मूल्यांकन करण्यात आले आहे.

घटक	तपशील
अभ्यासाचे स्वरूप	वर्णनात्मक (Descriptive), विश्लेषणात्मक (Analytical), आणि गुणात्मक साहित्य पुनरावलोकन.
माहितीचे स्रोत	दुय्यम माहिती स्रोत: कृषी मंत्रालय (भारत सरकार), CACP, नाबार्ड (NABARD), RBI, कृषी उत्पन्न बाजार समित्या (APMCs), AGMARKNET, FAO, जागतिक बँक, तसेच Scopus, Google Scholar, Web of Science डेटाबेस.
समावेश निकष (Inclusion Criteria)	२००५ ते २०२५ दरम्यान प्रकाशित पीअर-रिव्ह्यूड जर्नल्स, संशोधन अहवाल, अर्थमितीय मॉडेलिंग व उत्पन्न अस्थिरतेशी संबंधित अभ्यास.
वगळण्याचे निकष (Exclusion Criteria)	वृत्तपत्रीय लेख, गैर-शैक्षणिक मासिके, असंबद्ध सामग्री आणि अपूर्ण शोधनिबंध.

३. राष्ट्रीय साहित्य आढावा (National Literature Review)

भारतातील कृषी विपणन, भाव अस्थिरता आणि शेतकरी उत्पन्न यावर मागील दोन दशकांत झालेल्या प्रमुख संशोधनांचे खालील मुद्द्यांच्या आधारे विश्लेषण करण्यात आले आहे:

३.१ कृषी विपणन आणि बाजार रचना (Agricultural Marketing)

आचार्य आणि अग्रवाल (२०११) यांच्या अभ्यासानुसार, कृषी विपणनातील मध्यस्थांची मोठी संख्या, वाहतुकीच्या अपुऱ्या सोयी, साठवणूक क्षमतेचा अभाव आणि बाजार माहितीचा अभाव यामुळे शेतकऱ्यांच्या नफ्यात लक्षणीय घट होते. थेट खरेदी केंद्रे आणि पारदर्शक विपणन व्यवस्था उभारल्यास शेतकऱ्यांचे उत्पन्न वाढू शकते.

३.२ शेतकऱ्यांचे उत्पन्न आणि उत्पादकता (Farmers' Income)

रमेश चंद (२०१७) यांच्या अभ्यासाने स्पष्ट केले की, केवळ पीक उत्पादकता वाढवून शेतकऱ्यांचे उत्पन्न दुप्पट करणे शक्य नाही; त्यासाठी पिकांचे विविधीकरण, मूल्यवर्धन, योग्य हमीभाव आणि पायाभूत विपणन सुविधांची गरज आहे.

३.३ कापूस व सोयाबीन पिकातील जोखीम घटक

- **कापूस उत्पादन:** अनियमित मान्सून, बोंडअळीचा प्रादुर्भाव, कीटकनाशकांचा वाढता खर्च आणि आंतरराष्ट्रीय बाजारातील चढ-उतार.
- **सोयाबीन उत्पादन:** काढणीच्या वेळी भावात होणारी घसरण, आंतरराष्ट्रीय खाद्यतेल आयात धोरणे आणि प्रक्रिया उद्योगांची स्थानिक मागणी.

३.४ अर्थमितीय मॉडेल्सचा वापर (Econometric Applications)

कृषी क्षेत्रातील किमतीचा अंदाज घेण्यासाठी ARIMA (Autoregressive Integrated Moving Average) मॉडेल आणि किंमतीतील अस्थिरतेच्या मोजमापासाठी GARCH (Generalized Autoregressive Conditional Heteroskedasticity) मॉडेलचा वापर जगभरात केला जातो. परंतु, पश्चिम विदर्भातील स्थानिक बाजारपेठांसाठी (जसे की अकोला आणि वाशीम कृषी उत्पन्न बाजार समित्या) या मॉडेल्सचा वापर करून झालेला एकत्रित अभ्यास अत्यंत मर्यादित आहे.

४. संशोधन त्रुटी आणि संश्लेषण (Research Gap & Synthesis)

सध्या उपलब्ध असलेले बहुतांश संशोधन हे राज्य किंवा राष्ट्रीय पातळीवरील व्यापक आकडेवारीवर आधारित आहे. कापूस आणि सोयाबीन या दोन्ही प्रमुख पिकांच्या एकत्रित उत्पन्न अस्थिरतेवर आणि पश्चिम विदर्भातील सूक्ष्म (जिल्हास्तरीय) परिस्थितीवर केंद्रित संशोधनाची कमतरता आहे.

उत्पादनातील हवामानविषयक जोखीम आणि बाजारातील भाव घसरणीची जोखीम यांच्या एकत्रित परिणामांचे आधुनिक अर्थमितीय साधनांद्वारे विश्लेषण करणे भविष्यातील धोरणनिर्मितीसाठी आवश्यक ठरते.

५. प्रमुख निष्कर्ष, शिफारशी आणि समारोप (Findings, Recommendations & Conclusion)

प्रमुख निष्कर्ष (Major Findings)

- कापूस व सोयाबीन उत्पादकांच्या उत्पन्नातील अस्थिरतेचे मुख्य कारण काढणी हंगामातील किमतीतील अनपेक्षित घसरण आणि वाढता निविष्ठा खर्च हे आहे.
- बाजार माहितीच्या अभावामुळे आणि साठवणुकीच्या मर्यादांमुळे शेतकऱ्यांना कमी भावात माल विकावा लागतो (Distress Sale).
- स्थानिक बाजारपेठांवर केंद्रित आधुनिक अर्थमितीय विश्लेषणाची मोठी गरज आहे.

शिफारशी (Policy Recommendations)

1. **विपणन पायाभूत सुविधा:** ग्रामीण भागात आधुनिक गोदामे, शीतगृहे आणि थेट खरेदी व्यवस्था बळकट करणे.
2. **FPO (शेतकरी उत्पादक संस्था):** शेतकऱ्यांची सौदेबाजी क्षमता वाढवण्यासाठी शेतकरी उत्पादक कंपन्यांना प्रोत्साहन देणे.
3. **रिअल-टाइम बाजार माहिती:** डिजिटल प्लॅटफॉर्म आणि मोबाईल प्रणालीद्वारे शेतकऱ्यांपर्यंत अचूक बाजारभाव पोहोचवणे.
4. **पीक विमा योजना सुधारणा:** पीक नुकसानीचे पंचनामे आणि भरपाई वेळेत मिळण्यासाठी प्रक्रिया सुलभ करणे.
5. **अंदाज यंत्रणा (Forecasting Tools):** किमतीच्या चढ-उतारांवर लक्ष ठेवण्यासाठी ARIMA आणि GARCH सारख्या मॉडेल्सचा वापर करून शेतकरी आणि धोरणकर्त्यांना पूर्वसूचना देणे.

समारोप (Conclusion)

पश्चिम विदर्भातील कापूस आणि सोयाबीन उत्पादक शेतकऱ्यांना आर्थिक स्थैर्य मिळवून देण्यासाठी केवळ उत्पादनवाढ पुरेशी नसून, सर्वसमावेशक बाजार सुधारणा, जोखीम व्यवस्थापन आणि संस्थात्मक पतपुरवठ्याची एकात्मिक धोरणे राबवणे आवश्यक आहे.

संदर्भ (References)

1. Acharya, S. S., & Agarwal, N. L. (2011). *Agricultural Marketing in India*. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
2. Chand, R. (2017). *Doubling Farmers' Income: Rationale, Strategy, Prospects and Action Plan*. NITI Aayog Policy Paper No. 1/2017, Government of India.
3. Bollerslev, T. (1986). Generalized Autoregressive Conditional Heteroskedasticity. *Journal of Econometrics*, 31(3), 307-327.
4. Box, G. E., Jenkins, G. M., Reinsel, G. C., & Ljung, G. M. (2015). *Time Series Analysis: Forecasting and Control*. John Wiley & Sons.
5. Engle, R. F. (1982). Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation. *Econometrica*, 50(4), 987-1007.
6. Government of Maharashtra (2023-24). *Economic Survey of Maharashtra*. Directorate of Economics and Statistics, Planning Department, Mumbai.

मध्यम सिंचन प्रकल्प एक अभ्यास

डॉ. दिलीप प्रल्हादराव जावळे

ज्ञानोपासक कला, वाणिज्य व विज्ञान महाविद्यालय परभणी

प्रस्तावना

देशाचा विकास हा ग्रामीण भागाच्या विकासावर अवलंबून आहे. म्हणून महात्मा गांधीच्या 'खेड्याकडे चला'या उक्तीप्रमाणे सध्याच्या जागतिकीकरणाच्या युगात ग्रामीण विकासाच्या योजना निर्माण करून त्याची प्रभावी अंमलबजावणी करणे महत्त्वाचे आहे. कारण देशाच्या एकूण लोकसंख्येच्या ६८.८४% जनता आजही खेड्यातच वास्तव्य करीत आहे आणि एवढ्या मोठ्या जनतेला उपेक्षित ठेवून कोणत्याही देशाचा विकास होणार नाही हे तितकेच सत्य आहे. ग्रामीण भागातील सर्व जनतेचा मुख्य व्यवसाय शेती आहे. म्हणून शेतीचा विकास करण्यासाठी प्रजन्यवर आधारित शेती न करता पावसाच्या पाण्याची योग्य व्यवस्थापन करून त्या पाण्याचा दीर्घकाळ उपयोग करणे आवश्यक आहे. त्या आधारावरच आज भारतामध्ये व जगातील विविध देशांमध्ये मध्यम सिंचन प्रकल्प राबवून शेती विकासाला चालना देण्याचा प्रयत्न करताना दिसून येतो.

संशोधन विषयाची निवड

पाण्याशिवाय शेतीचा विकास साधने शक्य नाही. ग्रामीण भागात उपलब्ध पाण्याचे योग्य पद्धतीने व व्यवस्थापन होणे आवश्यक आहे. महाराष्ट्र राज्यात कृषी क्षेत्राचा चांगला विकास झालेला आहे. महाराष्ट्र राज्यात जे विविध प्रादेशिक विभाग आहेत, त्यांच्या विकासासाठी महाराष्ट्र शासन वेगवेगळया योजना व प्रकल्प राबवत असते. महाराष्ट्र राज्यामध्ये प्रादेशिक असमतोल असल्यामुळे विकासास अनेक अडचणी येतात. महाराष्ट्रातील मराठवाडा विभाग हा विकासाच्या प्रादेशिक असमतोलाचा नेहमी बळी पडलेला आहे. म्हणून मराठवाड्यातील ग्रामीण भागातील पाण्याची स्थिती, प्रकल्पाची भूमिका अभ्यासून विकासाचा प्रादेशिक असं होतो कसा दूर करता येईल यासाठी ग्मध्यम सिंचन प्रकल्प एक अभ्यास हा विषय निवडण्यात आला आहे.

संशोधनाचे उद्देश

१) मध्यम सिंचन प्रकल्पाचा अभ्यास करणे

२) मध्यम सिंचन प्रकल्पाच्या माध्यमातून पाण्याचे व्यवस्थापन योग्य पद्धतीने केली जाते का? हे पाहणे.

गृहीतके

१) मध्यम सिंचन प्रकल्पाच्या माध्यमातून ग्रामीण विकास साध्य होत आहे

२) मध्यम सिंचन प्रकल्पामुळे पाणी वाहून जाण्याचे प्रमाण कमी झाले आहे.

नमुना निवड

मध्यम सिंचन प्रकल्प एक अभ्यास प्रस्तुत संशोधन कार्य करण्यासाठी मध्यम सिंचन प्रकल्पाची निवड ही उद्देश मुलक नमुना निवड पद्धती अंतर्गत १०% प्रकल्पाची निवड करण्यात आलेली आहे. मराठवाड्यातील 74 मध्यम सिंचन प्रकल्प आहे.७४ चे १०% म्हणजे ७.४. होय.

संशोधनाची मांडणी

मराठवाडा विभागामध्ये सिंचन विषयक विविध प्रकल्प राबविण्यात आलेले आहेत. मराठवाडा विभागात एकूण 74 मध्यम सिंचन प्रकल्प असून त्याची प्रत्येक जिल्हा जिल्ह्यामध्ये संख्या भिन्न स्वरूपात आढळते. मराठवाड्यातील मध्यम सिंचन प्रकल्प राबविण्याचा उद्देश म्हणजे मराठवाड्यातील सिंचन क्षमतेत वाढ करणे आणि

जलसंधारण मृदा संधारणाच्या माध्यमातून जमिनीच्या आतील व जमिनीवरील उपलब्ध पाण्याची पातळी वाढवणे व मातीची होणारी दूध थांबवणे हे उद्देश डोळ्यासमोर ठेवून मध्यम सिंचन प्रकल्प निर्माण केलेली आहेत.

सिंचन प्रकाराचे आकार : सिंचन प्रकल्पातील पाण्याचे व्यवस्थापन किती करावयाचे आहे, हे त्या सिंचन प्रकल्पाच्या क्षेत्रफळाच्या प्रमाणात ठरते. सिंचन प्रकल्पाचे त्याच्या क्षेत्र अनुसार खालील प्रमाणे वर्गीकरण केलेले आहे.

१) मोठ्या सिंचन प्रकल्पातून जी सिंचन केले जाते त्याचे लाभक्षेत्र १०,००० हेक्टर पेक्षा जास्त असते.

२) मध्यम सिंचन प्रकल्पाचे लाभक्षेत्र २०००० हेक्टर पेक्षा जास्त असून परंतु १०,००० हेक्टर पेक्षा कमी अशा प्रकारचे असते.

३) लघु सिंचन प्रकल्पाचे लाभक्षेत्र जास्तीत जास्त २००० हेक्टर पर्यंत असते. म्हणजे २०००० हेक्टर पेक्षा कमी लाभक्षेत्र असलेल्या सिंचन प्रकल्पाला लघु सिंचन प्रकल्प असे नाव देण्यात आले आहे.

मध्यम सिंचन प्रकल्पाला नैसर्गिक सीमा असल्यामुळे त्या सीमाच्या अधीन राहून विविध बाबीचे नियोजन व त्यानुसार कृती करणे हे शक्य असल्यामुळे मध्यम सिंचन हा घटक घेऊन विकास योजना तयार करणे महत्त्वाचे आहे. मध्यम सिंचन प्रकल्पामध्ये पडलेल्या पावसाचे तसेच जमिनीचे व इतर साधन संपत्तीचे पुरेपूर फायदा घेता येतो. प्रत्येक मध्यम सिंचन प्रकल्पातील वनस्पती, जमीन इत्यादी गुणधर्म, त्यावर पडणारा पाऊस व त्याचे गुणधर्म सारखेच असतील असे नाही. तसेच काही विशिष्ट भूभागावर राहणाऱ्या लोकांचे जीवनमान त्यांच्या गरजा व अन्य भूभागावरील लोकांपेक्षा भिन्न असू शकतात. प्रत्येक मध्यम सिंचन प्रकल्प क्षेत्रामध्ये विशिष्ट असा सामाजिक व आर्थिक स्तर असू शकतो. समान गुणधर्म व समान समस्या असणाऱ्या मध्यम सिंचन क्षेत्र विकास म्हणजे त्या क्षेत्रातील उपलब्ध जमीन,पाणी,वनस्पती व इतर नैसर्गिक साधन संपत्तीचा योग्य रीतीने वापर करणे जेणेकरून पुढील उद्दिष्टे सफल होतील. त्यात जमिनीची धूप थांबवणे, पाणी अडवून जिरवणे, जेणेकरून जमिनीतील पाण्याचे पुनर्भरण होईल, कृषी उत्पादन वाढवणे. जैविक समतोल राखणे, इंधन व चारा उपलब्ध करणे व प्रकल्प कालावधीत व पूर्ततेनंतर रोजगार संधी उपलब्ध करणे.

निष्कर्ष :

१) ग्रामीण विकास साधण्यासाठी मराठवाड्यातील मध्यम सिंचन प्रकल्पाची सिंचन व्यवस्था समाधान कारकरीत्या कार्य करताना दिसून येते.

२) याचाच अर्थ असा की पाणी वाहून जाण्याचे प्रमाण कमी झाले आहे व लाभार्थी शेतकऱ्यांना त्यांच्या शेतीसाठी पाणी उपलब्ध होत आहे.

३) मराठवाड्यातील काही जिल्ह्यांमध्ये फळ लागवडीसाठी अग्रेसर आहेत प्रकल्पीय अधिकाऱ्याच्या माहिती अनुसार शेकडा 52% ते 60 हजार रुपये उत्पन्न वाढले आहे बागायती शेतीत 80 टक्के वाढ झालेली दिसून येत आहे.

वरील संशोधनाचा एकंदरीत विचार केला असता आपल्याला असे म्हणता येईल की ग्रामीण विकास करण्यासाठी मध्यम सिंचन प्रकल्प हे एक कमी पैशांमध्ये शासनाला फायद्याचे ठरतील आणि ग्रामीण विकास हा साध्य करता येईल.

संदर्भ ग्रंथ

१) महाराष्ट्र जल व सिंचन आयोग अहवाल, खंड १, महाराष्ट्र शासन ,जून 1999.

२) मोरे दि. मा." सिंचन साधना" महाराष्ट्र सिंचन सहयोग लाभ क्षेत्र, विकास भवन परिसर ,औरंगाबाद, २०१०

३) मिश्रा ए. पी. "जल संसाधन प्रबंध संरक्षण"अविष्कार पब्लिशर्स जयपुर २००१.

४) भोंगळी सुधीर "राजकारण पाण्याचे " राजहंस प्रकाशन,२०००

हारून फ्रेम वर्क्स : समुह मनाचे हिंसक वर्तन

विद्यार्थी

स्वामी रत्नमाला महारुद्र

मार्गदर्शक

डॉ. प्रतीक्षा गायकवाड

अभ्यासकेंद्र – हिंद सेवा मंडळाचे पेमराज सारडा महाविद्यालय

प्रास्तविक :

भाऊ पाध्ये, जयंत पवार, चिं . त्र्यं खानोलकर, जयवंत दळवी मधु मंगेश कर्णिक, महेश केळुसकर यांच्या लेखनामध्ये महानगरी जाणिवा आणि संवेदन आढळते. मानसशास्त्रीय संकल्पना व अवधारणा तसेच अधोविश्वाचे दर्शनही घडते, या परंपरेत समकालीन लेखकांमध्ये किरण येले यांचे नाव आघाडीवर आहे. 'हारून फ्रेम वर्क्स' ही त्यांची एक गाजलेली कथा आहे दंगलीच्या पार्श्वभूमीवर घडणाऱ्या या कथेत एक गरीब मुस्लिम कथानायकाचे कुटुंब आणि त्याच्या जगण्याच्या प्रश्नांचे तीव्र दर्शन घडते . समूह मनाची विचार करण्याची पद्धत आणि त्याआडून निर्माण होणारी हिंसा हा या कथेचा मुख्य विषय आहे.

उद्देश : ग्रामीण समाजशास्त्र व शहरी समाजशास्त्र या समाजशास्त्राच्या दोन महत्वाच्या शाखा आहेत . दोन्ही शाखांमध्ये समुह किंवा समाज यांच्या अंगाने अभ्यास केला जातो .

१. समुहाचे वर्तन ही एक महत्त्वाची बाब आहे.
२. त्या अनुषंगाने अभ्यास करण्यासाठी समूह मानसशास्त्र आणि सामाजिक मानसशास्त्र उपयोगी ठरते .
३. किरण येले यांच्या प्रस्तुत कथेतील समूहमन आणि त्या अनुषंगाने येणाऱ्या हिंसेचा मानसशास्त्रीय अंगाने अभ्यास करणे, हा या शोधनिबंधाचा उद्देश आहे .

व्याप्ती व मर्यादा - सदर शोधनिबंधाची व्याप्ती किरण येले यांच्या वरील कथेपुरतीच असून, या कथेची समुह तथा सामाजिक मानस शास्त्रीय चिकित्सा करणे ही या शोधनिबंधाची मर्यादा आहे .

कथानक व कथेचे आशयसूत्र -

कथा सुरू होते तेव्हा लक्ष्मीनगरमध्ये तसेच पूर्ण शहरात दंग्यामुळे कर्फ्यू लागलेला. चार दिवस होऊन गेले तरी तो चालूच होता दुकानाचे शटर ओढून चार पोरासकट हारून आणि शहिदाबी विमनस्क अवस्थेत बसलेले. घरात थोडे धान्य सोडून काहीच नव्हते . 'आबिद नि आसिफला कळायचं नाही की आपल्याला खेळू का दिलं जात नाही ? चाळीत, रस्त्यावर जायला का देत नाही ? दुकान का नाही उघडत अब्बा ? आपल्याला बाहेर खेळायला किंवा शेजारी टी . व्ही . पाहायला का जाऊ देत नाहीत ते . फ्रेमच्या काचा किंवा पट्ट्या खेळून ते कंटाळले होते. शिवाय पोटात भूक भडकलेली.'[१] पृष्ठ ३

सकाळी चमनसेठच्या दुकानातून उधारीवर काहीतरी आणण्याच्या निमित्ताने हारुन दुकानावर जातो . तेव्हा तिथे प्रचंड गर्दी आणि लोक हातात नोटा घेऊन उभे असतात. आपल्याला उधारीवर माल घ्यायचा म्हणून तो गर्दी कमी व्हायची वाट पाहतो. हारून दुकानासमोर जायला आणि चमनसेठने दुकानाचे शटर ओढायला एकच वेळ होते. भवतीची गर्दी कमी झाल्याची जाणीव हारूनला होते. जवळच दंगा सुरू झाला म्हणून लोक घाईने पळाले हे ही त्याला समजते . तेव्हा तोही घाईने घरी परततो त्याच्या चेहऱ्यावरूनच शहिदाबीला काय समजायचे ते समजते. त्यानंतर ती उरलेल्या थोड्याशा धान्याची पेज करून मुलांना खाऊ घालते.

दुसऱ्या दिवशी शहिदाबी मुलांना काय खाऊ घालायचे ? याचा विचार करत असताना तिला आसिफ आणि आबीद लपून काहीतरी खाताना, चावताना दिसतात ती त्यांच्या तोंडातून तो पदार्थ बाहेर काढते तेव्हा तिला प्रचंड धक्का बसतो कारण ती दोघे चक्क फेविकॉलचा गोळा चघळत असतान. ती त्यांना मारण्याच्या विचारात असते पण भुकेपायी त्यांनी हे कृत्य केल्याने तिला भडभडून येते आणि ती त्यांच्या केसांतून हात फिरवते. प्रेमाने जवळ घेते .

पुढच्या दिवशी पोलिस दोन दिवसांत परिस्थिती नियंत्रित करतील अशी नमाजच्या वेळी मशिदीत झालेली चर्चा हारून सांगतो. बाहेरच्या बाजूला बायका बोलत असल्याचा आवाज आल्याने शहिदाबी खिडकी उघडते. ४०

रुपये रोजाने कामाला जाणाऱ्या रमेशच्या आईला खायला असेल तर द्या म्हणून विणवते. थोड्या वेळाने ती भातावर डाळ घातलेला टोप शटरखालून सरकवते, मुले खातात पण नवरा बायको नुसतेच पाणी पिऊन राहतात. सबाहला छोट्या अश्रफला उठवायला सांगते पण तो हालत नाही शहिदाबी घाबरते त्याच्या छातीला हात लाऊन पाहते तेवढयात हारून पुटपुटतो. 'अल्ला हो अकबर'[२] **पृष्ठ ९** तेव्हा शहिदाबी देवाला शिव्याशाप देते . ते पाहून हारून तिला शिव्या देतो. तेव्हा ती भयानक सत्य सांगते, "तो क्या करू? दो साल के बच्चेकू टरपेटायन पिलाना पडता मेरेकू, रातको उसकी हलखसे आवाज निकलके किसी को पता नै चले करके."[३] **पृष्ठ ९**

हादरलेला हारून बाहेर परत दंगा भडकल्याचे सांगतो. त्यावर शहिदाबी घाबरते आणि अल्लाहची माफी मागते. तेवढयात टरपेटायन पिलेला अश्रफही कूस बदलतो. त्यामुळे ती परत अल्लाहचे आभार मानते. जमाव शेजारच्या रशीदच्या दुकानाला जाळून टाकतात. त्यावेळी अश्रफ रडतो म्हणून शहिदाबी त्यांचे तोंड दाबून धरते. त्यामुळे तो गुदमरतो नंतर दंगेखोर हारूनच्या दुकानाकडे मोर्चा वळवतात पण शेजारचे हिंदू हारून सुलतानपुऱ्यात गेल्याचे सांगतात. तेव्हा ते दुकान जाळून टाकायचे ठरवतात पण त्यामुळे अख्खी चाळ पेटेल आणि हिंदूची घरेही जळतील हे लक्षात आल्याने ते थांबतात. दरम्यान हे सारे असहाय्य झालेला हारून वरुन गणपती, शंकर आणि हनुमानाची फ्रेम काढून दोन पोरांच्या हातात देतो व एक स्वतः घेतो. बाहेर येताच हातातल्या फ्रेम पाहून हिंदू जमाव त्यांना सोडतो पण आमच्याच हिंदू देवतांच्या तसबीरी घेऊन उभे आहात म्हणून त्याला टोचून बोलतात आणि 'सकाळी इथून निघून जायचे व दंगा शांत झाल्यावर जागेची कागदपत्रे घेऊन यायचे आणि आमच्या हवाली करायचे', [४] **पृष्ठ २८** असे सुनावतात.

हिंदू जमाव निघून जाताच दुसऱ्या मोहल्यात राहणारा रशीद मुस्लिम जमाव घेऊन येतो. त्याला आपले दुकान जाळून टाकल्याचे समजलेले असते. हारून व मुलांना हिंदू देवताच्या तसबीरी घेऊन उभे असल्याचे पाहताच भडकतो आणि त्या फेकून द्यायला सांगतो पण ऐकत नाही म्हणून हारुनच्या डोक्यात लोखंडी शीग मारतो आणि त्याचे दुकान जळून टाकतात. दुकानाला लागून असणाऱ्या हिंदू चाळीत आग भडकत जाते. दरम्यान शाहिदाबीने तोंड दाबल्याने अश्रफचा गुदमरून मृत्यू झालेला असतो. इथे कथा संपते आणि वाचकांच्या डोक्यात ती सुरु होते.

कथेतील समूह मानसशास्त्र व सामाजिक मानसशास्त्र:

कथेत दोन समूह आहेत आणि ते वेगवेगळया धर्माचे आहेत. धार्मिक मुद्यावर सुरू झालेल्या दंगलीत हे दोन्ही समूह एकमेकांच्या विरोधात आक्रमक झालेले दिसतात. मानसिक पातळीवर दोन्ही समूहाचे मानसशास्त्र सारखेच आहे एकमेकांची घरे, दुकाने जाळणे आणि एकमेकांचे जीव घेणे या दोन्ही बाबतीत दोन्ही समूह आग्रही आहेत. दंगा बाहेर जेवढा आहे तेवढा तो प्रत्येकाच्याच मनातही आहे. एरिक फ्रॉम यांच्या मते, 'अशा प्रकारची हिंसा, क्रूरता, समोरच्याचा विनाश करणे किंवा त्याच्यावर संपूर्ण नियंत्रण मिळवणे यातून आनंद शोधला जातो, धर्मांधता वांशिक व्देष आणि राजकीय हिंसेचे मूळ या घातक आक्रमतेत असते.' **५ पृष्ठ ५२१**

उद्योग करत असतात. राजकारण, पैसा आणि बिल्डर्स यांच्याभोवती महानगरीय वर्तमान फिरत असते. यातूनच गुन्हेगारी फोफावत जाते 'Money & muscle are not independent forces shaping India's electoral politics but are deeply intertwined'[६] या एम आर माधवन यांच्या म्हणण्याप्रमाणे किंवा ५ मार्च २०१२ च्या वॉशिंग्टन पोस्टच्या अंकातील सायमन डेनीवर यांच्या म्हणण्याप्रमाणे, 'Criminals Flourish in Indian Elections' आपल्या भोवतालचे वास्तव दिसून येते.

निष्कर्ष:-

१. महानगरीय जीवनाचे भयावह दर्शन या कथेतून घडते.

२. हारूनची जागा बळकावण्यासाठी हिंदू जमावातील धेंडे प्रयत्नशील असतात. यातून दंगलीमागचे एक प्रखर कारण कळते. दंगल का घडवून आणली जाते? हेही उमगू लागते.

मुस्लिम जमाव हिंदूच्या एरियात राहणाऱ्या हारूनने हिंदू देवतांच्या फ्रेम्स बनवू नये आणि दंगलीच्या वेळी मुस्लिमांच्या बाजूने राहावे, भाईचारा सोडून द्यावा अशा मताचा आहे. अन्यथा त्याला काफिर ठरवण्याचा मक्ता त्यांच्याकडे असल्यासारखे ते वागतात

१. यातून धर्म हिंसेसाठी कसा वापरला जातो, ते दिसून येते .

२. उन्माद चढलेले समूहमन हे दुबळ्या व निरपराध माणसांच्या अस्तित्वाचे निर्णय स्वतः घेते.

३. सामान्य माणसांना हातावर पोट असणाऱ्या माणसांनाच दंग्याची झळ जास्त बसते.

समारोप :

किरण येले यांच्या प्रस्तुत कथेच्या अनुषंगाने दंगल आणि तिच्या आडून सामाजिक मानसशास्त्र आणि समूह मानसशास्त्र याची कल्पना येते. उन्माद चढलेला समूह हिंसेचे समर्थन करतो आणि आपल्यापेक्षा दुबळ्या लोकांवर आपला धाक जमवतो धर्म हा हिंसेसाठी कसा वापरला जातो, ते ही या कथेतून दिसून येते. धर्माचे ठेकेदार हाती शस्त्र घेऊन अनीतीपूर्ण व्यवहार करतात. मात्र त्यामागचे उद्देश वेगळे असू शकतात. जसे की प्रस्तुत कथेत हिंदू जमाव त्याच्या जागेची कागदपत्रे मागतो. शेजारधर्म पाळणाऱ्या अन्य जातीच्या लोकांचा चांगुलपणा आणि हारूनप्रति असलेली आस्थाही येले चितारतात, त्यामुळे कथेचा आशय एकांगी न राहता सर्वसमावेशक होतो .

संदर्भसूची :

१. येले किरण, तिसरा डुळा, ग्रंथाली प्रकाशन,प्रथमावृत्ती २०१९ , पृष्ठ क्र.३

२ . येले किरण, तिसरा डुळा, ग्रंथाली प्रकाशन,प्रथमावृत्ती २०१९ , पृष्ठ क्र.९ .

3. येले किरण, तिसरा डुळा, ग्रंथाली प्रकाशन,प्रथमावृत्ती २०१९ , पृष्ठ क्र.९

४. येले किरण, तिसरा डुळा, ग्रंथाली प्रकाशन,प्रथमावृत्ती २०१९ , पृष्ठ क्र.२८

५ . एरिक फ्रॉम, The Anatomy of Human Destructiveness ,Holt, Rinehart and Winston Publication,1973, page no.521

६ . Vaishnav Milan,When Crime Pays Money,Muscle In Indian Politics , Harpers Collins Publisher , 2018

Importance of Mathematics in Artificial Intelligence (AI) and Machine Learning (ML)

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Abstract

Artificial Intelligence (AI) and Machine Learning (ML) have transitioned from theoretical constructs to pervasive technologies shaping our modern world. Behind their sophisticated capabilities lies foundational bedrock of mathematical principles. The pivotal role of various mathematical disciplines; including linear algebra, calculus, probability theories and optimization in advancing AI and ML technologies. We begin by examining how linear algebra facilitates the manipulation and transformation of high-dimensional data, which is crucial for "techniques such as principal component analysis (PCA) and singular value decomposition (SVD)". Next, we delve into the applications of calculus in training neural networks through gradient-based optimization methods, highlighting the importance of differentiation and integration in back propagation and loss function minimization. The role of probability theory in handling uncertainty and making predictions, emphasizing its application in Bayesian networks, Markov decision processes, and probabilistic graphical models. Additionally, we discuss optimization techniques, both convex and non-convex, that are fundamental to finding optimal solutions in machine learning tasks, including support vector machines (SVMs) and deep learning architectures.

Keywords: Artificial Intelligence, Machine Learning, mathematics, linear algebra, optimization, calculus.

Introduction

The rapid proliferation of Artificial Intelligence (AI) and Machine Learning (ML) has ignited a revolution across diverse sectors, from healthcare and finance to autonomous systems and natural language processing. These technologies empower machines to perform tasks that typically require human intelligence, such as learning, problem-solving, perception, and decision-making. However, the seemingly magical capabilities of AI/ML artifacts are not born from an ethereal source; rather, they are meticulously engineered through the application of sophisticated mathematical frameworks. Mathematics serves as the fundamental language and toolkit that underpins every aspect of AI and ML, from the representation of data to the intricate algorithms that enable learning and prediction. This paper asserts that mathematics is not merely a supporting discipline for AI/ML but its indispensable cornerstone. Without a robust understanding of mathematical principles, the effective design, implementation, interpretation, and advancement of AI/ML systems would be impossible.

We will systematically explore the key mathematical domains that contribute to AI/ML, illustrating their direct impact on core concepts and algorithms. Our journey will begin by establishing the fundamental relationship between mathematics and AI/ML, followed by a review of related literature, a detailed examination of specific mathematical disciplines and their applications, a discussion of emerging mathematical frontiers, and a reflection on the future interplay between mathematics and intelligent systems.

1. Review of Literature

Tyagi & Chahal, (2020) studied "Artificial Intelligence and Machine Learning Algorithms:" and said that The Big Data generated daily by IoT devices is relied upon by organizations and applications like e-healthcare. Two fields where computer vision is making strides are healthcare and transportation robotics. Google and Facebook use computer vision—a combination of AI, ML, and deep learning—to assess data and make recommendations.

Barragán-Montero, (2021) studied "Artificial intelligence and machine learning for medical imaging: A technology review" and said that When it comes to artificial intelligence (AI) picture processing and analysis, the medical industry is leading the pack. A number of medical specialties are

capitalizing on AI's potential in the clinic, including oncology, pathology, and radiology. "The goal of this article is to provide a synopsis of the underlying technologies of artificial intelligence (AI), present machine learning approaches, and their applications to medical imaging.

Canhoto & Clear, (2020) studied "Artificial intelligence and machine learning as business tools: A framework for diagnosing value destruction potential" and said that This article offers an approach to reduce the negative impact of AI and ML on value. These technologies' possible threats to the integrity of inputs, processes, and results are exposed. Using concepts of value creation process and content, the framework illustrates how these risks might obstruct or even destroy the process.

Miller & Brown, (2018) studied "Artificial Intelligence in Medical Practice: The Question to the Answer" and said that Artificial intelligence (AI) is assisting society in many ways, including weather prediction, face recognition, fraud detection, and genome decoding. However, its future medical applications remain uncertain. Dermatology, radiography, and pathology all use AI-powered image analysis that can diagnose conditions just as well as human physicians. Cognitive algorithms are enhancing system performance, optimizing care, reducing mistakes, suggesting precision therapies, and enrolling patients in clinical trials.

Sutton and Barto, (2018) demonstrated that reinforcement learning algorithms are grounded in Markov Decision Processes (MDPs), dynamic programming, and stochastic optimization. Concepts such as the Bellman equation, value functions, and policy gradients rely on probability theory and numerical optimization techniques.

Hinton and Salakhutdinov (2006) demonstrated that neural networks can perform nonlinear dimensionality reduction, extending traditional methods such as Principal Component Analysis (PCA). Their research illustrated how deep autoencoders can compress high-dimensional data into lower-dimensional representations while preserving meaningful structures.

Boyd and Vandenberghe (2018) provided a rigorous treatment of convex optimization techniques that are widely used in machine learning, including gradient descent, interior-point methods, and dual optimization. These methods enable efficient parameter estimation in large-scale learning systems. Optimization has become particularly important in deep learning, where non-convex objective functions require sophisticated numerical algorithms for stable training.

2. Expanding the Perspective: Mathematics as a Universal Language

What makes mathematics truly remarkable is its universality. The same principles that help us manage daily expenses or interpret weather patterns are also used to build intelligent systems. Mathematics connects simple observations to complex innovations through mathematical concepts in artificial intelligence, computational mathematics, and applied mathematics.

For instance:

- When we budget our expenses, we optimize limited resources.
- When AI models are trained, they optimize performance by minimizing error.
- When we observe weather changes, we analyze patterns over time.
- When AI predicts outcomes, it uses mathematical models to understand change.

This parallel shows that mathematics is not divided into "basic" and "advanced" in terms of relevance—it is a continuous spectrum of ideas applied at different levels of complexity.

3.1 Mathematical Formulation of Learning Models

AI models are essentially mathematical functions designed to approximate relationships between input data and desired outputs. A machine learning model can be expressed as a function

$$y = (x, \theta)$$

Where x represents the input data, y represents the predicted output, and θ denotes the set of parameters that define the model.

The objective of learning is to determine the optimal values of the parameters θsuch that the model accurately captures patterns in the data. Different AI models correspond to different mathematical formulations. For instance:

- Linear regression models relationships using linear equations.

- Neural networks approximate complex nonlinear functions using layers of interconnected nodes.
- Decision trees use recursive partitioning of the feature space.
- Probabilistic models represent relationships using probability distributions.

These mathematical formulations enable models to generalize from observed data and make predictions about unseen data. The ability to formalize learning problems mathematically allows researchers to analyze model performance, identify limitations, and design improved algorithms.

3.2 Learning Through Optimization

Learning in machine learning is essentially an optimization problem. The goal is to find parameter values that minimize a predefined loss or cost function measuring the discrepancy between predicted outputs and actual observations.

If a dataset contains input-output pairs x_i, y_i a typical objective is to minimize a loss function (θ), defined as

$$L(\theta) = \frac{1}{n}\sum_{i=1}^{n} \ell(f\ (x_i\ , \theta), y_i)$$

Where n is the number of training samples and $\ell(\cdot)$ represents the error between predicted and true outputs

Optimization techniques such as gradient descent are widely used to solve this problem. Gradient descent iteratively updates model parameters according to

$$\theta_{t+1} = \theta_t - \eta\nabla \mathrm{L}(\theta_t)$$

Where η is the learning rate and $\nabla(\theta_t)$ represents the gradient of the loss function. The process of back propagation in neural networks is fundamentally based on the chain rule of calculus, which allows efficient computation of gradients across multiple layers of a network. Through repeated optimization steps, the model gradually improves its ability to capture patterns within the data.

3. Mathematical Foundations of AI and ML

4.1 Linear Algebra

Linear algebra is central to AI, especially in the development of neural networks and computer vision systems. Concepts such as vectors, matrices, eigenvalues, and transformations are critical in representing and manipulating data. For example, in image recognition, an image is represented as a matrix of pixel values. Neural networks use matrix multiplication to process this input across layers, enabling feature extraction and pattern recognition

4.2 Calculus: Optimizing AI Models

Calculus—particularly differential calculus—is used in training machine learning models through optimization algorithms like gradient descent. The process involves calculating derivatives to minimize a loss function, thereby improving the model's predictions. Back propagation in neural networks, for instance, uses derivatives to adjust weights and biases iteratively.

4.3 Probability and Statistics

AI heavily relies on probability theory and statistics to handle uncertainty and model randomness. Bayesian networks, Markov models, and probabilistic reasoning systems are built on these concepts. Statistical tools are used for data preprocessing, hypothesis testing, and evaluating the accuracy and performance of AI models.

3.4 Optimization

Optimization theory plays a central role in training machine learning models. Most learning algorithms can be formulated as optimization problems where the objective is to minimize a loss function that quantifies the difference between predicted outputs and actual observations. In mathematical terms, the training process can be expressed as

$$\theta^* = \arg\min_{\theta} \mathrm{L}\ (\theta)$$

Where (θ) represents model parameters and (θ)denotes the loss function.

Traditional optimization methods include gradient descent, stochastic gradient descent (SGD), and Newton-type methods. However, deep learning models often involve highly non-convex optimization landscapes with numerous local minima and saddle points. Advanced optimization techniques such as Adam, RMSProp, and momentum-based methods have been developed to address these challenges.

Convex optimization has also played a significant role in machine learning. Convex problems possess unique global minima, allowing efficient and reliable solutions. Many classical learning algorithms—including support vector machines (SVMs), logistic regression, and LASSO regression—are based on convex optimization frameworks. In large-scale machine learning, distributed optimization and parallel algorithms have become increasingly important, enabling training of models on massive datasets across multiple computing nodes.

4.5 Discrete Mathematics

Logic, graph theory, and combinatory, all part of discrete mathematics, form the backbone of algorithmic design. AI applications like knowledge representation, decision trees, and search algorithms depend on discrete mathematical concepts

4.6 Kernel Methods in Functional Analysis

Functional analysis provides the mathematical framework for studying infinite-dimensional vector spaces and operators acting on them. This area of mathematics underlies kernel-based learning algorithms and many modern statistical methods. Kernel methods allow complex nonlinear relationships to be modeled by implicitly mapping data into high dimensional feature spaces. Instead of computing coordinates in this space directly, kernel functions measure similarity between data points. A typical kernel function can be expressed as

$$K\left(x_i, x_j\right) = \phi(x_i) \cdot \phi\left(x_j\right)$$

Where (x) represents a transformation of the input data into a higher-dimensional feature space. Kernel-based algorithms include:

- Support Vector Machines (SVMs)
- Kernel Principal Component Analysis (KPCA)
- Gaussian Process Regression

These techniques enable powerful nonlinear modeling while maintaining strong theoretical guarantees derived from functional analysis.

4. Research and Development

Recent advancements in AI and ML underscore the critical role of mathematics in driving innovation. The development of advanced neural network architectures, such as transformers used in natural language processing, relies on linear algebra and calculus for efficient data processing and model training. Research in reinforcement learning, which integrates probability theory and dynamic programming, has led to breakthroughs in autonomous systems and game playing, exemplified by algorithms like AlphaGo. Optimization techniques have been enhanced through innovations in convex and non-convex optimization, improving model accuracy and training efficiency. These mathematical advancements are not only propelling AI and ML forward but also opening new avenues for future research and applications.

5. Challenges and Way Forward

Despite progress, key challenges are:

- Interpretability: Deep learning models often act as “black boxes.” Mathematical frameworks for explainability remain underdeveloped.
- Robustness and Generalization: Understanding model stability and adversarial resistance demands advanced mathematical analysis.
- Causality: Shifting from correlation to causal inference is a frontier challenge requiring sophisticated probabilistic modelling.
- Quantum Mathematics: Quantum computing introduces new paradigms for optimization and probabilistic amplitude estimation, potentially revolutionizing AI learning.

- Ethical and Fair AI: Mathematical bias detection and statistical fairness metrics are vital for trustworthy AI systems.
- Theoretical Guarantees: Mathematical proofs of safety, stability, and performance are increasingly essential in high-stakes AI applications.

7. Conclusion

Mathematics is the bedrock upon which artificial intelligence (AI) and machine learning (ML) are built, providing the essential tools and frameworks that drive innovation and advancement in these fields. Throughout this paper, we have explored the critical roles of linear algebra, calculus, probability theory, and optimization in developing and refining AI and ML algorithms. Linear algebra forms the foundation for data manipulation, dimensionality reduction, and the implementation of various machine learning techniques. It enables efficient computation and transformation of high-dimensional data, which is crucial for many AI applications. Calculus, through differentiation and integration, underpins the optimization processes used to train models, such as neural networks. These mathematical operations allow for the fine-tuning of model parameters to achieve high accuracy and performance. Probability theory provdes the framework for modeling uncertainty and making informed predictions. It is essential for developing probabilistic models, Bayesian networks, and Markov decision processes, which are fundamental in handling real-world data variability and complexity. Optimization techniques, both convex and non-convex, are central to finding the best solutions in machine learning tasks, from support vector machines to deep learning architectures. The interplay of these mathematical disciplines enables the creation of sophisticated algorithms that can learn from data, adapt to new information, and perform complex tasks with remarkable efficiency. As AI and ML continue to evolve, the importance of a strong mathematical foundation becomes even more pronounced. Future advancements in these fields will likely stem from new mathematical insights and techniques, driving further innovation and expanding the boundaries of what is possible.

References

1. Abajian, A., Murali, N., Savic, L. J., Laage-Gaupp, F. M., Nezami, N., Duncan, J. S., Schlachter, T., Lin, M., Geschwind, J.-F., & Chapiro, J. (2018). Predicting Treatment Response to Intra-arterial Therapies for Hepatocellular Carcinoma with the Use of Supervised Machine Learning—An Artificial Intelligence Concept. Journal of Vascular and Interventional Radiology, 29(6), 850-857.e1. https://doi.org/10.1016/j.jvir.2018.01.769.
2. Cortes, C., & Vapnik, V. (1995). Support-vector networks. *Machine Learning*, 20(3), 273–297. https://doi.org/10.1007/BF00994018.
3. Hastie, T., Tibshirani, R., & Friedman, J. (2009). The Elements of Statistical Learning: Data Mining, Inference, and Prediction (2nd ed.). Springer.
4. Koller, D., & Friedman, N. (2009). *Probabilistic Graphical Models: Principles and Techniques*. MIT Press.
5. Miller, D. D., & Brown, E. W. (2018). Artificial Intelligence in Medical Practice: The Question to the Answer ? The American Journal of Medicine, 131(2), 129–133. https://doi.org/10.1016/j.amjmed.2017.10.035.
6. Murphy, K. Machine Learning: A Probabilistic Perspective. MIT Press.
7. Nichols, J. A., Herbert Chan, H. W., & Baker, M. A. B. (2019). Machine learning: Applications of artificial intelligence to imaging and diagnosis. Biophysical Reviews, 11(1), 111–118. https://doi.org/10.1007/s12551-018-0449-9.
8. Shalev-Shwartz, S., & Ben-David, S. (2014). Understanding Machine Learning: From Theory to Algorithms. Cambridge University Press.
9. Sutton R. S. and Barto ,A. G., Reinforcement Learning: An Introduction, 2nd ed. Cambridge, MA, USA: MIT Press, 2018.
10. Hastie, T., Tibshirani, R., and J. Friedman, The Elements of Statistical Learning: Data Mining, Inference, and Prediction, 2nd ed. New York, NY, USA: Springer, 2009.

Assessment of Water Contamination in the Nandur Madhyameshwar

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Abstract

Water contamination in the Nandur madhyameshwar region, an ecologically valuable wetland and bird sanctuary in Maharashtra, is a developing environmental concern as anthropogenic pressures increase. This study evaluates major physicochemical and biological water quality indicators to determine the degree and nature of water contamination in the Nandur madhyameshwar area. Water samples were collected and examined for pH, dissolved oxygen (DO), biochemical oxygen demand (BOD), chemical oxygen demand (COD) and total dissolved solids (TDS),The findings suggest that water quality varies spatially, with certain sites having elevated levels of nutrients and organic pollutants, which are most likely caused by agricultural runoff, home sewage discharge, and other human activities. Reduced dissolved oxygen levels in certain regions indicate stress on aquatic life and potential threats to the wetland environment. The findings emphasize the impact of contamination on water quality and ecological health in Nandur madhyameshwar, which is home to a rich flora and fauna, including migratory birds. This evaluation highlights the importance of regular monitoring, appropriate wastewater management, and sustainable land-use practices in protecting and conserving the Nandur Madhyameshwar wetland's water supplies and ecological integrity.

Keywords - Nandur madhyameshwar ,Ecological Integrity, Protection, BOD-COD.

Introduction-

Better environment is our prime requirement. Water is not only an essential environmental ingredient for all kinds of life, but it also plays a significant part in the socioeconomic growth of the human population. (1)The human welfare is related to the water quality. Water is one of the prime necessities of life. We can hardly live for a few days without water (2). In humans body 70% is water, blood cell and bones contains 18%, 75% and 22% water respectively, even teeth and nails also contain some part of water. Water has becomes an essential commodity for the development of Industries and agriculture. The demand for water is increases continuously in the world. Without it life on earth would be cease to exist (3).

The general survey reveals that the total surface are of earth is 51 carore-square km. out of which 36% carores km. is covered by sea. In addition to this we get water from rivers, lakes, and snow. About 15 carores cubic km. of water is also found the average layers of the earth. Although it is surprising but trues that inspite of such abundance there is shortage of soft water in the word due the water pollution (4-6). To aid in a systematic discussion of water pollutants, they will be classify into following categories.

1) Oxygen demanding wastes
2) Disease causing agents
3) Plant nutrients
4) Synthetic – organic compounds
5) Oil

6)Inorganic chemical and mineral substances
7) Radioactive material
8) Heat
9) Toxic metal
10) Poisonous chemical
11) Domestic wastes.
12) Pesticide pollutants.

The water quality has deteriorated everywhere, particularly due to increased human population pressures, unscientific waste disposal and improper water management. Contaminants in water are defined as any physical, chemical, biological, or radiological matter in water. This has led to scarcity of potable water, affecting the human health (7). Polluted and un potable water due to poor environmental sanitation has been the major cause of diseases like diarrhea, dysentery, typhoid, intestinal helemints, jaundice, cholera etc. endemic to India. Sources of water pollution are countless and most important one and of great concern are due to human activities.

Significance of Study-

The assessment of water contamination in the Nandur madhyameshwar Bird Sanctuary, located in Nashik district of Maharashtra, is essential because this region have a major wetland ecosystem that supports, agriculture, biodiversity and local livelihoods. Assessing water contamination helps in understanding the quality of water and the environmental threats affecting this ecologically sensitive area.

2. Wetland Ecosystem Protection-The Nandu rmadhyameshwar sanctuary is the important wetland site of Maharashtra. Assessing water contamination helps protect the wetland ecological balance and Ecosystem.
3. Biodiversity Conservation- The Nandu rmadhyameshwar sanctuary area habitat for many migratory and resident bird, aquatic plants, wild animal life, fish. Water contamination is directly affected the species. Therefore study about water contamination is very essential.
4. Environmental Health Monitoring- Water quality indicators such as pH, dissolved oxygen (DO), chemical oxygen demand (COD) and biochemical oxygen demand (BOD) helps to determine the aquatic ecosystem health
5. Support for Local Livelihoods and Agriculture –water is the most essential part of the our life. Water for this region used in irrigation and fisheries, there for evaluating the water contamination ensures safe water for agricultural field, and protect every local communities, and livelihoods.
6. Policy making and Environmental Awareness-the finding the evaluation of the study we create the awareness among local people and assist government agencies in implementing environmental protection policies.

Thus assessment of water contamination for Nandur madhyameshwar is very essentials part for the maintaining ecological balance.

Review of Literatures-

Several research workers have studied the quality of ground water. Ground water in varies cities and drinking water quality are affected from many industrial processes because industrial effluent contains large number of chemical these chemical subsequently polluted the in river water as well as ground water (1-2).

Pollution due to Paithan industries, Kothur industries and their impact on water are studied with the help of standard parameter like physico- chemical characteristics (3-6).Sources of water pollution are countless polluted and un potable water due to poor environmental sanitation has been the major cause of diseases like diarrhea, dysentery, typhoid, fever, intestinal heleminths. Water pollution is not only hazardous for human being but also dangerous for plant, animal and environment.

Industries are of great concern and industrialization contributing to water pollution has reached the alarming situation less than 5 percent of the industries have provided adequate measures for the treatment of effluents and even most of them have neglected this totally. Industrial chemical contains oil, Detergents suspended particles, poisonous chemical such as sulphides and sulphities, heavy metal which are too much harmful for natural water (6, 7-9).

Surface water often has taste and odour problems particularly in region of dense population. These are generally caused by domestic pollution and runoff from agricultural region. Plant nutrients, pesticide, insecticides, herbicides contain N, P, K, Cl. The excessive use of plant nutrient led to the disruption of N and P balance in water affecting plant growth. Organic wastes increase the BOD of receiving water (10, 11).

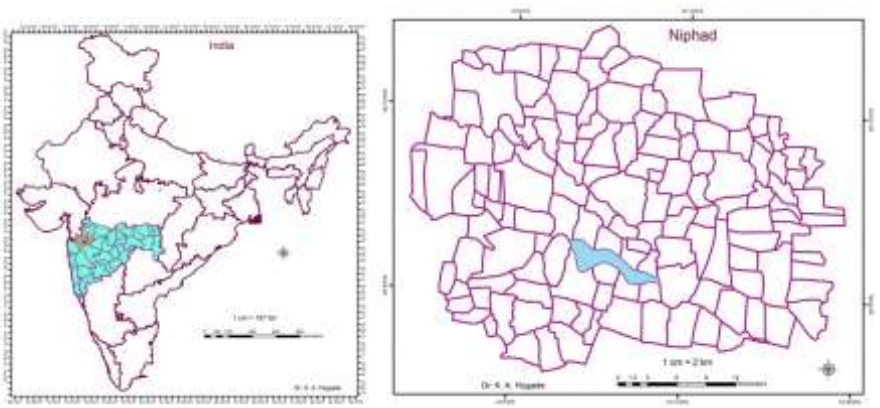
Food processing wastes from meat, dairy, sugar – beet processing as well as brewing, distilling and canning operations, generate large amounts of organic by products that have been disposed of in waste water its also leads to high BOD and a consequent oxygen depletion (11-12).

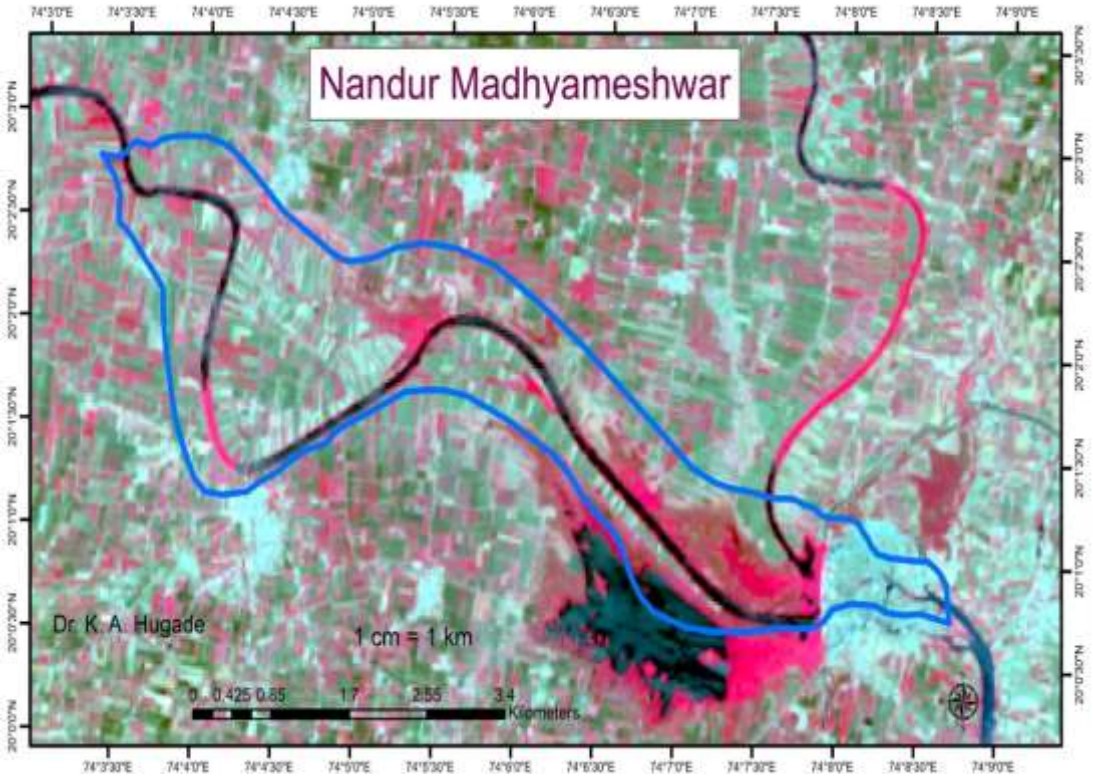
Metal industries large keep a wide array of contaminants in their waste water. Heavy metal in the aquatic environment is become toxic to aquatic organism and can also reach to human beings via food chain as bioaccumulation. The specific contaminants and concentration depend only on the particular manufacturing process (9). The complexation of metal with organic molecules has recently been subject of much research (13). Organic compounds are known to play an important role in various geochemical processes such as solubility, mobility, concentration and accumulation of metal.

Kulkarni J.R. and cowerkers also reported that, copper forms complexes with organic compound present in dye form, like dibromo-hydroxyl quinoline with copper. Lead is also toxic element. It is found generally in industrial waste sewage. It accumulates in body mainly in bones mercury is a very hazardous metal commonly used in fungicides constitutes (2,7,13)

Study Area-Nandu rmadhyameshwar, Niphad, MH.

Nandur Madhameshwar a village, in Niphad Tehsil in Nashik district, Maharashtra, is a hidden gem. Geographically, it is located 12 kilometers from Niphad and 47 kilometers from Nashik, with an area of 1520.87 hectares.Historically, the village has been recognized for its ecological relevance, with the Nandur madhyameshwar Bird Sanctuary being a key destination. The sanctuary was formed in 1950 and is recognized as the "Bharatpur of Maharashtra" due to its abundant wildlife. Many woodland dwellers, plants and animals, and migrating birds struggled with the region's humid physical environment, which included marsh areas and a lot of stagnant water.The Nandur madhyameshwar reservoir, an important Ramsar site and bird sanctuary in Maharashtra's Nashik district, is currently experiencing extreme water contamination. The water body is terribly contaminated by the Godavari and Kadva rivers and the National Green Tribunal (NGT) is declaring the water not suitable for bathing.untreated swage,Agricultural Runoff,havey siltation and organic load,industrial influents, metallic contamination occurs in the this region.its create a many impact on Enviornment and Ecology.





Material and Method-

In this paper we are using secondary method for study. the official **MPCB/CPCB records** for monitoring station **2183 – Godavari River at Nandur–Madhyameshwar Dam, Village Nandur, Taluka Niphad, District Nashik**. One important correction to my previous answer: the MPCB table does **not report COD** for this station. Its columns are pH, DO, BOD, faecal coliform (FC), and total coliform (TC). Therefore, COD values should **not be invented or calculated from the FC/TC values**.

2017–2024 BOD and COD data

Year	BOD (mg/L)	COD (mg/L)	Data status
2017	2.6	NR	BOD reported by MPCB
2018	5.02	NR	BOD reported by MPCB
2019	3.0	NR	BOD reported by MPCB
2020	3.4	NR	BOD reported by MPCB
2021	2.8	NR	BOD reported by MPCB
2022	3.44	NR	BOD reported by MPCB
2023	3.2*	NR	BOD reported by MPCB
2024	**6.2†**	NR	Maximum BOD reported by CPCB
COD	—	**Not reported in these official station records**	Requires separate laboratory/monitoring data

NR = Not reported.

- The 2017-2023 values above are BOD observations from the MPCB polluted-river-stretch dataset for station 2183; the corresponding rows also include pH, DO, and microbiological parameters, but no COD.
- The 2023 figure is derived from the station's recorded observation in the MPCB table. According to the CPCB's 2024 polluted-river report, station 2183 had a maximum BOD of 6.2 mg/L.

- The Nandur-Madhmeshwar Dam monitoring station shows significant year-to-year variance between 2017 and 2024. BOD was very low in 2017, at 2.6 mg/L, but grew significantly to 5.02 mg/L in 2018, and then varied between 2.8 and 3.4 mg/L from 2019 to 2023.
- The maximum BOD reported for the station in 2024 was 6.2 mg/L, indicating an increase in biodegradable organic pollution compared to previous years. BOD levels of ≤3 mg/L are widely utilized in CPCB designated-use requirements for specific surface-water classes. Thus, findings beyond this level suggest increased organic loading and demand a study into pollution sources.
- An earlier study of the Godavari up to Nandur-Madhmeshwar found seasonal BOD change at the station, highlighting the value of seasonal sampling.

Suggetions-

1. No any Firm and industry is permitted in the area of Nandur Madhyameshwer Sanctuary. But, many industry situated in Nashik city is located near Godavari river.
2. No any factory and firm in Nashik District is permitted for release of industrial waste into river water.
3. Mechanism for regular checking of pollution and action against defaulter. No any industrial waste is released from any factory and firm in Nashik District into river water.However, domestic waste water from Nashik city is released into the river water to some extent.
4. Consistent BOD and COD monitoring:
   To determine seasonal and long-term variations, collect BOD and COD samples on a monthly basis from fixed monitoring sites.
5. Seasonal sampling: Collect samples before, during, and after monsoons to account for seasonal variations in dilution, runoff, and organic loading.
6. Various sampling locations:
   To discover geographic variance, choose sites in the Godavari-Kadva inflow areas, reservoir center, downstream/outflow area, and human-influenced locales.
7. Monitor both BOD and COD: BOD shows biodegradable organic load, while COD represents chemically oxidizable load. Their combined assessment provides a clearer picture of organic contamination.
8. Investigate pollution sources.
   When elevated BOD/COD levels are detected, investigate possible contributions from home wastewater, agricultural runoff, animal activities, and other nearby sources.
9. Add supporting parameters:
10. Along with BOD and COD, keep track of DO, pH, TDS, turbidity, electrical conductivity, nutrients, and coliform bacteria. Low DO combined with excessive BOD may suggest increased organic pollution.
11. Apply GIS for geographical analysis:
12. Create GIS-based maps that depict sampling locations and spatial variation in BOD and COD. This can assist pinpoint pollution hotspots.

Conclusion –

The evaluation of BOD and COD is critical for determining the extent of organic pollution in the Nandur-Madhyameshwar Reservoir and wetland system. Elevated BOD implies more biodegradable organic matter and can reduce dissolved oxygen availability, affecting aquatic ecosystems.

COD provides extra information on the total oxidizable organic load in the water. According to the available monitoring data, BOD levels in Nandur-Madhyameshwar have been elevated at times, indicating the presence of organic pollution. However, COD data are not consistently accessible throughout all years and monitoring locations. As a result, missing COD observations should be reported as NR (Not Reported/Not Available) instead of estimated.

Overall, it is recommended to monitor BOD, COD, and DO on a seasonal basis, as well as pH, TDS, turbidity, nutrients, and microbiological parameters. To sustain the ecological health of the Nandur-Madhmeshwar Reservoir, it is critical to identify pollution sources, manage wastewater effectively, control agricultural runoff, and monitor water quality consistently. The integration of RS and GIS can help detect pollution hotspots and enable sustainable water resource management. Thus, rigorous monitoring and adequate pollution control methods are critical for the long-term conservation and management of the Nandur-Madhyameshwar wetland ecosystem.

Referances-

1) Thoms Abraham', Chung Caw Chewng. And John. H. Tellam, Devekionebt if a Gis – Based model for assessment of "Ground water contamination" Through sewage networks in urban environments Poll Res**. 25(1) : I – VIII (2006).**
2) Jain Nisha , Daisy Sabal and Bassin J.K., Assessment of ground water quality of Jaipur city. Journal of IAEM. **34(2), 92-97 (2007).**
3) Ramamurthy N, Kannan S. and Thillasvelavan ,Impact of industrial effluents on groundwater Region ground kudikadu village, cuddlore.IJEP **27 (8) :689-695 (2007).**
4) Dhindsa S.S., Bheel, P. and Musturia, Y., Hydrochemical study of ground water quality variation in tank district, Rajastan. Indian Journal of Environment and Ecoplan 8(1) : 129-136(2004).
5) Sethi, S. and Pandit, M.K., Nitrate concentration in ground water of Jaipur City, NW India and its implication. Ind. Jour. of. Env. Science, **8(1) 59-62 (2004).**
6) Saxena, A., Irrigation impact of match factory effluent on Vignamungo, Poll. Res. **22(4); 601 – 604 (2003).**
7) Chandrasekar P. and Ayyappan S., Impact of municipal solid waste (msw) During on ground water quality A case study. Poll. Res. **25(1) : 31-34 (2006).**
8) Chakor, B. R., Devidas, P. K., & Hadpe, P. M. Analysis And Monitoring Of Water Quality At Confluence Of Godavari And Kadva, At Different Points, In Niphad Tehsil.
9) https://datazone.birdlife.org/site/factsheet/18273-nandur-madhmeshwar-wildlife-sanctuary
10) https://mpcb.gov.in/

स्थानिक स्वराज्य संस्था प्रशासनात दुर्बल घटकांचा सहभाग

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प्रस्तावना:

लोकशाहीचे विकेंद्रीकरण झाल्याशिवाय खऱ्या अर्थाने सत्तेची फळे सर्वसामान्यांपर्यंत पोहंचणार नाहीत. म्हणून कारभाराचे विकेंद्रीकरण व्हावे, विकासयोजना तळागाळापर्यंत पोहचण्यात लोकांचा सहभाग वाढावा या हेतूने भारतात पंचायतराज व्यवस्थेचा स्विकार करण्यात आला. स्थानिक स्वराज्य संस्था या केवळ जनतेचा लोकशाहीतील सहभाग वाढविण्या पुरत्याच मर्यादित राहू नये, तर त्यांनी आर्थिक,सामाजिक विकासाची कामे हाती घ्यावित अशी अपेक्षा त्यामुळे लोकशाही व कल्याणकारी राज्याचा प्रयोग राबविण्यात स्थानिक स्वराज्य संस्थांच्या भुमिकेला विशेष महत्व प्राप्त झाले आहे. स्थानिक स्वराज्य संस्थांमध्ये (ग्रामपंचायत, पंचायत समिती, जिल्हा परिषद, नगरपालिका आणि महानगरपालिका) समाजातील दुर्बल घटकांना—विशेषतः अनुसूचित जाती (SC), अनुसूचित जमाती (ST), इतर मागासवर्ग (OBC) आणि महिलांना—मुख्य प्रवाहात आणण्यासाठी कायदेशीर तरतुदी करण्यात आल्या आहेत.

भारतात पंचायतराज व्यवस्थेच्या माध्यमातून मागासवर्ग व महिलांचा निर्णय प्रक्रियेत सहभाग वादुन त्यांना विकासाची समानसंधी प्राप्त होईलअशीअपेक्षा होती. प्रत्यक्षात मात्र महिला व दुर्बल घटकांना पंचायतराजव्यवस्थेत प्रभावी स्थान प्राप्त होऊ शकले नाही. त्यामुळे समाजाच्या सर्वांगीण विकासाचे साधन पंचायतराज व्यवस्था बनू शकल्या नाहीत. देशाची राज्यघटना निर्माण करतांना डॉ.आंबेडकरांनी भारतीय समाजव्यवस्था जातीव्यवस्थेवर आधारित असल्यामुळे पंचायतराज व्यवस्थेत उच्चजातीय लोकांचे वर्चस्व निर्माण होईल आणि स्त्रिया व तथाकथीत खालच्या जातींना कोणतेही स्थान राहणार नाही अशी भिती व्यक्त केली होती. पंचायत राजव्यवस्थेच्या सामाजिक भूमिकेचे मूल्यमापन करता पंचायतराज व्यवस्थेत ही उच्चजातीय वर्गाची व पुरुषांची मक्तेदारी होती विकासाची गरज असलेला मागासवर्ग समान संधीपासून वंचित राहीला. राजकीय प्रक्रियेत आरक्षणाचे धोरण हे दलित व मागास समुहाच्या राजकीय सहभागाचे साधन म्हणून स्विकारण्यातआले होते.

भारतात 1993 पासून स्विकारलेल्या 73 व 74 व्या घटनादुरुस्तीने स्थानिक स्वराज्य संस्थात महिलांना व इतर मागासवर्गीयाना प्रतिनिधीत्वाचा अधिकार मिळाला. महिलांना 33% तर इतर मागासवर्गीयाना 27% आरक्षण देण्यात आले.

भारतीय समाजातील दुर्बल मानल्या गेलेल्या अनुसुचित जाती, अनुसुचित जमाती, इतर मागास प्रवर्गव महिला या घटकांना स्थानिक स्वराज संस्थात महत्वाची भुमिका आदा करु शकतील इतके प्रतिनिधीत्व प्राप्त झाले. तसेच स्थानिक स्वराज संस्थातील पदाधिकाऱ्यांसाठीही आरक्षण लागु झाल्यामुळे या घटकांना महत्वाच्या पदावर जाण्याची संधी मिळाली. त्यामुळे विशीष्ट वर्गाची सत्तेतील मक्तेदारी मोडीत निघाली. सामाजिक व अर्थिक मागास वर्गाला प्रतिनिधीत्व मिळु लागल्याने त्यांचा समाजव्यवस्थेत मान व दर्जा उंचावला आहे. दुर्बल घटकांना राजकीय प्रतिनिधित्व देण्यामागे केवळ संख्यात्मक सहभाग वाढविणे हा उद्देश नसून त्यांच्या सामाजिक, आर्थिक व राजकीय सक्षमीकरणाला चालना देणे हा व्यापक हेतू आहे. तथापि, निवडून आलेल्या प्रतिनिधींना प्रत्यक्ष निर्णयप्रक्रियेत कितपत स्वायत्तता आहे, त्यांना प्रशासकीय ज्ञान किती आहे, ग्रामसभा व समित्यांमध्ये त्यांचा सहभाग किती प्रभावी आहे आणि सामाजिक-आर्थिक विषमता त्यांच्या सहभागावर कसा परिणाम करते, हे अभ्यासणे आवश्यक आहे.

संशोधनाचे उद्दिष्टे

1. स्थानिक स्वराज्य संस्थांमध्ये दुर्बल घटकांच्या सहभागाबाबतच्या तरतुदींचा अभ्यास करणे.
2. दुर्बल घटकांकडून प्रशासनात असलेल्या अपेक्षांचे विश्लेषण करणे.
3. प्रत्यक्ष प्रशासकीय व राजकीय पातळीवरील वास्तव तपासणे.

'दुर्बल घटक' ही संकल्पना

'दुर्बल घटक' ही संकल्पना व्यापक आहे. सामाजिक, आर्थिक, शैक्षणिक आणि राजकीयदृष्ट्या मागे राहिलेले किंवा निर्णयप्रक्रियेत पुरेसे प्रतिनिधित्व न मिळालेले घटक या संकल्पनेमध्ये समाविष्ट होतात. या संशोधनात 'दुर्बल घटक' ही संकल्पना मुख्यतः अनुसूचित जाती, अनुसूचित जमाती, सामाजिक-आर्थिकदृष्ट्या वंचित घटक यांच्या संदर्भात वापरली आहे.

अनुसूचित जाती व अनुसूचित जमातींचा सहभाग

अनुसूचित जाती व अनुसूचित जमातींना स्थानिक स्वराज्य संस्थांमध्ये आरक्षण देण्यामागे ऐतिहासिक सामाजिक व राजकीय वंचितता कमी करण्याचा उद्देश आहे.मात्र सामाजिक भेदभाव, आर्थिक अवलंबित्व, स्थानिक सत्तासंबंध आणि प्रशासकीय प्रक्रियेचे मर्यादित ज्ञान यांसारखे घटक त्यांच्या प्रभावी सहभागावर परिणाम करू शकतात.

दुर्बल घटकांच्या राजकीय सहभागासंबंधी काही निरीक्षणे

दुर्बल घटकांना स्थानिक प्रशासनामध्ये सहभागी केल्यामुळे लोकशाहीचा सामाजिक आधार व्यापक होतो. निवडणूक लढविणे, प्रचार करणे, सभांमध्ये बोलणे, निर्णय घेणे आणि प्रशासनाशी संवाद साधणे यामुळे दुर्बल घटकांमध्ये राजकीय आत्मविश्वास निर्माण होतो. स्थानिक स्वराज्य संस्थांमध्ये प्रतिनिधित्व मिळाल्यामुळे सामाजिक न्यायाची संकल्पना प्रत्यक्ष प्रशासनामध्ये उतरविण्यास मदत होते. स्थानिक संस्था या नवीन नेतृत्व निर्माण करणाऱ्या संस्था ठरू शकतात. दुर्बल घटकांच्या प्रतिनिधींना त्यांच्या समुदायाच्या प्रत्यक्ष समस्या माहीत असल्यामुळे स्थानिक विकासाच्या प्राधान्यक्रमामध्ये बदल होण्याची शक्यता असते.दुर्बल घटकांचा खरा सहभाग केवळ निवडणुकीत विजय मिळविण्यापुरता मर्यादित नसावा. या सर्व प्रक्रियांमध्ये प्रतिनिधींना आणि सामान्य नागरिकांना सक्रिय भूमिका मिळाल्यास स्थानिक स्वराज्य संस्थांची लोकशाही अधिक मजबूत होते.

ग्रामसभा ही स्थानिक लोकशाहीची मूलभूत संस्था आहे. ग्रामसभेत नागरिकांना विकासकामांबाबत चर्चा करण्याची, प्रश्न विचारण्याची आणि स्थानिक प्रशासनाच्या कामकाजावर देखरेख ठेवण्याची संधी मिळते.

मात्र अनेक ठिकाणी ग्रामसभेतील उपस्थिती आणि सक्रिय सहभागामध्ये सामाजिक विषमता दिसून येऊ शकते. आर्थिकदृष्ट्या दुर्बल नागरिक, महिला किंवा सामाजिकदृष्ट्या वंचित घटकांना स्वतःचे मत मांडण्यास संकोच वाटू शकतो. त्यामुळे ग्रामसभा ही केवळ औपचारिक बैठक न राहता सर्वसमावेशक लोकशाहीचे व्यासपीठ बनविणे आवश्यक आहे.

महाराष्ट्रातील स्थानिक स्वराज्य संस्थांच्या वाटचालीचा आढावा घेता 73 व 74 व्या घटनादुरुस्तीच्याअंमलबजावणीच्या अनुषंगाने गेल्या 25 वर्षाच्या कालावधीत अनेक सुधारणा करण्यात आल्या आहेत. पंचायत राज संस्थाचा कारभार व्यवस्थित म्हणता येईल अशा पध्दतीने चालू आहे. परंतु स्थानिक स्वराज्य संस्थांपुढे आता कोणतीच अडचणनाही असे समजणे वस्तुस्थितीला धरून नाही. आजही स्थानिक स्वराज्य संस्थानाच्या प्रशासनासंबंधी अनेक गंभीर समस्या उभ्या आहेत.

आज दुर्बल घटकांना आरक्षण असल्यामुळे त्या प्रवर्गातील व्यक्तीला पदावर निवडून आणल्या जाते पण प्रत्यक्ष कारभार त्या गावातील प्रस्थापित पुढारीच बघत असतो. त्यांना प्रस्थापितने त्यांच्या इशाऱ्यानुसारच वर्तन करावे लागते. हे असे काहो ते! तर त्यांना आपल्या कर्तव्याची जाणीव नाही. त्यांना त्यांचे अधिकार काय आहेत हे माहीत नाही. त्यांच्या अधिकारांची जबाबदाऱ्यांची माहिती करून देणारे कोणतेही शिक्षण त्यांनी घेतलेले नसते किंवा तशाप्रकारचे प्रशिक्षणही त्यांना दिल्या जात नाही. प्रशिक्षण असेलच तर ते अनिवार्य नसते.

अशिक्षित प्रतिनिधी:

स्थानिक स्वराज्य संस्था सदस्यांपैकी अनेक सदस्य कमी शिकलेले किंवा अशिक्षित असतात त्यामुळे निर्णय निर्धारणाच्या प्रक्रियेत सहभागी होण्यास त्यांना मर्यादा पडतात. लहानात लहान नोकरीसाठी शिक्षणाची अट आहे. पण मोठमोठ्या राजकीय पदासाठी कोणत्याच प्रकारच्या शिक्षणाची अट नाही. भारतात पहिल्यांदा हरियाणा सरकारने स्थानिक स्वराज्य संस्थांमध्ये उमेदवारीसाठी शिक्षणाची अट लावली आहे. 2017 मध्ये महाराष्ट्र शासनानेही सरपंचपदासाठी शिक्षणाची अट लागू केली आहे. हा एक कौतुकास्प निर्णय आहे.

दुर्बल घटकांच्या सहभागातील प्रमुख अडथळे

भारतीय लोकशाही व्यवस्थेच्या यशासाठी स्थानिक पातळीवरील लोकसहभाग आणि सामाजिक समावेशकता अत्यंत महत्त्वाची आहे. स्थानिक स्वराज्य संस्था या नागरिकांना प्रशासनाच्या निर्णयप्रक्रियेत प्रत्यक्ष सहभागी करून घेणाऱ्या लोकशाहीच्या तळागाळातील संस्था आहेत. भारतीय राज्यघटनेतील 73व्या आणि 74व्या घटनादुरुस्तीमुळे स्थानिक स्वराज्य संस्थांना घटनात्मक दर्जा प्राप्त झाला आणि अनुसूचित जाती, अनुसूचित जमाती तसेच महिलांसाठी राजकीय प्रतिनिधित्वाची घटनात्मक चौकट निर्माण झाली प्रशासकीय कागदपत्रे, अर्थसंकल्प, सरकारी योजना आणि नियम समजून घेण्यासाठी आवश्यक ज्ञानाचा अभाव हा महत्त्वाचा अडथळा ठरू शकतो. निवडणूक प्रक्रिया, प्रवास, बैठका आणि सामाजिक संपर्क यासाठी आर्थिक साधने आवश्यक असतात. जात, लिंग आणि सामाजिक स्थानावर आधारित भेदभावामुळे काही प्रतिनिधींना निर्णयप्रक्रियेत पूर्ण सहभाग घेणे कठीण होऊ शकते. स्थानिक पातळीवरील प्रभावशाली राजकीय व्यक्तींचा दबाव प्रतिनिधींच्या स्वायत्त निर्णयक्षमतेवर परिणाम करू शकतो. सरकारी योजना, निधी, प्रशासकीय प्रक्रिया आणि कायदेशीर तरतुदींची माहिती नसल्यामुळे प्रतिनिधींना अधिकाऱ्यांवर अवलंबून राहावे लागू शकते. सरकारी योजना आणि स्थानिक संस्थांच्या अधिकारांबाबत पुरेशी माहिती नसल्यास प्रतिनिधित्व प्रभावी सहभागामध्ये रूपांतरित होत नाही.

सारांश

स्थानिक स्वराज्य संस्था प्रशासनातील दुर्बल घटकांच्या सहभागाचे स्वरूप, त्यांचे राजकीय प्रतिनिधित्व, निर्णयप्रक्रियेतील सहभाग आणि सामाजिक-राजकीय सक्षमीकरणाचा अभ्यास करण्यात आला आहे. आरक्षणामुळे दुर्बल घटकांना स्थानिक राजकीय संस्थांमध्ये प्रवेश मिळाला असून त्यांच्या राजकीय जागरूकता, नेतृत्वक्षमता आणि सार्वजनिक जीवनातील सहभागाला चालना मिळाल्याचे दिसून येते. विशेषतः महिलांना स्थानिक स्वराज्य संस्थांमध्ये प्रतिनिधित्व मिळाल्यामुळे त्यांच्या राजकीय सहभागाच्या नवीन संधी निर्माण झाल्या आहेत.

केवळ संख्यात्मक प्रतिनिधित्व म्हणजे प्रभावी सहभाग असे नाही. सामाजिक भेदभाव, आर्थिक परावलंबित्व, अपुरे शिक्षण, प्रशासकीय ज्ञानाचा अभाव, स्थानिक राजकीय दबाव, कुटुंबीयांचा हस्तक्षेप आणि सरकारी योजनांची अपुरी माहिती यांसारखे घटक दुर्बल प्रतिनिधींच्या प्रभावी निर्णयक्षमतेसमोर अडथळे निर्माण करू शकतात. त्यामुळे प्रतिनिधित्वाबरोबरच निर्णयप्रक्रियेत स्वायत्तता आणि प्रशासकीय क्षमता विकसित करणे आवश्यक आहे.

संदर्भ ग्रंथ

1. शिरसाट श्याम, बैनाडे भगवान सिंग, भारतीय स्थानिक स्वशासन उद्या बुक्स पब्लिशियर्स औरंगाबाद 2010
2. यमलवाड गोविंद, स्थानिक स्वराज्य संस्था कल्पना प्रकाशन नांदेड 2001
3. पाटील व्ही.बी, महाराष्ट्रातील पंचायत राज व नागरी स्थानिक स्वराज्य संस्था, के सागर पब्लिकेशन पुणे 2011
4. दर्शनकार अर्जुनराव, पंचायत राज आणि नागरी प्रशासन कैलास पब्लिकेशन औरंगाबाद 2017

Data Localisation, Cloud Computing and Cross-Border Fintech Services: Compliance Challenges for Indian Start-ups

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Abstract

India's fintech ecosystem has developed around technologies that are inherently borderless. Cloud computing, application programming interfaces, remote analytics, fraud-detection tools, international payment gateways and software-as-a-service platforms enable start-ups to scale rapidly without investing in extensive physical infrastructure. At the same time, financial regulation remains territorially anchored. Indian law increasingly requires regulated entities to ensure domestic regulatory access, secure processing, controlled outsourcing and, in certain circumstances, local storage of financial data. This produces a difficult compliance environment for Indian fintech start-ups whose technological architecture may involve multiple cloud regions, foreign processors and cross-border payment networks.

This paper examines the interaction between data localisation requirements, cloud computing regulation and cross-border fintech services under Indian law. It focuses particularly on the Digital Personal Data Protection Act, 2023, the Digital Personal Data Protection Rules, 2025, the Reserve Bank of India's payment-data localisation framework, the RBI (Outsourcing of Information Technology Services) Directions, 2023, the regulatory framework for Payment Aggregators–Cross Border, the Payment and Settlement Systems Act, 2007 and relevant cybersecurity requirements. The paper argues that the principal challenge for Indian start-ups is not simply the existence of data-localisation rules. Rather, it is the coexistence of general data-protection law, sector-specific financial regulation, outsourcing standards, cybersecurity obligations and contractual requirements imposed by regulated financial institutions.

The paper concludes that India should adopt a more harmonised, technologically precise and risk-based framework. A clear taxonomy of financial data, explicit rules governing cloud storage, processing, backups and technical logs, recognised cloud-compliance standards and proportionate obligations for smaller fintech entities could protect regulatory and consumer interests without imposing unnecessary barriers to innovation and international expansion.

Keywords: Data localisation; fintech; cloud computing; cross-border data flows; RBI; DPDP Act; payment systems; start-ups; financial regulation; outsourcing.

I. Introduction

Financial technology has changed not merely the delivery of financial services but also the technological infrastructure on which those services depend. Traditional financial institutions historically operated through internally controlled information-technology systems, dedicated data centres and relatively identifiable outsourcing arrangements. Contemporary fintech businesses, by contrast, frequently operate through interconnected digital infrastructures comprising cloud platforms, APIs, foreign software vendors, outsourced KYC services, analytics engines, payment gateways and international communications networks.

For an Indian fintech start-up, even a seemingly domestic transaction can involve several distinct technological layers. A customer may access an application hosted on an Indian cloud region; authentication may rely on a third-party provider; fraud-detection analytics may be performed by foreign-hosted software; customer-support information may be stored in a global CRM platform; and transaction information may pass through payment networks with infrastructure in several jurisdictions. The legal issue therefore extends beyond the physical location of a principal database. It concerns the entire lifecycle of financial information.

The importance of this question has increased because India has simultaneously pursued rapid digitalisation and enhanced regulatory control over financial data. Under the Payment and Settlement Systems Act, 2007, the Reserve Bank of India is the principal authority responsible for regulation and supervision of payment systems.[1] In April 2018, the RBI directed payment-system providers to ensure that the entire data relating to payment systems operated by them is stored in systems located in India, subject to a limited qualification concerning the foreign leg of cross-border transactions.[2] The stated objective was to ensure better monitoring and unfettered supervisory access to payment data.

At the same time, India's general personal-data regime has taken a different regulatory approach. The Digital Personal Data Protection Act, 2023 does not adopt an absolute domestic-storage requirement for all personal data. Instead, its cross-border transfer provision permits the Central Government to restrict transfers to specified countries or territories, while preserving the operation of other Indian laws that impose a higher degree of protection or restriction.[3] Thus, financial entities may face sector-specific requirements that are stricter than the general data-protection framework.

The position has further evolved after the notification of the Digital Personal Data Protection Rules, 2025 and the commencement notification issued in November 2025. Significantly, commencement of the DPDP framework has been staggered: some provisions came into operation upon notification, while substantial operative provisions are scheduled to commence later.[4]

Cloud computing adds another layer. The RBI (Outsourcing of Information Technology Services) Directions, 2023 expressly include cloud computing within IT outsourcing and require regulated entities to manage risks throughout the entire lifecycle of data placed in the cloud.[5] Responsibility remains with the regulated entity even where the technological function is performed by an independent service provider.

For start-ups, therefore, the principal difficulty is regulatory overlap. A company may not itself be a bank or payment-system operator, yet its contract with a bank or regulated payment institution can indirectly subject it to regulatory obligations on data access, localisation, audits, cybersecurity and deletion. A business facilitating international transactions may additionally fall within the RBI's Payment Aggregator–Cross Border framework.[6]

This paper examines these intersecting obligations and evaluates whether the present structure offers sufficient certainty to Indian start-ups. Its central argument is that the compliance problem should not be described simply as "data localisation." It is more accurately understood as a problem of **data classification, technological architecture, regulatory attribution and cross-border operational control**.

II. Research Questions, Objectives and Methodology

The study addresses the following principal research questions:

1. What legal and regulatory rules govern domestic storage and international transfer of data by Indian fintech businesses?
2. How do the RBI's payment-data localisation requirements interact with the DPDP framework?
3. What obligations arise where banks and financial institutions outsource functions to fintech or cloud-service providers?
4. How do cross-border payment services complicate data-governance obligations?

"[1] The Payment and Settlement Systems Act, 2007 (Act 51 of 2007)

[2] Reserve Bank of India, "Storage of Payment System Data", RBI/2017-18/153, DPSS.CO.OD No. 2785/06.08.005/2017-18, Apr. 6, 2018, available at: RBI website (last visited on Sept. 27, 2026)

[3] The Digital Personal Data Protection Act, 2023 (Act 22 of 2023), s. 16.

[4] Ministry of Electronics and Information Technology, Government of India, Notification G.S.R. 843(E), Nov. 13, 2025, regarding commencement of provisions of the Digital Personal Data Protection Act, 2023, available at: MeitY website (last visited on Sept. 27, 2026).

[5] Reserve Bank of India, *Reserve Bank of India (Outsourcing of Information Technology Services) Directions, 2023*, RBI/2023-24/102, DoS.CO.CSITEG/SEC.1/31.01.015/2023-24, Apr. 10, 2023.

[6] Reserve Bank of India, "Regulation of Payment Aggregator–Cross Border (PA-Cross Border)", RBI/2023-24/80, CO.DPSS.POLC.No.S-786/02-14-008/2023-24, Oct. 31, 2023.

5. What compliance difficulties are particularly significant for Indian start-ups?
6. How can the framework be reformed without compromising regulatory supervision, cybersecurity and consumer protection?

The principal objectives of the study are to identify the relevant statutory and regulatory framework; distinguish general personal-data regulation from sector-specific financial-data requirements; analyse the legal implications of cloud computing and outsourcing; identify the operational burden borne by start-ups; and propose a coherent regulatory model.

The paper adopts a doctrinal and analytical methodology. Primary sources include statutes, RBI directions, notifications and official clarifications, MeitY notifications and CERT-In directions. Secondary materials from the OECD, World Trade Organization and Financial Stability Board are used to place the Indian regime within the wider debate concerning cross-border data flows and cloud concentration.

The paper does not attempt an empirical measurement of compliance expenditure incurred by Indian start-ups. Its focus is legal and regulatory: whether the architecture of existing rules generates avoidable uncertainty and whether greater harmonisation is possible.

III. Understanding Data Localisation in a Cloud-Based Financial Economy

A. Data localisation is not a single regulatory technique

The expression "data localisation" is frequently used as though it describes one rule. In reality, localisation measures vary substantially. They may require exclusive domestic storage; require only that one domestic copy be maintained; prohibit transfer abroad; permit overseas processing while restricting permanent foreign retention; or require continued domestic regulatory access.

The OECD similarly recognises that localisation rules can take different forms involving domestic storage, domestic processing or restrictions on international transfers.[7] Cross-border data regulation must therefore be analysed according to the precise legal obligation rather than through broad terminology.

This distinction is critical for fintech. Consider a payment transaction processed by an overseas fraud-detection system but stored permanently in India. That arrangement raises a different compliance question from a transaction whose only permanent database is maintained outside India. Similarly, a temporary encrypted cache and a full disaster-recovery database do not necessarily create identical regulatory risks.

B. Cloud computing complicates territorial regulation

Cloud computing is based on flexible access to shared computing resources. Its principal commercial models are Infrastructure as a Service, Platform as a Service and Software as a Service.

Deployment may occur through public, private, hybrid or multi-cloud environments.

From a regulatory perspective, the defining difficulty is that the user of a cloud service does not always control every technical layer in the same manner as an operator of a private data centre. The cloud provider may replicate information for resilience, route traffic dynamically, create operational logs and use subcontractors for particular services.

The Financial Stability Board has recognised both the benefits and risks of cloud dependence in financial services. Cloud adoption can improve scalability and resilience, but cross-border outsourcing and concentration among a relatively small number of major providers can create governance, oversight and systemic concerns.[8]

C. Fintech data is heterogeneous

Regulatory analysis must distinguish categories of information. A fintech company may process:

- identity and KYC information;
- bank-account details;

[7] Organisation for Economic Co-operation and Development, *Key Issues in Digital Trade Review* (OECD Publishing, 2023), discussion on cross-border data flows and data-localisation measures.

[8] Financial Stability Board, *Third-Party Dependencies in Cloud Services: Considerations on Financial Stability Implications* (FSB, Dec. 9, 2019).

- transaction information;
- card credentials;
- authentication records;
- device identifiers;
- fraud alerts;
- credit information;
- merchant information;
- transaction logs;
- behavioural analytics; and
- anonymised or aggregated commercial information.

Not all such information necessarily attracts an identical localisation obligation. A major source of compliance uncertainty is therefore the difference between the legal category of data and the technical manner in which companies organise databases.

IV. Digital Personal Data Protection and Cross-Border Transfers

The Digital Personal Data Protection Act, 2023 establishes India's principal general framework for digital personal data.[9] Its object is to regulate processing in a manner that recognises both the individual's right to protection of personal data and the need to process such information for lawful purposes.

A particularly important provision for fintech is section 16. Instead of requiring universal localisation of personal data, the provision empowers the Central Government to restrict transfer of personal data to such countries or territories outside India as may be notified. More importantly for financial regulation, the Act preserves provisions under other laws that provide a higher degree of protection or restriction in relation to transfer of personal data outside India.[10]

The legal consequence is significant. Compliance with the DPDP Act does not automatically establish compliance with RBI data requirements. A fintech enterprise may lawfully be able to transfer a category of personal data under the general DPDP framework but remain subject to a more stringent financial-sector rule.

This illustrates a central characteristic of Indian data governance: **sectoral regulation survives alongside horizontal data-protection legislation**.

The Digital Personal Data Protection Rules, 2025 were notified in November 2025.[11] They provide the implementation framework for matters including notices, consent management and other obligations, but their commencement is staggered. Rules 1, 2 and 17 to 21 came into force upon publication; Rule 4 is scheduled to commence one year later; and Rules 3, 5 to 16, 22 and 23 are scheduled to commence eighteen months after publication.[12] The Act itself has similarly been brought into force in stages.

For fintech start-ups, staggered commencement creates an additional transitional compliance problem. Organisations must distinguish between provisions that have legally commenced, obligations that have been formally enacted but are subject to a deferred commencement date, and independent RBI requirements that already operate.

The DPDP framework nevertheless has an important conceptual significance. It indicates that India's general data-protection policy is not based on universal localisation. The regulatory focus is on lawful processing, accountability and state power to impose transfer restrictions when necessary. Financial regulation, by contrast, may impose more specific territorial controls.

V. RBI Payment-Data Localisation

[9] The Digital Personal Data Protection Act, 2023 (Act 22 of 2023)
[10] Id., s. 16.
[11] Ministry of Electronics and Information Technology, Government of India, *Digital Personal Data Protection Rules, 2025*, G.S.R. 846(E), Nov. 13, 2025.
[12] Id., r. 1.

The RBI's April 2018 circular on Storage of Payment System Data remains central to the localisation debate.[13] It directed all system providers to ensure that the entire data relating to payment systems operated by them is stored in a system only in India. The requirement extends to full end-to-end transaction information collected, carried or processed as part of the payment instruction. For a foreign leg of a transaction, however, the relevant data may also be stored in the foreign country where necessary.

The regulatory rationale was expressly supervisory. The RBI observed that payment systems were increasingly technology dependent and that not all providers stored payment data in India. Domestic storage was therefore linked to better monitoring and unfettered supervisory access.

The RBI's 2019 FAQs provide important clarification.[14] The requirement applies to payment-system providers authorised or approved by the RBI. The clarification is particularly important for the distinction between **processing** and **storage**. The framework does not mean that every computational operation connected with a payment must necessarily occur only inside India. The legal concern focuses significantly on the location and retention of covered payment data and the RBI's access to it. This distinction creates a compliance opportunity but also substantial complexity. A start-up may design an architecture in which specialised processing occurs overseas while covered payment data is returned and stored in India in accordance with regulatory requirements. Technically, however, ensuring that no prohibited residual data remains outside India may be difficult. Modern cloud services create backups, diagnostic records, security logs and temporary copies that are not always visible at the application layer.

Another relevant rule concerns card-on-file information. RBI instructions restrict storage of actual card data by entities in the card transaction or payment chain other than permitted card issuers or networks.[15] This demonstrates that Indian payment regulation does not rely exclusively on localisation; in certain situations it also restricts **who may retain the data at all**, irrespective of territorial location.

Thus, a fintech compliance framework cannot simply ask: "Is the server in India?" It must ask: **what data is stored, by whom, for what period, in what technical form, and under what regulatory role?**

VI. Cloud Computing and the RBI Outsourcing Framework

The RBI (Outsourcing of Information Technology Services) Directions, 2023 are particularly important for start-ups that supply technology to banks, NBFCs, payment banks and other regulated financial entities.[16]

The Directions expressly include cloud computing services within outsourcing of IT services. They proceed on an important principle: outsourcing does not diminish the regulated entity's responsibility. The regulated entity's Board and senior management remain ultimately responsible for the outsourced activity, and outsourcing must neither impair the entity's ability to supervise operations nor impede the RBI's supervisory functions.

This principle has direct consequences for start-ups. A cloud or fintech vendor may not itself be subject to all obligations imposed directly upon a bank. Nevertheless, because the bank remains accountable to the regulator, its contract with the vendor will normally transfer a significant part of the compliance burden. Requirements can include audit access, data-return obligations, information-security standards, incident response, business continuity, subcontractor restrictions and termination assistance.

A. Data lifecycle obligations

[13] Reserve Bank of India, supra note 2.

[14] Reserve Bank of India, "Frequently Asked Questions—Storage of Payment System Data", June 26, 2019, available at: RBI website (last visited on Sept. 27, 2026).

[15] Reserve Bank of India, "Restriction on Storage of Actual Card Data [i.e. Card-on-File (CoF)]", RBI/2022-23/77, CO.DPSS.POLC.No.S-567/02-14-003/2022-23, June 24, 2022.

[16] Reserve Bank of India, supra note 5.

The cloud appendix to the RBI Directions requires regulated entities to address the entire lifecycle of data, from its creation and entry into the cloud until permanent deletion.[17]

This is technologically significant. Compliance cannot be established by pointing only to the production database. A serious cloud-compliance review must examine:

- data at rest;
- data in transit;
- backups;
- disaster-recovery copies;
- application logs;
- security logs;
- cached information;
- test environments;
- support environments; and
- deletion from decommissioned resources.

For start-ups, this requires coordination between legal teams, security architects and cloud engineers. A contract stating that "data shall be stored in India" is inadequate if the actual infrastructure sends copies to an overseas monitoring or analytics service.

B. Cross-border outsourcing

The RBI Directions separately address cross-border outsourcing and require regulated entities to consider jurisdiction-specific risks.[18] This reflects concerns regarding enforceability, regulatory access and the possibility that foreign legal requirements may interfere with contractual or supervisory expectations.

A foreign cloud provider may be subject to its home jurisdiction's law-enforcement or disclosure requirements. Conversely, Indian regulators may require records that the foreign provider is unable or unwilling to supply promptly. Political disruption, sanctions, insolvency and changes in foreign law can therefore become operational risks.

C. Concentration and lock-in

Cloud regulation also raises a broader financial-stability issue. A large number of banks and fintechs may depend on the same small group of cloud providers. The FSB has highlighted that third-party concentration can create common vulnerabilities even where individual outsourcing arrangements appear well managed.[19]

For a small start-up, however, avoiding leading cloud providers may itself be unrealistic. Large providers frequently offer better security infrastructure, compliance tooling, geographic-region controls and operational resilience than smaller alternatives. Regulation should therefore address concentration intelligently rather than assuming that local or fragmented infrastructure is necessarily safer.

VII. Cross-Border Payment Aggregators and International Fintech Services

Cross-border fintech creates an additional layer of regulation because the underlying commercial activity itself crosses national boundaries.

In October 2023, the RBI issued the framework for Regulation of Payment Aggregator–Cross Border, covering entities facilitating cross-border online payments for import and export of permissible goods and services.[20] The framework brought such entities within a more explicit regulatory structure and linked them with existing payment-aggregator requirements and foreign-exchange regulation.

A cross-border payment service may simultaneously involve:

[17] Id., Appendix I, "Usage of Cloud Computing Services".
[18] Id., Chapter IX, "Additional Requirements for Cross-Border Outsourcing".
[19] Financial Stability Board, *Enhancing Third-Party Risk Management and Oversight: A Toolkit for Financial Institutions and Financial Authorities* (FSB, Dec. 4, 2023).
[20] Reserve Bank of India, supra note 6.

- RBI payment-system regulation;
- FEMA compliance;
- merchant due diligence;
- KYC and AML standards;
- settlement and escrow requirements;
- data-localisation obligations;
- DPDP obligations; and
- contractual requirements imposed by banks and global networks.

This creates a regulatory-classification problem. A technology company may describe itself as a "platform," "gateway," "software provider" or "infrastructure provider," but the legal consequences depend on what it actually does. If the entity collects funds, controls settlement, performs merchant onboarding or materially participates in payment aggregation, it may move beyond the role of a passive software vendor.

This distinction is particularly important for start-ups whose business models evolve quickly. A company may begin as a technical interface but gradually add settlement, merchant, fraud-screening and payment-routing functions. The regulatory status of the company can therefore change without a dramatic change in consumer-facing branding.

VIII. Principal Compliance Challenges for Indian Start-ups

A. Determining what data is subject to which rule

The first difficulty is classification.

A single transaction record may contain personal data governed by the DPDP Act, payment-system information regulated by RBI directions, authentication information subject to security restrictions and business metadata used for analytics.

If a company stores all these elements in one undifferentiated data lake, it may be forced to apply the strictest rule to the entire dataset. Better compliance therefore depends upon **data mapping and segregation**.

Start-ups should identify:

1. the legal category of each data element;
2. the source of the data;
3. the regulatory capacity in which it is received;
4. authorised purposes;
5. permitted locations;
6. retention periods; and
7. processors and subprocessors that can access it.

This requires a level of data-governance maturity that early-stage companies may not initially possess.

B. Storage versus processing

The legal distinction between storage and processing is difficult to implement technologically.

For example, an AI-based fraud-detection tool may analyse a payment transaction outside India. Even if the primary transaction database remains in Mumbai, the tool may create feature vectors, debug logs or temporary files abroad.

The practical questions are therefore more complex than whether an overseas processor "stores" the original payment record. Does a derived fraud score contain regulated payment information? Does a backup constitute storage? Does an encrypted technical log that can be linked back to a payment transaction remain regulated data?

Regulatory guidance does not always answer such questions at the level of technical granularity necessary for modern infrastructure.

C. Cloud-region configuration

Major cloud services permit customers to choose a region, but not every component of a cloud service necessarily behaves identically.

A start-up may configure its database to use an Indian region while relying on:

- global DNS;
- centralised monitoring;
- overseas support personnel;
- software telemetry;
- global content-delivery networks; or
- cross-region backup tools.

Thus, "India region" cannot itself be treated as proof of complete localisation.

A prudent fintech must analyse the architecture service by service.

D. Subprocessors and SaaS vendors

One of the most underestimated risks arises from secondary vendors.

A start-up may carefully configure its primary cloud environment in India but use foreign-hosted services for:

- customer support;
- CRM;
- analytics;
- error monitoring;
- email delivery;
- cybersecurity;
- fraud detection;
- document verification; and
- collaboration.

Each service can create an independent international data flow.

Vendor due diligence therefore becomes essential, but small start-ups often lack the bargaining power to negotiate bespoke contractual terms with global SaaS providers.

E. Compliance through contractual supply chains

A fintech may face obligations that are not imposed upon it directly by statute but arise because its customer is regulated.

Suppose an Indian start-up supplies transaction-monitoring software to a scheduled commercial bank. The bank remains responsible under RBI outsourcing requirements. It may therefore require the start-up to accept extensive audit, information-security, regulator-access, localisation and business-continuity clauses.

This produces what may be described as **downstream transmission of regulatory obligations**.

The model is defensible because outsourcing should not enable a bank to escape regulation. But it also creates uncertainty because different banks may interpret the same RBI requirement differently and impose different contractual standards.

Start-ups can therefore face a fragmented compliance environment even within a single jurisdiction.

F. Cost of localisation and duplicated infrastructure

Localisation may require:

- dedicated Indian cloud regions;
- domestic backup infrastructure;
- additional monitoring;
- local security tools;
- separate databases for Indian customers;
- specialised legal advice;
- compliance audits; and
- engineering work to prevent unintended replication.

For large banks these costs may be significant but manageable. For a start-up with limited funding, fixed compliance expenditure can influence whether a product is commercially viable.

The concern is not that financial data should be unregulated. Rather, it is whether the regulatory objective can be achieved through proportionate means.

OECD/WTO research recognises that cross-border data flows are integral to digital economic activity while regulations restricting transfers or requiring domestic storage can produce economic consequences.[21] The policy challenge is therefore to balance openness and trust.

G. Cybersecurity and incident reporting

Data localisation does not eliminate cybersecurity obligations.

The CERT-In Directions of 28 April 2022 impose requirements concerning information-security practices and cyber-incident reporting and include obligations relevant to data centres, cloud-service providers and other digital infrastructure actors.[22]

A fintech must therefore operate a compliance programme that addresses not only geographic storage but also incident detection, log management, security controls and regulatory notification.

The regulatory lesson is important: **localised insecure data is not safer merely because it is physically located in India**.

H. Conflicting international requirements

A fintech expanding abroad may face inconsistent legal rules.

India may require certain financial data to remain available domestically. A foreign country may impose its own privacy-transfer restrictions. A foreign regulator may require local access. Contractual obligations with international financial institutions may demand retention or reporting in a particular jurisdiction.

A single global database may therefore be legally impractical.

Start-ups increasingly need region-specific architectures and internal rules determining which datasets may be shared globally.

I. Vendor concentration and exit risk

Start-ups often build deeply around proprietary cloud tools. Migrating later can be expensive and technically disruptive.

The RBI outsourcing framework's emphasis on exit planning is therefore particularly important.

If a cloud provider ceases service, changes contractual conditions or becomes legally unsuitable, the regulated ecosystem must be capable of transitioning without losing access to critical data.

For a start-up, portability should therefore be treated as a regulatory issue, not merely an engineering preference.

IX. Is Data Localisation Justified?

Any serious evaluation must acknowledge the legitimate objectives behind localisation.

Financial systems are strategically important. Regulators require rapid access to data in order to investigate fraud, supervise payment systems, enforce consumer-protection standards and respond to systemic incidents. Foreign storage can create delays, jurisdictional barriers or dependence on foreign authorities.

The RBI's 2018 circular expressly connected domestic storage with supervisory access.[23]

There is therefore a defensible distinction between ordinary commercial data and critical payment-system information.

Nevertheless, localisation is not the only mechanism available for ensuring regulatory access. Alternative approaches may include:

- mandatory domestic mirrors;
- enforceable access obligations;

[21] OECD and World Trade Organization, *Economic Implications of Data Regulation: Balancing Openness and Trust* (OECD Publishing, Paris, 2025).

[22] Indian Computer Emergency Response Team, "Directions under sub-section (6) of section 70B of the Information Technology Act, 2000 relating to information security practices, procedure, prevention, response and reporting of cyber incidents for Safe & Trusted Internet", Apr. 28, 2022, available at: CERT-In website (last visited on Sept. 27, 2026).

[23] Reserve Bank of India, supra note 2.

- certified foreign processors;
- encryption and Indian key control;
- reciprocal supervisory cooperation;
- audit rights; and
- risk-based transfer mechanisms.

The strongest regulatory model is therefore unlikely to be absolute openness or absolute localisation. It should instead identify the particular risk associated with each category of data and choose the least burdensome measure capable of controlling that risk.

This is consistent with the broader international movement toward trusted cross-border data flows. The OECD has emphasised that international data flows are economically important but must be supported by mechanisms that preserve trust and legal safeguards.[24]

X. Recommendations

1. Create a unified financial-data classification framework

The RBI, MeitY and other relevant regulators should develop a common taxonomy.

At minimum, the framework should distinguish:

- authentication credentials;
- payment instructions;
- settlement information;
- customer personal data;
- credit data;
- KYC information;
- operational metadata;
- security logs;
- anonymised information; and
- aggregated analytics.

Each category should specify storage, processing, transfer and retention requirements.

This would reduce the present tendency to apply broad contractual localisation clauses to entire systems.

2. Define storage and processing technically

Rules should expressly address:

- permanent storage;
- temporary processing;
- caching;
- backup;
- disaster-recovery replication;
- technical logging;
- telemetry;
- derived data; and
- encryption.

Regulation written only in traditional database terminology will become increasingly difficult to apply to cloud-native systems.

3. Develop recognised cloud-compliance architectures

Instead of requiring every start-up and financial institution to independently interpret cloud requirements, regulators could recognise standard technical architectures.

For example, an approved model could specify:

- India-based primary databases;
- India-based backups;
- approved overseas computation;

[24] Organisation for Economic Co-operation and Development, *Cross-Border Data Flows: Taking Stock of Key Policies and Initiatives* (OECD Publishing, Paris, 2022).

- encryption requirements;
- key-management controls;
- deletion timelines; and
- regulator-access procedures.

A recognised standard would substantially reduce legal uncertainty.

4. Introduce proportionality for start-ups

Regulatory responsibility should depend partly on risk.

Relevant factors could include:

- transaction volume;
- number of customers;
- sensitivity of information;
- whether funds are held;
- systemic importance;
- duration of data retention; and
- level of control over payment settlement.

This does not imply exempting small firms from basic security or privacy obligations. It means avoiding identical procedural burdens where risks differ substantially.[25]

5. Establish fintech/cloud vendor certification

A recognised certification mechanism for service providers could reduce repeated due diligence.

If a cloud or fintech vendor has already demonstrated compliance with specified RBI-aligned technical standards, banks could rely partly on that certification while retaining ultimate responsibility.

This would also reduce the repeated audit burden currently imposed upon common vendors by multiple financial institutions.

6. Clarify the interaction between the DPDP Act and sectoral rules

Formal joint guidance should explain that the permissibility of a cross-border transfer under general data-protection law does not override stricter financial regulation.

The guidance should include practical examples involving:

- payment data;
- KYC databases;
- overseas customer-support systems;
- fraud analytics;
- card data; and
- international transactions.

7. Improve coordination between regulators

Fintech companies increasingly face overlapping jurisdiction from RBI, MeitY, CERT-In and foreign-exchange and anti-money-laundering frameworks.

A coordinated regulatory mechanism could publish consolidated compliance guidance and reduce inconsistent interpretations.

8. Promote regulatory sandboxes for cross-border architecture

RBI sandboxes should expressly encourage testing of compliant cloud and cross-border-data architectures.

The purpose of a sandbox should not merely be testing a financial product. It can also be used to test whether innovative technological designs satisfy regulatory objectives.[26]

9. Focus on regulatory access, not geography alone

Where the underlying risk can be addressed through strong access, encryption, audit and deletion controls, regulators should evaluate whether absolute localisation remains necessary.

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[25] Reserve Bank of India, "Guidelines on Regulation of Payment Aggregators and Payment Gateways", DPSS.CO.PD.No.1810/02.14.008/2019-20, Mar. 17, 2020.

[26] Ministry of Electronics and Information Technology, Government of India, *Digital Personal Data Protection Act, 2023*, Gazette of India, Extraordinary, Aug. 11, 2023."

Data location should remain important where justified, but it should form part of a broader operational-resilience framework rather than being treated as an independent guarantee of safety.

XI. Conclusion

The compliance challenges facing Indian fintech start-ups arise from a fundamental tension between the architecture of modern digital finance and the territorial character of regulation.

Cloud platforms are designed to be scalable, distributed and internationally integrated. Fintech companies depend upon global technological services in order to innovate quickly and compete internationally. Financial regulators, by contrast, must ensure security, supervisory access, consumer protection and operational continuity. Neither objective can reasonably be disregarded.

India's present framework reflects this tension. The DPDP Act adopts a general framework for cross-border personal-data transfers while preserving stricter sector-specific rules. The RBI's payment-data localisation regime gives particular importance to domestic storage and supervisory access. Its IT-outsourcing directions recognise cloud computing but impose extensive lifecycle, governance and oversight obligations. The PA-Cross Border framework adds further regulatory duties for firms participating in international payments.

For start-ups, the result is a compliance structure in which the same technological system may simultaneously attract privacy law, payment-system regulation, outsourcing rules, cybersecurity requirements and contractual obligations imposed by banks.

The principal weakness of the present regime is therefore not necessarily excessive regulation. It is **regulatory fragmentation and insufficient technical precision**.

Future policy should move toward a harmonised framework based upon data classification, risk and technological function. Sensitive payment credentials may justify particularly stringent restrictions, while less sensitive operational information may be governed through controlled transfer mechanisms. Cloud regulation should expressly address backups, processing, logs, derived information and subcontractors. Certified architectures and common vendor standards could reduce duplicated compliance burdens.

India should also recognise that regulatory sovereignty and international data flows are not inherently incompatible. A modern financial-data regime can preserve effective RBI supervision while permitting appropriately safeguarded international processing.

For Indian fintech start-ups, regulatory clarity is itself an innovation policy. Predictable rules allow founders and engineers to design compliant systems at the outset rather than rebuilding infrastructure after regulatory uncertainty arises. A proportionate, technology-neutral and coordinated framework would therefore strengthen not only consumer protection and financial stability but also India's ability to develop internationally competitive fintech enterprises.