मतादर्श

सामाजिक विज्ञान, मानविकी एवं वाणिज्य की शोध पत्रिका

प्रधान संपादक

डॉ० प्रसून दत्त सिंह

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संपादक

डॉ० रितेश भारद्वाज

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मतादर्श

मतादर्श भारत में समाचार पत्रों के निबंधक (आर.एन.आई.) द्वारा अनुमोदित है।

संपादक मंडल

डॉ॰ आर. एन. कुंअर

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डॉ॰ विद्या भूषण श्रीवास्तव

डॉ॰ रवीन्द्रनाथ राय

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मुद्रक एवं प्रकाशक अलका सिंह द्वारा एफ–3/139, सेक्टर–16, रोहिणी दिल्ली–110089 से प्रकाशित तथा बी. के. ऑफसेट, नवीन शाहदरा दिल्ली–32 से मुद्रित

नोटः पत्रिका में प्रकाशित लेखकों के विचार अपने हैं। उसके लिए पत्रिका/संपादक/संपादक मंडल को उत्तरदायी नहीं ठहराया जा सकता। पत्रिका से सम्बंधित किसी भी विवाद के निपटारे के लिए न्याय क्षेत्र दिल्ली होगा।

Editorial

One Big, Beautiful Bill: Cutting Taxes at the Cost of Raising Debt

A bill, which is being discussed and debated in the US these days is President Donald Trump's "One Big Beautiful Bill" (also known as OBBBA). Though the bill has finally been passed by the Parliament and approved by the President, in the process, it has definitely broken a friendship that was in the news recently, where Elon Musk was seen as Santa, to President Trump, as he played a significant role in getting him elected to this post. Elon Musk is so upset with this law that he has even formed a new political party. While President Trump claims that his bill will bring more prosperity to the US than ever before, and help make America great again, critics including Elon Musk believe that this bill can wreak havoc on the US economy.

Before passing any judgement on who is right and who is wrong, let's try to understand what this bill means?

One thing for sure is clear that bill will increase the federal deficit in the coming decade. The US debt is projected to increase by $3.3-$3.9 trillion in the next one decade, from 2025. Currently, (as of 2025) US national debt is over $34 trillion, which is more than 120 percent of its GDP, and is very high even from the perspective of a developed country.

It is clear that the federal debt is already very high, and the interest outgo on increased debt could deteriorate the economic scenario for the US. Interest payments on the existing debt are already the largest federal expenditure, competing with defense and health expenditures, and this scenario could get even worsen in the coming years. Although, this new law will lead to a huge jump in the federal debt, but with the debt increasing from time to time, Americans have realized its inevitability. Perhaps, this is the reason that although those aware of its impact are worried, the general public may not be. This is why Trump has been able to garner support for the bill in the Parliament and among the general public as well.

But the markets are not so kind to Donald Trump, as they are signaling the potential risks from the rising debts. The yield on US government bonds is rising as investors are demanding higher returns for holding the debt. Some experts have also warned of a fiscal crisis if the yield on government debt rises. If the US is unable to control its debt or the world loses confidence in the dollar, the crisis could worsen. Rating agencies such as Fitch have already downgraded US credit rating, citing long-term fiscal challenges.

Another provision that has been controversial, is the provision to phase out the clean energy tax credit. The clean energy tax credit was included under past President Biden's Inflation Reduction Act (IRA) 2022.

The Inflation Reduction Act introduced a number of tax incentives to promote clean energy, including a variety of tax credits for solar, wind and other renewable energy projects, electric vehicle (EV) taxes, home energy efficiency upgrades, etc.

These credits were designed to promote investment in clean technology, reduce greenhouse gas emissions and speed the transition to a low-carbon economy. The new law will roll back most of these credits over a period of time, usually 2 to 5 years.

The argument for rolling back these tax credits is that they promote unnecessary government intervention and market distortion. These incentives cost hundreds of billions of dollars and add to the national debt. Donald Trump says fossil fuel and traditional industries should be given a level playing field. He says energy policy should focus on affordability and reliability, not just decarbonization.

Opponents say rolling back these credits will slow clean energy deployment and undermine climate action. The move could also discourage private investment in renewable infrastructure and domestic manufacturing, threatening jobs in the growing clean tech sector.

By phasing out the Clean Energy Tax Credit from the Inflation Reduction Act, this law marks a significant shift in US energy and climate policy. While governments all over the world, including India, are making major efforts to promote green energy expansion, this move of the Trump administration is being considered regressive.

Under the new law, a 1 per cent tax will be levied on international remittances in the form of money sent from individuals in the United States to individuals outside the country. It is worth noting that the House version initially proposed a 3.5 per cent tax, but the Senate lowered it.

Other Major Provisions of the Bill

There are hundreds of provisions in the OBBBA. The Tax Cuts and Jobs Act of 2017 (TCJA) was signed into law by President Donald Trump, under which for most income groups, personal income tax rates were reduced and standard deductions were increased, and tax credits for children were doubled. These reliefs were to expire at the end of 2025. The "One Big Beautiful Bill" removes that expiration date, making lower individual tax rates permanent. This means that unless Congress changes the law again, Americans in most income brackets will continue to benefit from lower marginal tax rates, higher standard deductions, higher tax credits for children, and more.

The One Big Beautiful Bill (OBBBA) increases the Child Tax Credit (CTC) to $2,500 per child (from $2,000 earlier) to provide more financial support to families with children. It's important to note that a large portion of the credit is refundable, meaning families can receive the money even if they owe little or no income tax.

The One Big Beautiful Bill will reduce the burden of the Alternative Minimum Tax (AMT) on middle- and upper-middle-income taxpayers. The Alternative Minimum Tax is a parallel tax system designed to ensure that higher-income earners, who benefit from many deductions and credits still pay a minimum level of tax.

Workers will also find relief in this law. The law specifically introduces new tax deductions for tips and overtime pay, aimed at benefiting hourly employees, especially those working in hospitality, retail, service, etc. Tip-earning workers (such as restaurant servers, bartenders, hotel workers, etc.) can now deduct a portion of their reported tip income from their taxable income. The bill also allows a deduction for income earned from working overtime, typically hours worked in excess of 40 hours per week. These measures will increase take-home pay for workers who rely heavily on tips and overtime, encourage hard work, especially for those who put in extra hours, and also help address income volatility in sectors with inconsistent pay.

Although the Trump administration has succeeded in making this law that reduces taxes and increases debt, but due to this political turmoil has increased. America's increasing debt is now a reality, how will it deal with it? What will be Trump's plan to deal with the challenges facing the dollar? How will Trump deal with the crisis of inflation for the common man and what will be the fate of America's regressive policy in view of climate change in the world? All these questions are currently not only before US, but the entire world.

—Editor

इस अंक में

''पं० दीनदयाल उपाध्याय के एकात्म मानववादी दर्शन के विभिन्न आयाम: एक विश्लेषणात्मक अध्ययन" –चन्द्रभान सिंह; डॉ० विजय प्रताप सिंह 7

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Economic Framework of Ancient India: Maurya and Gupta Empires

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Abstract:

The economic conditions of a state influence nearly every aspect of its social system. This principle was true in ancient times, just as it is today. Presently, we frequently witness economic crises and recessions. Similarly, in ancient periods, the economy was significantly impacted by the incompetence of rulers, epidemics, natural disasters, and other factors. The topic of economic prosperity was also relevant. When examining the historical eras, there is a notable lack of knowledge sources regarding Ancient India, particularly when comparing Ancient, Medieval, and Modern Bengal. Furthermore, some sources from Ancient India remain undeciphered to this day. Consequently, researching Ancient India poses considerable challenges. Despite these limitations, efforts are made to uncover information about this period. For my current research, I have relied on various books and articles. After thorough reading, I meticulously gather information from these sources. I then analyze the data, including and excluding relevant details for my research. Additionally, I have collected information regarding the economic conditions of that era from various artifacts such as coins, land deeds, and copper plates.

Keywords: Economy, Gupta Empire, irrigation,Maurya Empire, revenue, trade and commerce.

Introduction

The economy is fundamentally intertwined with our everyday existence. Ancient India was no exception to this phenomenon. This economic trend has evolved over various periods. Just as there were shifts in power, noticeable changes in the economic landscape were also evident. The trajectory of the economy fluctuated, sometimes ascending and at other times descending. At times, the state of the economy was a catalyst for shifts in power. Economically dominant rulers sought to consolidate their power by invading neighboring territories. Consequently, these rulers aimed to ensure the smooth operation of their state's economy. Policy makers in Ancient India, such as those from the Maurya and Gupta dynasties, were influenced by the vibrancy of the economy during their respective eras.[1] The effectiveness or ineffectiveness of these rulers was closely tied to this economic activity. Moreover, the participation of the common populace in Ancient India was crucial for maintaining economic vitality. Given that the economy was predominantly agrarian, the involvement of the common people was significant. Additionally, the foreign relations of Ancient India were also closely linked to economic factors. This research aims to illuminate these economic dimensions of Ancient India, through which we aspire to uncover a clearer understanding of the economic conditions of that era. Thus, the interplay between rulers, the common people, power, and the economy, as well as the relevance of their influence today, constitutes the central theme of this research.[2]

Methodology

This paper has been composed based on a review of relevant literature and articles pertaining to Ancient India. While numerous primary sources exist regarding Ancient India, these sources have not been thoroughly deciphered. Therefore, for this research, I have had to rely more heavily on secondary sources. Data has been gathered from all these sources, and after verification, I have utilized them in my

current research. Due to the limited availability of information on Ancient India, certain constraints had to be acknowledged in the completion of the research. Secondary data sources have been employed in this study, collected from various articles, books, thesis papers, and similar materials. All types of secondary sources have been regarded as data collection instruments focused on the economic system of Ancient India. Special emphasis should be placed on enhancing the effectiveness, success, and target orientation of this research. Initially, the collected data has been processed, analyzed, and interpreted to derive research findings. In this study, I have utilized narrative and quotation methods to analyze the data in accordance with the study objectives.

Maurya Empire

The Maurya Empire was established in 322 BCE by Chandragupta Maurya. With the assistance of Kautilya (also referred to as Chanakya), the author of "Arthashastra," Chandragupta Maurya assembled a military force and successfully overthrew the Nanda Empire. The emergence of the Mauryas in the late 4th century BC illuminated the history of India, dispelling the darkness of the past. Chandragupta Maurya is recognized as the inaugural emperor of the Maurya Dynasty. There is some contention regarding the precise date of Chandragupta Maurya's rise to power, as various sources provide differing accounts. Additionally, there is no contemporary record detailing how Chandragupta Maurya defeated the Nanda Dynasty, necessitating reliance on multiple historical sources.

There are two categories of sources to understand the Maurya Empire. The first is literary, while the second is archeological. The literary sources of the Maurya Empire consist of texts authored by both local and foreign writers. Indigenous sources include Kautilya's "Arthashastra", Vishakhadatta's Sanskrit drama "Mudrarakshasa", Banvatta's "Harshacharita" (a biography of Harshabardhana), Kalahana's "Rajtarangini", "Jain Parishishtha Parvana", and various Buddhist traditions. Foreign sources encompass Megasthenes's "Indica" (written in Greek), Pliny's "Natural History" (composed in 72 AD), Sri Lankan Buddhist texts (written in Pali), and travel accounts from three Chinese travelers: Fa Hien, Hiuen Tsang, and I-Tsing.[3]

The epigraphical sources currently available include the Edicts of Ashoka, which feature inscriptions. Ashokan inscriptions can be categorized into three types based on the rock surface. These are Rock Edicts, Pillar Edicts, and Cave Edicts. The Rock Edicts are further divided into major and minor Rock Edicts. Major Rock Edicts include those at Girnar (near Junagadh), Shabazgari, Khyber Pakhtunkhwa (inscribed in Kharoshti script), Mansehra, Yerragudi, Dhauli Jaugada (near Bhubaneswar, Odisha), Sopara (Maharashtra), Kalsi, Sannati, and the Kandahar Greek inscription. The minor Rock Edicts consist of Bhabru, Kandahar Bilingual inscriptions, among others. The archeological sources comprise Ashokan Edicts and inscriptions, as well as material remains such as gold, silver, and copper punch-marked coins.

All these sources provide insight into the primary information regarding the Maurya Dynasty. According to these sources, when Kautilya faced an insult from King Dhana Nanda, he persuaded Chandragupta Maurya to seize the Nanda kingdom. Kautilya vowed to take revenge and pledged to dismantle the Nanda Empire. His primary objective was to train an army under the leadership of Chandragupta Maurya and launch an assault on the Nanda Empire. Kautilya motivated Chandragupta Maurya and his forces to claim the throne of Magadha. At that time, the citizens of Magadha were deeply dissatisfied with the corrupt and tyrannical rule of King Dhana Nanda. Chandragupta Maurya rallied his army and prepared to conquer Dhana Nanda's kingdom. He declared a battle, and the Magadha army was mobilized from the city to a distant battlefield to confront Maurya's forces. Additionally, Chandragupta Maurya fostered an environment of civil unrest within Dhana Nanda's kingdom, and Kautilya successfully garnered the support of the common people. Ultimately, Nanda abdicated, relinquished his power, and went into exile, never to be heard from again. Subsequently, Chandragupta Maurya was rightfully installed as the new king of Magadha in 322 BCE at the age of 21, while Kautilya took on the role of an elder statesman. Chandragupta Maurya solidified his authority in Magadha,

establishing its capital at Pataliputra (modern-day Patna). The Empire was the largest ever to exist in the Indian Subcontinent, covering an area of approximately 5 million square kilometers at its peak under Ashoka. With Kautilya's assistance, Chandragupta Maurya swiftly expanded his influence. At that time, the Maurya Empire was recognized as one of the largest empires in the world.

The empire extended northward along the natural borders of the Himalayas, eastward into Assam, westward into Balochistan, and into the Hindukush Mountains of present-day Afghanistan. The emperors Chandragupta Maurya and Bindusara expanded the empire into the central and southern regions of India, although a small area of unexplored tribal and forested regions near Kalinga remained excluded until it was conquered by Ashoka. Following the end of Ashoka's reign, the Empire experienced a decline lasting approximately 50 years, culminating in the dissolution of the Maurya Dynasty in 185 BCE with the establishment of the Shunga Dynasty in Magadha.

Economic System of the Maurya Dynasty:

Under the reign of Chandragupta Maurya and his successor, both internal and external agriculture, trade, and various economic activities flourished and expanded throughout South Asia, facilitated by the establishment of a unified and efficient system of finance, administration, and adequate security. The economy of the Maurya Empire was highly advanced during this period.

Agriculture:

The majority of the population in the Maurya Dynasty were engaged in agriculture and resided in villages. Given that one of the primary sources of revenue during the Maurya Era was derived from agricultural activities, the rulers prioritized land development. They provided financial support to impoverished farmers and issued land grants for cultivation purposes. The state assisted individuals in bringing new areas under cultivation by clearing forests and reclaiming fallow land. However, certain types of forests were protected by law. Farmers had direct communication with the king. A variety of crops were cultivated during the Maurya period, including rice, coarse grains, sesame, pepper, saffron, pulses, wheat, bamboo, paddy, mustard, linseed, vegetables, various fruits, and sugarcane.

Ownership of the Land:

Dayodorous noted the king's ownership of the land. He asserted that no individuals could possess any form of property. Megasthenese echoed this sentiment regarding land ownership. Numerous conflicting doctrines regarding the king's ownership of the land have emerged. Some historians argue that the king was not the true owner of the land; rather, he received a portion of the crops as tax in exchange for protecting it. Nevertheless, the assertion in the "Manu-Shamhita" regarding the king as the land's owner is noteworthy. According to the "Manu-Shamhita", "he (the king) is the Lord of the land." Neither of these two doctrines is wholly acceptable. The prevailing view today is that the king did not possess complete ownership of the land during that period, but rather held special rights over it.[4] The "Arthashastra" indicates that certain lands were owned by the king and cultivated under government management. It also references other lands that were held by taxpayers.

Land system:

According to Dr. Basu[5], the land system was not uniform. There were at least three distinct types of land ownership. In some areas, land was owned by peasants, in others by the state, and in some cases, it was jointly owned. He also noted that tenant rights to land were gradually on the rise. A distinction existed between former ownership and joint ownership of land. The "Arthashastra" alluded to the rights of peasants. Furthermore, the king possessed the authority to confiscate land from peasants who showed indifference towards cultivation. However, this rule was later amended. If necessary, the land could be allocated to another individual for enhancement. Consequently, the ownership of the land would remain unchanged. Dr. Basu believed that the rights of both the farmer and the ruler were equivalent concerning land. Individual ownership was increasing in preference to joint ownership.

Land Revenue System:

According to Dr. Ghoshal's "Indian Revenue System," land revenue served as the cornerstone of the Indian economy during the era of the Maurya Empire. In the Maurya Empire, four categories of taxes were levied on land: Shita, Vag, Bali, and Kara.[6]

Shita - The crop cultivated on the royal farm was associated with the Shita tax. The farmer of this farm was required to pay a water tax to benefit from the royal irrigation system. If the farmer transported the water himself, he had to pay one-fifth of the crop; if he utilized animal assistance, he owed one-fourth of the crop; and if he employed machinery, he was liable for one-third of the crop. Should the farmer source water from rivers or lakes, he was obligated to pay a quarter of the crop as tax. In cases where cultivation was conducted using government equipment by a prisoner, slave, or free laborer under the oversight of a government official, all crops produced would be allocated to the royal treasury. The individual who provided oxen for farming on barren land would receive half of the crop, while those who contributed manual labor would obtain either one-fourth or one-fifth of the crop. The remaining crop was deposited in the royal treasury as revenue. During the Maurya Empire, land was categorized into two classes. State tax was levied on one class of land, requiring one-sixth of the crop produced from such land to be taxed. D.D. Koshamvi referred to the second class of land as ShitaJamin. In this category, settlement and agriculture were entirely under the direct supervision of the king. The majority of land during the Maurya period was classified as ShitaJamin. The tax imposed on all these lands was known as the Shita tax. At that time, land transfers could not occur without special permission. If an individual failed in agriculture, their land would be reassigned to another. Shita taxes were exempted if the settlement was new or during times of disaster. The minimum Shita tax rate was one-fifth of the crop produced.

- Vag - The second tax was referred to as Vag. This tax, which typically represented the king's portion of the crops cultivated on the land, was known as the Vag tax.
- Bali and Kara - The other two categories of taxes were Bali and Kara. Many historians assert that these were sub-taxes. Primarily, these two taxes were imposed on specific lands and for the upkeep of particular classes of employees.

The financial foundation of the Maurya Empire primarily relied on land revenue, alongside trade and commerce. The gradual growth of the agrarian economy and enhancements in the administrative framework for revenue collection led to an increase in income from land revenue. Kautilya noted that the state ought to facilitate the reclamation of wasteland and populate it with villages of shudra cultivators. The nature of land revenue has been a topic of debate. Additionally, there are mentions of crown lands, the cultivation of which played a significant role in the economy. Two categories of taxes existed: one based on the size of the land and the other on the yield produced. The irrigation system was managed by the state in specific regions and during certain periods. Furthermore, cultivators and landowners also exercised private control over the irrigation system. Revenue policies were applied to both domestic and international trade. During that era, roads were constructed to ensure swift communication with local administration, which inevitably became vital channels for exchange and trade. Restrooms were established along major trade routes. Consequently, commercial interests flourished. Tariffs were levied on imports and exports, thereby enriching the royal treasury.

During the Maurya period, the accounts of Megasthenes and other Greek writers regarding the land and revenue system hold significant importance. Megasthenes made three key observations on this topic. Firstly, the second largest group in India consisted of farmers, who were also the most numerous. They provided the king with a quarter of their produce, exempt from land tax. Secondly, the entire country was considered the king's property. Farmers cultivated the land under the agreement of yielding a quarter of the harvested crops. Lastly, through their agricultural activities, the peasants contributed taxes to both the king and the autonomous cities.

The king required a substantial amount of money to fulfill his regular and essential needs. In addition to the military, there were numerous salaried employees. The primary and reliable source of income was state land. Other sources of state revenue were less certain and secure. Consequently, the area of

state land was expanded through various means. If an individual did not leave a will prior to their death, their land would be appropriated by the state. The fallow lands were allocated to tenants, and all the extensive land was cultivated. Those who occupied the fallow land received tenancy rights but did not obtain ownership of that land. Megasthenes, along with Ariyan, Diodorus, and Strabo, also provided some insights regarding land revenue. According to Ariyan, "Peasants cultivated the land and paid taxes to the king or to the independent cities." Diodorus stated, "they paid land tax to the king, as the entirety of India was regarded as royal property, and no individual could possess land there. In addition to taxes, farmers contributed a quarter of their produce to the royal treasury." Strabo noted that "three-quarters" of the crops produced had to be remitted to the state as land revenue, while farmers retained one-fourth as compensation. It is challenging to determine whether the variation in revenue rates was attributable to the differing conditions under which the farmer cultivated the land or to other factors. It may be the case that in instances where the king allocated only land to the farmer, the revenue rate was lower, whereas in situations where he supplied plows, oxen, fertilizer, and other agricultural necessities, the revenue rate was higher. This disparity in revenue is also documented in the "Arthashastra." During that period, the village was regarded as the fundamental economic unit. Each village maintained a connection to the central government through the imposition of two taxes, Vag and Bali. Villagers were granted tax exemptions if they excavated new ponds or restored damaged ones. The state provided protection to farmers against all forms of loss.

Trade and Commerce:

The political cohesion and internal stability of the Maurya Empire fostered the growth of trade within India. Under Ashoka's rule, the Maurya's international trade network experienced significant expansion. The Khyber Pass emerged as a crucial hub for trade and engagement with the external world. Greek states and Hellenic kingdoms in West Asia became valuable trading partners. Trade also extended through the Malay Peninsula into Southeast Asia. Consequently, the state emerged as the largest trader in the region, necessitating control over its entire trade to protect its own interests. This control over trade was predicated on the state's regulation of prices. A variety of taxes were imposed on trade and commerce in numerous ways. Although the state did not adopt a benevolent stance towards traders, some revenue was generated for the treasury through trade. In the "Arthashastra," traders were referred to as "Achaurashchar" (practically a thief, even if not by name). The Mauryans maintained amicable relations with other nations. For commercial purposes, the Mauryans cultivated strong ties with several countries, including Syria and Egypt, among others in the west. During this period, industry and commerce thrived remarkably.[7] Numerous foreign traders settled in the cities of the Mauryan Dynasty. The system of price control was established based on certain essential provisions.

The historical elements of the Gupta period can be categorized into three main classes: Inscriptions, Coins, and Literature. Among these, Samudragupta's pillar inscription stands out as the most significant inscription from the Gupta era. Additionally, his inscriptions at Aaron, Nalanda, and Gaya are also of considerable importance. The Mathura pillar inscriptions attributed to Chandragupta II contain a wealth of crucial information. Kumaragupta I is noted for having the highest number of inscriptions, totaling fourteen. Noteworthy among these are the third Udaipur cave inscription, the Mandasor inscription, and the Damodarpur inscription. The inscriptions of Skandhagupta, including the Junnagarh inscription, the Supiya inscription, and the Vitari inscription, also provide valuable insights. Furthermore, Budhgupta's Saranath inscription, the Paharpur copper plate, the Rajghat pillar inscription, and the Damodarpur copper plate yield significant information. During the Gupta period, three types of coins were in circulation: gold, silver, and copper. The gold coins from this era appear to be imitations of the Kushan gold coins, although this assertion is not universally accepted. Nevertheless, it is observed that during the Gupta period, the gold content in gold coins diminished while the level of adulteration increased. This fluctuation in gold content is indicative of economic turmoil. The discovery of these gold coins across various regions of India will aid in uncovering the history of the Gupta Dynasty. The insights gained from these coins are instrumental in reconstructing the historical narrative of the Guptas.[8]

Conclusion

Regardless of whether it was during the Maurya or Gupta period, the primary source of revenue in both eras was derived from land revenue. The majority of the population in the empire consisted of farmers who predominantly resided in villages. These individuals were essential in sustaining the economic momentum. Although trade and commerce also contributed to the royal treasury, their contributions were significantly lower than that of land revenue. The rulers of both the Maurya and Gupta periods required skilled armies to effectively govern their expansive empires. Consequently, substantial financial resources were necessary to support such a large military force. Furthermore, the rulers had to remain vigilant to deter foreign invasions and foster positive relations with other nations. To facilitate agriculture, trade, and commerce, as well as to establish amicable relations with foreign countries, the rulers required considerable funds. This necessity prompted them to implement various strategies aimed at expanding agricultural production and enhancing trade and commerce. Through these efforts, the rulers successfully augmented their treasury and achieved economic prosperity. Although no empire endures indefinitely, the rulers were prudent in their endeavors to sustain the economic vitality of their empires. Beginning with the appointment of competent treasurers, the rulers focused on the overall enhancement of the revenue system. This ensured that the treasury remained well-stocked with funds, enabling effective governance. In both periods, the rulers employed nearly identical measures to uphold economic prosperity. All aspects, from irrigation systems to revenue collection, were executed efficiently in both eras.

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Academic Bank of Credit: Its Role in Higher Education

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Abstract

The Academic Bank of Credit (ABC) is an innovative digital initiative introduced under the National Education Policy (NEP) 2020 by the Government of India to transform the higher education landscape through enhanced flexibility, multidisciplinary integration, and learner autonomy. This mechanism allows students to accumulate, transfer, and redeem academic credits earned across recognized institutions, thereby overcoming the rigidity of traditional degree systems and creating a seamless continuum of learning.

In the context of commerce and management education, the ABC model plays a pivotal role in fostering academic mobility, lifelong learning, and skill-based employability. It facilitates a learner-centric approach by recognizing diverse learning pathways—including online, hybrid, and experiential learning—and integrating them into a unified academic framework. Through the digital repository of credits linked to each learner's Academic Bank account, students can design personalized academic trajectories aligned with their professional aspirations, thereby promoting outcome-based education and industry relevance.

This paper critically examines the role, implementation, and impact of the Academic Bank of Credit in higher education with specific reference to the commerce and management disciplines. It explores how ABC enhances academic collaboration between institutions, promotes innovation in curriculum design, and supports the development of flexible and modular degree structures. Additionally, it addresses operational challenges, including credit equivalency, institutional readiness, and regulatory compliance, that influence the successful adoption of this system.

Drawing upon national policy documents, institutional case studies, and recent academic discourse, the study evaluates ABC as a transformative tool for educational democratization and employability enhancement. Ultimately, the research establishes how ABC contributes to the evolution of higher education into a more inclusive, adaptive, and globally competitive ecosystem, aligning with the vision of NEP 2020 and the Sustainable Development Goals (SDG 4 – Quality Education).

Keywords:

1. Academic Bank of Credit (ABC)
2. National Education Policy (NEP) 2020
3. Higher Education Reform
4. Credit Transfer System
5. Commerce and Management Education
6. Learner Mobility
7. Outcome-Based Learning

Introduction

In the twenty-first century, the higher education landscape is undergoing rapid transformation driven by globalization, technological advancement, skill-based employability, and the growing demand for flexible learning systems. The traditional degree-oriented model, often characterized by rigidity and compartmentalization, is gradually giving way to a learner-centric paradigm that emphasizes flexibility, interdisciplinarity, and outcome-based learning. Within this dynamic educational environment, commerce

and management disciplines face unique challenges and opportunities. Modern businesses require graduates who are not only academically competent but also equipped with multidimensional skills—critical thinking, analytical reasoning, entrepreneurial orientation, and adaptability to technological shifts. Consequently, reforming commerce and management education to meet these evolving needs has become a national priority.

Amidst these transformations, the Academic Bank of Credit (ABC) emerges as a landmark initiative introduced under the National Education Policy (NEP) 2020 by the Government of India. Designed as a digital academic repository, ABC allows students to earn, store, transfer, and redeem academic credits accrued across multiple recognized institutions throughout their learning journey. By enabling students to design personalized academic pathways and combine credits from diverse learning sources—conventional classroom learning, online courses, vocational programs, or industry-based internships—ABC redefines higher education into a modular and flexible framework. Platforms such as MasterSoft ERP and EdisonOS have strengthened operational integration, allowing institutions to manage credit transactions transparently and in alignment with national academic standards.

This initiative is particularly relevant in commerce and management education, where interdisciplinary exposure and practical application are essential for employability. ABC facilitates a flexible academic structure that promotes learner autonomy, allowing students to pursue cross-institutional and cross-disciplinary courses in finance, marketing analytics, entrepreneurship, and digital management. This not only broadens their learning horizon but also enhances industry readiness and global competitiveness. Furthermore, by recognizing credits earned through internships, entrepreneurial projects, and online certifications, ABC bridges the longstanding gap between academic learning and professional skill development.

This research is driven by several key questions exploring the systemic and pedagogical implications of ABC in higher education:

- How can the Academic Bank of Credit be effectively implemented within commerce and management curricula to enhance flexibility and innovation?
- What impact does ABC have on student learning continuity, academic mobility, and employability skills in the management and commerce disciplines?
- From an institutional perspective, what challenges and opportunities arise in adopting the ABC system, particularly regarding regulatory compliance, faculty adaptation, and curriculum restructuring?

The literature review examines the conceptual foundation and policy evolution of ABC, tracing its origin from NEP 2020 and global models of credit accumulation systems, such as the European Credit Transfer and Accumulation System (ECTS). It highlights how credit banks and modular education systems have redefined higher education in both international and Indian contexts. In commerce and management streams, the literature underscores the growing need for flexible, multidisciplinary curricula and stronger industry-academia linkages to foster experiential learning and professional competency. Despite policy emphasis, there remains a research gap in analyzing the operational and pedagogical impact of ABC within management and commerce programs—a gap this study seeks to address.

The research methodology employs a mixed-method approach, combining qualitative and quantitative strategies to gain a holistic understanding of ABC's role in higher education. Data are collected through surveys, interviews, and document analysis involving faculty, administrators, and students from leading commerce and management institutions. The sample includes both public and private universities that have adopted or are in the process of implementing ABC. Quantitative data are analyzed using SPSS and Excel, while thematic analysis interprets qualitative responses to identify trends, challenges, and perceptions regarding ABC adoption.

Limitations of this study may include differences in institutional readiness, lack of standardization in credit transfer mechanisms, and varying levels of awareness among stakeholders. Nevertheless, the

study assumes that the gradual digital transformation of higher education in India, supported by NEP 2020, will accelerate the adoption of ABC across disciplines.

In essence, this introduction positions the Academic Bank of Credit as a transformative educational innovation aligning with India's vision for a globally competitive, flexible, and learner-centric higher education ecosystem. For commerce and management education, ABC represents a progressive step toward integrating knowledge, skill, and professional relevance—empowering students to become adaptable, employable, and future-ready professionals.

Conceptual Framework of the Academic Bank of Credit (ABC)

The ABC represents a paradigm shift from the traditional linear structure of degree-based education toward a modular, flexible, and technology-enabled learning ecosystem. Conceptually, ABC functions as a digital credit repository where each learner is assigned a unique Academic Bank ID to store credits earned from different recognized institutions. These credits can later be redeemed toward degrees, diplomas, or certifications. The initiative is founded on the principle of "multiple entries and exits" as envisioned in NEP 2020, which promotes lifelong learning and academic mobility.

Theoretically, ABC is grounded in the constructivist learning model, emphasizing learner autonomy, flexibility, and integration of diverse learning experiences. This framework allows students to customize their academic journey according to personal aspirations, professional goals, and socio-economic contexts. In commerce and management education, where knowledge domains evolve rapidly—digital marketing, financial analytics, entrepreneurship, and supply chain management—ABC provides a platform for continuous skill upgradation without disrupting the learner's academic trajectory.

Historical and Policy Context: NEP 2020 and Institutional Integration

The genesis of ABC lies within NEP 2020, which seeks to overhaul India's higher education by introducing flexibility, interdisciplinarity, and technology integration. NEP 2020 advocates an Academic Credit Bank to facilitate credit accumulation, transfer, and recognition across institutions, aiming to make education more accessible, equitable, and globally aligned through digital transformation.

Institutions such as the University Grants Commission (UGC), National e-Governance Division (NeGD), and National Academic Depository (NAD) have collaborated to implement ABC through platforms like DigiLocker, MasterSoft ERP, and EdisonOS. These platforms enable seamless credit management, verification, and inter-institutional collaboration.

However, policy challenges include credit equivalency, accreditation standards, and data interoperability across institutions. For commerce and management faculties, aligning course outcomes and credit structures is critical for maintaining academic rigor and quality assurance. ABC, therefore, functions both as a policy instrument and as strategic infrastructure for academic governance.

Role of ABC in Commerce and Management Education

Commerce and management curricula must constantly evolve to reflect market realities, technological disruptions, and global business practices. ABC enhances adaptability by enabling students to earn credits through diverse modalities—classroom instruction, MOOCs, internships, and entrepreneurial projects.

For example, a finance student may earn credits from university courses, an online blockchain accounting course, and a certified financial modeling internship. These credits consolidate in the learner's academic bank, making the degree both comprehensive and professionally relevant.

ABC also integrates industry-oriented certifications into formal programs, bridging theoretical knowledge and employable skills. Interdisciplinary learning, such as combining management with data analytics or sustainability studies, creates well-rounded professionals capable of navigating complex business ecosystems.

Institutional Readiness, Challenges, and Implementation Barriers

Implementation challenges include infrastructural constraints, limited digital literacy, and policy unawareness among faculty and administrators, especially in Tier-II and Tier-III universities. Lack of uniformity in credit mapping and course equivalence often creates confusion in credit transfer and recognition.

Resistance to change within traditional academic cultures is another critical challenge. Faculty accustomed to semester-based evaluation systems may struggle to adapt to modular, credit-based models. Additionally, the absence of robust data management systems and ERP interoperability hinders seamless ABC functioning.

Quality assurance is essential when integrating credits from diverse platforms, including private ed-tech providers. Transparent mechanisms must ensure that all credits represent genuine learning outcomes. Pilot institutions implementing ABC report positive outcomes in student flexibility, inter-collegiate collaboration, and global exposure.

Impact on Learner Mobility, Employability, and Skill Development

ABC democratizes access to higher education by allowing students to pause and resume learning without losing academic progress. This flexibility benefits working professionals and learners from economically marginalized backgrounds.

In commerce and management, ABC encourages accumulation of practical experience as academic credit. Internships, industrial projects, entrepreneurship ventures, and professional certifications enhance employability. ABC promotes lifelong learning, allowing individuals to return to academia at different life stages for skill upgradation—essential in a rapidly evolving digital economy.

Data Analysis and Empirical Observations

Quantitative survey data and qualitative insights from students, faculty, and administrators reveal that 72% of students view ABC as beneficial for academic flexibility and credit transfer, while only 46% of faculty report clear understanding of ABC operations, indicating a need for capacity-building programs.

Institutions with integrated digital platforms like MasterSoft ERP show smoother ABC implementation than those relying on manual data handling. Thematic analysis indicates ABC positively influences student motivation, institutional collaboration, and curricular innovation, though full potential depends on faculty training, policy coherence, and technical standardization.

Policy Implications and Future Prospects

Successful ABC implementation requires policy synchronization between UGC, AICTE, and other regulatory bodies. A standardized framework for credit equivalence, digital infrastructure funding, and capacity building is essential. ABC can also serve as a foundation for international academic collaboration, enabling credit recognition with foreign universities and promoting global student exchanges.

Future integration of AI, blockchain credentialing, and big data analytics can enhance transparency and reliability in credit verification. Fully operationalized, ABC will redefine higher education as an open, modular, and innovation-driven ecosystem, aligning academic learning with Industry 4.0 and beyond.

Analytical Summary

ABC, though in formative stages, represents a revolutionary reform with potential to reshape India's higher education. In commerce and management sectors, ABC bridges academic theory and professional practice, institutional rigidity and learner flexibility, and national policy with global competitiveness. By institutionalizing credit portability and modular education, ABC is a cornerstone of India's vision for a future-ready, knowledge-based economy.

Conclusion

ABC represents a landmark innovation in India's higher education, marking a shift from traditional degree-based learning to a credit-based, learner-driven model. It embodies NEP 2020's vision of flexibility, interdisciplinarity, and lifelong learning. Through credit accumulation, transfer, and redemption, ABC empowers students to chart individualized academic journeys across institutional and disciplinary boundaries.

In commerce and management education, ABC bridges academic theory and industrial practice, integrating vocational, online, and experiential learning with formal degrees. Such flexibility enhances employability, encourages innovation, entrepreneurship, and real-world problem-solving—essential for contemporary business environments.

Full realization of ABC depends on effective policy implementation, institutional collaboration, and technological integration. Challenges like uniform credit equivalence, quality assurance, and faculty-student awareness must be systematically addressed.

Ultimately, ABC is more than a policy instrument—it embodies educational democratization and mobility. By enabling continuous learning, fostering academic inclusivity, and aligning Indian higher education with global standards, ABC lays the foundation for a future-ready, knowledge-oriented society. With vision and vigilance, it can transform and redefine the purpose and process of higher education in India.

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Role of Internet Banking and Mobile Banking in Digital Payment Systems in India

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Abstract:

When the Modi government came to power in India in 2014, the digital banking initiative was started in India. There is no denying the fact that the Modi government has taken several initiatives to implement the digital payment system in India. Digital India scheme was launched by the Modi government to make the online payment system possible in India. The UPI, Google-Pay, Phone-Pay and Net-Banking are the paramount examples of digital payment systems in India. Currently, most of the Indian people are enjoying the online payment system in India. Digital payment systems have made the physical distance between two people irrelevant. Digital payments have saved the time and energy of Indian people. This has sparked a digital financial banking revolution in India. Digital payments have paved the way for online banking in India. Digital payment systems have reduced the burden on the Indian banking system. Banks are now conducting most of their work online. Digital payments have increased financial inclusion in India, bringing banking access to every poor Indian household. The Internet has played a vital role in making online digital payment systems possible in India. Online banking was the need of the hour and the digital payment system has provided opportunities to those who were unable to access the banking system. Now the underprivileged people are using the banking facility through their mobile phones and all this has become possible due to the plan of Modi government for digital banking system in India. This has transformed the entire banking system in India. The author attempts to explore the role of internet banking and mobile banking in digital payment systems in India.

Key Words: Internet Banking, Mobile Banking, Digital Bharat, Digital Payment Systems.

Introduction:

There is not denying the fact that Internet and mobile banking facility serve as the foundational platforms and primary drivers of digital payment systems in India, which provide essential banking services like fund transfer and bill payments and also integrate with major Indian digital banking platforms like Unified Payments Interface (UPI). He has played a key role in promoting financial inclusion and accelerating the transition to a cashless digital Indian economy. Internet banking (net-banking) and mobile-banking provided the initial digital infrastructure for conducting financial transactions electronically, paving the way for more advanced systems like UPI. The UPI played a vital role in providing access to banking infrastructure to people in remote areas. These platforms have expanded banking services to remote and underserved areas, giving people who previously had limited access to traditional bank branches the opportunity to participate in the formal financial system. Internet and mobile banking are thus the fundamental digital infrastructure for India's digital economy, providing the technology and services that underpin the vast volume of digital transactions in the country.

There is no denying the fact that public and private banks in India offer a wide range of basic services to their customers through digital platforms such as online banking (also known as net banking and mobile banking). These online banking services can be availed through Wi-Fi and internet connection. Although both net-banking and mobile banking offer similar banking services to the customers, yet some key differences make them different. Digital payment systems can be fully or partially digital,

depending on how the transactions are processed. They offer customers a safe, convenient and efficient way to transfer economic funds. It is indeed a fact that Mobile banking can really be a useful tool for various banking tasks, but net banking offers a wide range of features, functions and banking services that may not be available through mobile banking.

What is Digital Payment Systems in India:

Digital payment system means that banking transactions will be done through online medium, hence there will be no need to physically reach the banks for financial transactions. Digital payments are transactions conducted electronically or online, where both the payer and the payee use digital platforms to exchange financial funds. In simple terms, it is the transfer of funds between payment accounts using a digital device and channel. Digital payment systems in India are electronic methods of money transfer, including popular platforms such as Unified Payments Interface (UPI), debit/credit cards, mobile wallets, and online banking. These systems have evolved significantly and facilitate fast, secure and convenient transactions by transferring money between accounts electronically instead of using physical cash. The government and stakeholders have worked to expand digital electronic infrastructure, including a massive increase in POS terminals and QR codes for payment acceptance. This growth is driven by coordinated efforts to create a more accessible, secure and efficient financial ecosystem, as highlighted by the Reserve Bank of India's Digital Payments Index.

Traditional Indian economy is based on cash transactions, so due to lack of transparency Indian economy faced the problem of corruption. Every person has access to mobile and internet at low cost, hence internet and mobile revolution has played a vital role in financial inclusion. Before UPI, India's traditional payment ecosystem was heavily reliant on cash, with over 90 percent of transactions conducted in cash. The UPI changed the world by providing users with an easy, free, and fast way to make digital payments. It combined the convenience of mobile apps with the security of bank accounts, allowing users to transfer money instantly across multiple banks 24/7. The introduction of UPI has revolutionised India's digital payments ecosystem by enabling instant and seamless transfer of funds between different bank accounts using smartphones.

The UPI is the underlying payment system in India, providing a quick, real-time and secure inter-bank network, while Google Pay is an banking app that acts as a user-friendly interface to the UPI network. The UPI app enables seamless transactions and inter-operability, allowing online users to link multiple bank accounts and make various digital payments. Google Pay uses this system to provide additional features on the platform, such as smart notifications, bill payment integration, and advanced security measures like biometric authentication. The growing adoption of digital payments in India has been significantly boosted by innovations such as UPI and e-Rupee. These new tools support the government's "Digital India" initiative to reduce cash usage and connect more people to the digital banking system. Digital platforms have promoted cashless economy in India and cashless economy is the main objective of current Modi government. The cashless economy has stopped the corrupt practices that were part of the cash economy in India.

Role of Internet Banking in Digital Payment Systems in India:

In this new age of digital technology, where the country is close to becoming a cashless economy, internet banking plays a vital role in shaping the banking habits of consumers. With this evolution in banking digital technology, financial freedom is just a click away, and it has emerged as a comprehensive solution for all banking needs. With the advent of the Internet or online banking, also known as e-banking, ease of banking has become a reality. This is the need of hour to enabling banking customers to carry-out financial transactions through the bank's website and app, the banking facility can be used through electronic devices and mobile phones without visiting the bank branch. Presently, all bank services are available through Internet Banking. The use of Internet banking has the potential to make the Indian financial system cashless. Internet banking is often referred to as "e-banking, online banking, virtual banking" or similar names. An "electronic payment system" that allows customers of banks or

other banking organizations to perform a variety of financial operations through the web pages of those banking organizations is called a payment gateway.

It is the fact that Internet banking serves as the digital infrastructure and main channel for digital payment systems in India, providing the platform for electronic fund transfers and it is integrated with modern systems like Unified Payments Interface. Banks implement robust security measures such as encryption, two-factor authentication and fraud detection on their internet banking platforms, thereby increasing user confidence in the digital payments ecosystem. Increasing smartphone and internet penetration has accelerated the adoption of digital payment options like UPI and QR codes, moving the country towards a more transparent and efficient economy.

Role of Mobile Banking in Digital Payment Systems in India:

Mobile banking has been a transformative force in India, serving as a key driver and platform for the widespread adoption and rapid growth of digital payment systems like Unified Payments Interface (UPI). It provides the necessary access, convenience and infrastructure that has enabled the country to transition from a cash-based economy to a digital-first economy. Mobile banking apps serve as the main interface for India's most popular digital payment method, UPI, which accounts for over 80% of all digital transactions. They also facilitate other major inter-bank transfer services, such as the Immediate Payment Service. Mobile banking has brought formal banking services to remote and underserved populations who previously did not have access to physical bank branches. This has been particularly important for rural areas, giving millions of people the opportunity to participate in the formal Indian financial system.

Mobile banking has been crucial in the implementation of government schemes like Pradhan Mantri Jan Dhan Yojana and Direct Benefit Transfer, ensuring efficient and transparent delivery of subsidies and welfare benefits directly into the accounts of beneficiaries. Mobile banking plays a vital role in India's digital payment systems, making transactions faster, safer and more convenient. Mobile banking has promoted financial inclusion, giving people living in remote areas access to financial services. It helps banks reduce operational costs, increase efficiency, and provide various services to customers, such as fund transfers, bill payments, and account management. Mobile banking has connected people who had limited access to traditional banking, especially those living in remote areas, to the formal banking system. Digital banking provides banking services using the internet and mobile technology. These include managing your account, transferring funds, recharging, and paying bills. Digital banking is becoming popular day by day due to its convenience.

Mobile banking can be a useful tool for various banking tasks, but net banking offers a wider range of features, functions and services that may not be available through mobile banking. Mobile banking is a simplified version of traditional banking services that can be accessed through a banking app on a mobile device. Net banking, also known as internet banking, is a digital system provided by banks that gives customers instant access to financial and non-financial banking services online.

Conclusion

There is not denying the fact that Internet banking and mobile banking are the foundation of India's digital payment systems, serving as the primary channels providing 24/7 access, greater convenience and lower transaction costs compared to traditional methods. These online banking facilitate seamless integration with other payment methods like UPI and mobile wallets, helping the country move towards a cashless economy. Internet and mobile banking serve as essential platforms that enable a wide range of digital payment services. These give users secure access to their accounts from anywhere, anytime, using devices such as smartphones, tablets, or computers. The online banking play a vital role in the government's direct benefit transfer programmes, ensuring that subsidies and welfare payments reach the intended beneficiaries directly and transparently, reducing leakages and corruption. Both net banking and mobile banking apps are generally safe to use, as banks have systems in place to detect fraudulent activities. However, it is important to exercise caution when using digital platforms, as they can still be vulnerable to online fraud.

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Women Empowerment in India and the Role of ICT

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Abstract

Information and Communication Technologies (ICTs) are a diverse set of technological tools and resources which in a way used to create, disseminate, store, bring value-addition and manage information. It also provides information and solution for a broad based development in social, economical and political life of the people. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware, software and services and electronic media, i.e, internet and electronic mails.

Thus, ICT has emerged as a powerful tool for measuring and dissemination of information, especially in relation to gender and its related concomitants. It is evident that there has been a rapid growth in the ICT sector since the late 1980s and the ICT usage has dramatically expanded since the 1990s. According to the World Bank, teledensity in India had reached 3.8% of the population by 2001. The number of internet accounts is growing at a rate of 50% per annum. The ITES-BPO sector alone grew at 59% and employment had reached 106,000 by 2004 [NASSCOM 2004]. According to the 2004 report by the Cisco Learning Institute, women comprise only 23% of India's internet users. This gender digital divide in India is characterized by low levels of access to technologies and its related materials. Poverty, lack of computer literacy and language barriers are among the factors impending access to ICT infrastructure, especially in developing countries.

This paper explores the role of ICT-enabled networking processes for Women's empowerment. Further, the paper also addresses social, cultural, economic and other factors that challenge women's access and use of communication technologies.

Keywords: ICT, Women empowerment, Government, NGOs, and India

Introduction

In order to bridge the gap between rich and the poor or rural and urban areas, ICTs are very useful. Thus, ICT stems mainly from the fact that rural areas often lag behind urban areas in terms of essential infrastructure and services such as transportation, health, education, electricity and government services.

This creates a politically and ethically unacceptable inequality of services and opportunities for rural populations and prevents them from participating appropriately and fully in socioeconomic and political life of the nation. Rural isolation and deprivation can negatively impact growth and certainly growth cannot be sustainable unless it is inclusive. This is especially true of a nation like India, where more than 70% of the population resides in rural areas and is largely engaged in low productivity sectors like agriculture and its allied activities. Thus, ICTs can overcome many infrastructural constraints.

Women empowerment through ICT is merely associated with socioeconomic development (Women 2000 and beyond). This potential towards social transformation demands that everyone should have access to ICT. Prevailing inequalities in access to ICTs throughout the world suggest that many groups are hindered by their social, economic, political and cultural circumstances from d[1]eveloping a relationship with ICT.

With regard to women this inequality is referred as the "gender digital divide" which postulates that women all over the world have very much less access to the ICT than their male counterparts. It aims to fill the gap by addressing ICT which can promote sustainable socioeconomic development and help women to overcome the gap.. Women across the world experience multiple challenges in access to and use of ICTs. Most of these challenges are a result of social processes that marginalize women to access technology, and thus invariably affect progress.

Information and communication technologies (ICT)

ICT can be interpreted broadly as "technologies that facilitate communication and the processing and transmission of information by electronic means." ICT promises a fundamental change in all aspects of our lives, including knowledge dissemination, social interaction, economic and business practices, political engagement, media, education, health, leisure and entertainment.

Governments, both at the Centre and States, have given emphasis to bridge the gap and hence introduced many schemes and programmes in the rural areas of India. In India ICT applications such as Warana, Dristee, Sari, Sks, E-Chaupal, Cybermohalla, Bhoomi, E-Mitra, Deesha, Star, Setu, Friends, E-Seva, Lokmitra, E-Post, Gramdoot, Dyandoot, Tarahaat, Dhan, Akshaya, Honeybee, Praja are in functioning for rural development. Through ICTs people in rural areas can connect with the local, regional and national economy and access markets, banking/financial services and employment opportunities. ICTs can act as a channel of delivery of e-Government services including health and education. Thus bridging the digital divide also bridges the overall infrastructural gap and addresses other constraints faced by rural areas. If ICTs is appropriately deployed and realize the differential needs of urban and rural people, they can become powerful tools of economic, social and political empowerment.

Women Empowerment

Empowerment of women in the context of knowledge societies entails building up the abilities and skills of women to gain insight into the issues affecting them and also to build their capacity to voice their concerns and issues in the larger forums of the society they live. It also entails to develop the capacities of women to overcome social and institutional barriers and thus strengthen their participation in the economic and political processes which led to improve their quality of life.

For instance, Women's Network of the Association for Progressive Communications [APC] has conducted training workshops to support electronic networking among women's groups. The Multimedia Caravan project in Senegal provided rural women with the opportunity to develop their own ideas on how ICT can be used to meet their development needs and goals in order to implement them successfully.

ICT Applications for Women Empowerment

With the advent of various organizations, Government, Non-government Organisations (NGOs) and private institutions, a lot of ICT applications were developed to bring out social, economic and political changes in the lives of the rural women across the states in India. All these organizations, government, NGO's, and other private institutions, tried their best to implement different schemes and programmes which have led to improvement of the status of women through ICTs in rural areas of the country.

Government Initiatives

In order to enhance the skills of rural women, governments, both at the centre and in different states, have initiated few ICT knowledge tools. For instance, Yeshaswini Nagara Hagu Grameena Abhivruddi Parishat in association with Karnataka State Women's Development Corporation (KSWDC) have launched e-mahile project to women's drawn from over 200 villages in 11 districts of the Karnataka state. Later, each trained woman who is called village service provider, has been given a laptop, printer, Uninterrupted Power Supply (UPS), soil testing kit, LCD projector, digital camera, e-mahile dual language software and educational CDs, Internet connection, IRTC currency for booking rail and air tickets at a cost of Rs. 1,80,000. Nationalized banks support these women by providing loans. Apart from loans, the government also give Rs. 10,000 as subsidy to each woman under the Asare programme. This is besides the Rs. 25,000 margin money. Personality development courses and Yoga classes are the added benefits. Many women with their newborns used to attend the training camps and the organizers have set up a creche and also appointed a maid to take care of these children.

NGO's Intiatives

In order to build the capacities of rural women, government initiatives alone does not yield the desired results due to its diversity in nature of India and to achieve total coverage of all the people in the country, certain NGOs also encouraged to start their activities in some of the pockets of India. Thus, Smile (Savitri Marketing Institution for Ladies Empowerment) organizes IT seminars in collaboration with IT companies. NIIT has launched SWIFT JYOTI programme for IT education of women. The

programme is designed to provide computer literacy to females from six years to sixty years. It also provides functional literacy on the one hand and benefits women in seeking and receiving information useful in their daily life.

The duration of the SWIFT JYOTI programme is 18 hours. SEWA (Self Employed Women's Association) has launched IT programme to increase efficiency of rural micro enterprises. Ujjas Innovation: It is an initiative to empower women by bringing out their own newsletter called "Ujjas". The newsletter went on air on All India Radio Bhuj Station in Gujarat. The newsletter provides a medium to express views against female infanticide, dowry, and other relevant issues.

Presence of Private Sector

In additon to both government and NGO's initiatives, of late, private sector also playing its role to enhance the ICT networks base in the selected pockets of rural and semi-urban areas of India. For instance, Project Shakti launched by Hindustan Unilever promotes internet dissemination among rural women.

The project now provides services to 135000 villages, across 15 states and has developed 45000 women entrepreneurs. Project Shiksha of Microsoft and Internet Bus on Google is also contributing to increasing internet awareness. E-choupal initiative of ITC has reached 40,000 villages covering 4 million farmers through 6500 kiosks. NASSCOM: National Association of Software and Service Companies provide mentoring and empowering women managers across junior, middle and senior level of the IT Industry through various workshops, activities and training sessions. India Shop, an e-commerce website in Tamil Nadu, has been designed to sell rural women's cooperatives. Swayam Krishi Sangam (SKS) is using ICT's such as smart cards and handheld devices to improve microfinance projects to empower poor women in the areas.

There are number of projects spread across India and elsewhere to cater the needs of the women and thus to develop and enhance their capacities in order to provide basic knowledge on ICTs and its applicability to women and their empowerment. In the following section, an attempt is made to showcase certain projects, Best Practices, which are working for the betterment of women in the society.

Table: *Schemes for Women Empowerment Using ICT*

S.No.	Name of the Department	Name of the Scheme	Purpose of the Scheme
1	Smile NGO	Swift Jyoti	IT education of women
2	MHRD	Central scheme to provide Internet Subsidy	Provide Internet subsidy during period of Moratorium
3	MHRD	ICT in School	Provide opportunities to secondary stage students to develop ICT skills & ICT learning process.
4	Karnataka State Women's Development Corporation (KSWDC)	e-mahile	Soil testing kit, on-line Booking of air and railway tickets
5	SEWA NGO	Ujjas	IT programme to increase efficiency of rural micro enterprises
6	Hindustan Unilever	Project Shakti	To increase internet awareness
7	Department of Telecommunication	Sanchar Skanti	A suite of Mobile Value Added Service(VAS) to provide a variety of useful information to women & other schemes.
8	UNESCO sponsored project in India	NABANNA	Use of intranet portals, databases, and web based applications
9	MHRD	Sakshar Bharat	Provide & strengthen Adult education especially women.
10	India NGO IT	Mahiti Manthana	Empower rural women through ICT
11	Government of Kerala	Kudumbashree	To set up micro-enterprises based on ICT applications

Success Stories of ICTs

With the help and support from the government, non-governmental agencies, corporate sector and other private agencies effort has paved the way for creating and establishing some success stories on ICTs and its effective implementation in the rural areas of India. In the next section, an attempt is made here to portray those success stories.

Networking Rural Women and Knowledge (NABANNA)

NABANNA is a UNESCO sponsored project in India, to empower the women through the use of intranet portals, databases, and web based applications. Through the NABANNA network women share local indigenous information and information obtained at group meetings and newsletters. Women gained more respect in their local community due to this project and the knowledge they got due to this project. Through this project, younger women are more confident to approach the job market. Further, women became more creative after learning programs like a paintbrush and related services. Thus, women developed a sense of unity among them and further led to enhance their leadership qualities.

Gyandoot

Gyandoot is an e-government project started by the state government of Madhya Pradesh, which won the prestigious Stockholm Challenge award in 2000. The project provides a network of computers connecting to the rural areas and fulfilling the everyday, information related needs of the rural people. 20 kiosks ("soochanalayas") were initially set up in various rural centres, with each kiosk typically serving a population of 20,000-30,000 villagers.

A further 18 kiosks were added later. Each kiosk was run by a trained operator, and can provide a range of services for a nominal service charge, ranging from around US$0.10 for 'ask the expert' through US$0.20 for registrations to US$0.50 for use of the matrimonial site (many villagers subsist on less than US$2 per day). eTransparency-related information and services provided include:

- *Land records:* farmers need an official map and land record of their land ownership if they are to apply for loans. It was intended that they could apply for these via the kiosk, and then come later to collect the official documents.
- *Below poverty line and other lists:* government provides special welfare schemes for those families in a village deemed to be living below the poverty line. This list - previously available only to governing bodies in the village - is now available online, so that families can check directly to see whether or not they are listed. Lists are also available relating to public distribution of food, and pension and rural development scheme beneficiaries. There are also details of the grants given by government for use by village committees.
- *Grievance registration:* if a citizen has a grievance to raise against a public servant, they previously had to travel to district headquarters. Now registration and progress reporting could all be done remotely, through the kiosk.
- *Market prices:* related to e-transparency in markets rather than government, this is the facility by which prices for agricultural goods from the district wholesale markets are made available to farmers via the kiosk. Having such prices would enable them to wait at home until the right price is reached, rather than having to rely on intermediaries (or make a special journey to market, which might be up to 25 kilometres distant, needing 4-5 hours' travel time with a typical journey cost of around US$0.50 plus loss of income).

M. S. Research Project

M. S. Research Project in Pondicherry is providing internet connectivity and to spread the information to the villages the state. The project has developed a "hub and spokes" distribution model where Web-based data are downloaded in a community with an Internet connection and subsequently relayed through a local voice/data network to community Village Knowledge Centre's (VKCs) in six nearby villages. This project have both connectivity and content, is designed to empower rural families with new knowledge and skills based on the Gandhian principle of antyodaya (i.e., unto the last), where the empowerment starts with the poorest and the most underprivileged women and men. In this model, the local population will have a sense of ownership of the Rural Knowledge Centre (RKC). It will be client managed and controlled, so that the information provided is demand and user driven. The local

population should be willing to make contributions towards the expenses of the RKC, so that the long-term economic sustainability of the programme is ensured. Contributions in cash or kind generate a sense of ownership and pride and create an economic stake in the operation of the centre. The local communities should be able to run the centres when the implementing agency moves to other regions. The hub centre and RKCs should act as a rural library and much more. Each hub centre may cover 25 to 30 villages within a radius of 60 km. Each hub centre will consist of at least three networked computers, one scanner, two web cameras, internet facility, one printer, one digital camera, solar backup facility, etc. The RKCs should be located in a public place and not to be associated with one group or caste; should allow everyone to take part. Each RKCs should have two-way communication with hub. RKC will consist of two to three computers [depending on village population / needs], a web camera, phone, a printer, notice board, etc.

Datamation Foundation

Datamation foundation in collaboration with the UNESCO has set up a community media center in a Madarasa in extremely backward Seelampur-Zaffrabad in New Delhi. The project aims to empower girls with the basic computer skills for their better future. The ICT centre aims to impart computer skills and build the capacities of young women. Two courses in computer training are offered – one at the basic level and the other advanced, on desktop publishing and screen-printing. The ICT centre is also an open learning centre for young girls and women, providing them interactive multimedia content for enhancing their vocational and life-skills, and providing rights-based information on various issues.

The other significant goals of the initiative are development and dissemination of local content through a participatory process for enhancing vocational skills and also to overcome the language barrier which non-English speaking users of internet often face. As mentioned before, the research also brought up the need felt by the participants to develop local content and participate in this process themselves.

There are over 100 women visiting the ICT centre everyday and the total enrollment for the computer training is around 100 at any given time. More than a thousand young women have been trained in basic ICT skills at the centre since the inception of the centre. Developing local content and facilitating their access to relevant content and information have been the other significant areas in this initiative.

Dairy Information System Kiosk

Dairy Information System Kiosk (DISK) is a project in Gujarat, which provides Internet connectivity and a portal at the district level serving transactions and information needs of all members. DISK has improved efficiency of milk buying process at 2,500 rural milk collection societies. The DISK project was conceived with two components; 1) an application running at the society level that could be provided Internet connectivity and, 2) a Dairy Portal at the district level serving transactional and information needs of all members and staff in the district co-operative structure. The software used at the society level was developed to provide: Data analysis and decision support to help a rural milk collection society in improving its performance i.e. increasing milk collection. Data analysis to improve productivity and yield of milch cattle. Farmers with facilities to place orders for goods and services offered by different agencies in the co-operative sector and seek information on subjects of interest. The services to be offered at these centres would include; 1) Delivery of information related to dairying, including best practices in breeding and rearing milch cattle, scheduling of government and other private sector agency services, and collecting feedback on the quality of service provided to the catchment area; 2) Access to a multimedia database on innovations captured by SRISHTI (an NGO working with IIMA) from hundreds of villages, covering agricultural practices, medicinal plants, home remedies, tools and implements, etc., and a multimedia format that has captured the description of the innovations provided by innovators and a visual presentation of the innovations; 3) use as a communication centre offering services like email, fax and Internet telephony (if Internet telephony is permitted); 4) Internet Banking Services and Automated Teller Machines (ATMs), which will enable the milk societies to credit payments directly to sellers' bank accounts. (The sellers already have plastic card identifiers. The card identifier may have to be upgraded to smart cards carrying biometric identification. The cards can be used to withdraw cash from ATMs); 5) a way for farmers to download Government Forms, receive documents (from a Government site) and

order supplies and agricultural inputs from manufacturers; and 6) a means of communicating with farmers via the automatic printing process of daily payment slips.

Akash Ganga

Software called Akash Ganga has been developed with special features to enable speedier collection of milk and faster disbursement of payments to dairy farmers.AKASHGANGA is committed to spread information technology among rural masses. We identified milk cooperative societies where families are members & visit the society to sell milk of cattle owned by them twice a day. Spread of information & technology initiated with automating their routine milk collection process which was done manually. Beginning with computer & software in regional language, weighing scale, card reader & instrument to integrate the full process, we developed accounting system to automize and integrate accounting function in the system. AKASHGANGA Milk Analyzer which measures FAT, SNF (Solid but Not FAT) and Protein in a given sample of raw milk. This analyzer has bee developed considering the need of the village cooperative society. AKASHGANGA is totally automatic Microprocessor/ Computer based milk collection systems is specifically made to meet the needs of Village CoOperatives and its members. Milk Collection Process becomes simple, fast, accurate and reliable.

Success Stories from around the World

ICTs have become everybody's necessity and it became reality with the help and support from the different governments across the continents and agencies such as United Nations. With their consistant help and encouragement, there are number of success stories which are portrayed in the next section. This will definitely benefit the women who are in the verge of poverty and unemployment in the rural areas of India.

The World Wide Web as a Tool of Empowerment

The growing access of the web in the late 20th century, has allowed women to empower themselves by using various tools on the Internet. With the introduction of the World Wide Web, women have begun to use social networking sites like Facebook and Twitter to start online activism. Through online activism, women are able to empower themselves by organizing campaigns and voicing their opinions for equality rights without feeling oppressed by members of society.

Bloggers

In recent years, blogging has also become a powerful tool for the educational empowerment of women. According to a study done by the University of California, Los Angeles, medical patients who read and write about their disease are often in a much happier mood and more knowledgeable than those who do not. By reading others' experiences, patients can better educate themselves and apply strategies that their fellow bloggers suggest. With the easy accessibility and affordability of e-learning (electronic learning), women can now study from the comfort of their home anywhere, anytime. By empowering themselves educationally through new technologies like e-learning, women are also learning new skills that will come in handy in today's advancing globalized world.

In Kenya, women and men weavers were trained in using the internet to learn new weaving techniques and access more realistic prices for their products. In Uganda, the Uganda Media Women's Association established a radio programme – Mama FM – where women can actively participate and learn about development issues such as, among others, human rights, children, governance, nutrition and health. The UNDP telecenter project in Ukraine applies ICTs in agriculture and farm management to support women farmers, who identified lack of information and networking tools as the major obstacles to their becoming successful entrepreneurs in a new market economy. There are three types of women empowerment as reported by UNDP.

- *Economic empowerment:* Women are economically empowered when they are supported to engage in a productive activity that allows them some degree of autonomy. This type of empowerment is also concerned with the quality of their economic involvement, beyond their presence as poorly paid workers.

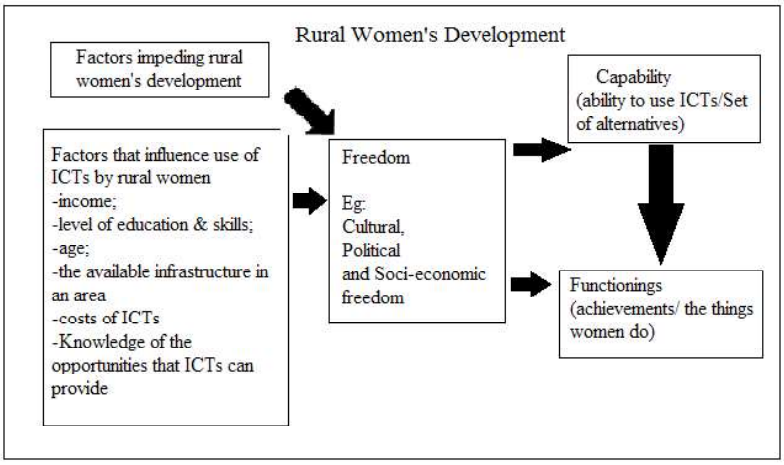

Fig: Capability approach applied to the use of ICTs for rurl women's development

- *Social empowerment:* This is a process of acquiring information, knowledge and skills; and supporting the participation of women in social organizations without any gender discrimination in day-to-day activities. It is also concerned with inculcating a feeling of equality instead of subordination among women.
- *Political empowerment:* Source : www.intechopen.com www.intechopen.com
  It is concerned with enhancing the power of voice and collective action by women. Besides, it ensures equitable representation of women in decision-making structures, both formal and informal, and strengthens their voice in the formulation of policies affecting their societies.

As gender inequality is embedded in a series of systemic inequalities, there is a need to employ different types of empowerment. Economic, social and political empowerments are all interrelated and all these are critical for women empowerment, though the emphasis varies during different stages in the empowerment process.

Women can use ICT tools in number of ways especially in the areas of education, business, services and social service activities.

Education

Women can use computers at the different levels and age groups from pre-university to university level which helps them to continue their education.

1. A faculty member can upload their course contents along with lecture notes so that any student girls or boys misses a lecture, can download the same and do it at home.
2. It should be the responsibility of government to sponsor learning tools available to women.
3. High speed broadband internet access for women at university, college and school level.
4. ICT provides links with other schools or with businesses.
5. Computers in schools provide wider access to ICT and encourages new ways of learning.
6. Interactive Learning packages are available on CD for different subjects.

Knowledge Society

Knowledge which becomes the fundamental source for all economic and developmental activities in the knowledge society of which women form an equal part. ICT networking opens up a new way of interactive communication between government bodies, NGOs, academic and research institutions, and the civil society.

Employment

ICT has played an important role in changing the concept of work and workplace. ICT offers women flexibility in time and space and as a result of the ICT, a high proportion of jobs outsourced by big firms

are going to women. ICTs enable women to reach markets far from home and sell their goods, providing greater access to regional, national and global markets. An article in The Guardian describes how Elsouk, an e-commerce website set up with World Bank assistance, helps women artisans from Morocco, Egypt, Jordan, Tunisia and Lebanon sell their products abroad and even develop B2B direct relations.The Tortas Peru confectionary website set up by housewives in Peru enables women with children to work from home and earn an income. Products are sold directly online thus cutting out the middleman and maximizing profits; likewise inputs are purchased directly, once again reducing costs.

The Guardian article also describes the story of a woman weaver from Kancheepuram in India who wove beautiful sarees that she was forced to sell at a very low price to a middleman as she had no access to other markets for her products. IndiaShop posted photos of her sarees on their website and was able to procure orders for her at a very good price, thus preventing her being exploited by a middleman.

Entrepreneurship

Tele-centers can solve these problems by combining home work with social spaces and organization. One way to do this is to move to Entrepreneurship on the internet. The internet which is the main element of ICT to help organize and build harmony with and between people working from home offices. Rural women in developing countries may be able to sell their products directly without going through middlemen. PEOPLink is one such organization which has been helping women's communities traditionally involved with handicrafts to put their products online in the world market.

ICTs should Promote Democratic Communication towards E-governance

ICTs are increasingly being used as necessary and effective ingredients in communications strategies. The potential of these new technologies for participatory and democratic communication and the opening up of new communication spaces are seen as main contributions to social development and transformation. One must be mindful, however that these spaces can exclude and alienate women who are less articulate and who may not speak the dominant international languages that are often used in these discussions. Indicators should take account of the means available that enable people/communities to feed their voices into debate and dialogue. The underlying assumption of the use of ICTs for information sharing and communication is that it provides a means for the sharing of knowledge and information directly with those who generate them. The quality rather than the volume or quantity of information generated is more meaningful as an indicator.

While women's increased participation in communication spaces is an indicator for the positive use of ICTs, it is even more important to measure their role in these spaces. Some of the indicators could be their involvement in the major decisions related to the initiative. This will ensure relevance and meaning – a vital component for any intervention.

Conclusion

In the paper an attempt is made to explain the processes involved in the ICTs and its nitty-gritty issues and also as argued by scholars that ICTs serve as an instrument of awareness generation among the marginal and vulnerable sections of the society. It is also viewd by many that ICTs have become to the vioceless in the rural, remote and interior areas of the country. Further, ICTs can play a significant role in combating rural and urban poverty and fostering sustainable development through creating information rich societies and supporting the livelihoods of the poor and the marginalized.

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A Study of Indian Migrant Labours and Migration

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Abstract

Human migration has become a vital issue of many developed and developing countries in the recent past. It is stressful, demands emotional, social, cultural, educational, and economical adjustments. Migration means voluntary or involuntary movement of individuals from their native lands with the basic motive of earning a livelihood. The people who migrate are called emigrants or immigrants or migrants. Human migration experienced an upward trend after World War-II as the people were forced to deport or evacuate and thus, were displaced from their native lands. This trend further got a boost after globalization and liberalization of the world economy (Ellerman, 2005). The three main components of population change are fertility, mortality and migration, of which fertility and mortality work in biological framework, while migration depends upon economic, political, social and demographic forces in environment. The objective behind writing this paper was to understand about the scenario of Indian Migrant labours and what are the reasons of migration. This paper is based on the review of most relevant information regarding migration and migrant labours and aims to highlight the different types, causes and a framework to understand it in a better prospective by adopting an explorative research design mainly based on secondary data.

Trade unions and non-governmental organizations though very small in number make sincere efforts to alleviate the problems of migrant workers. IMF initiated an effort to organize the migrant workers at the shipbreaking yard at Mumbai and along through Steel, Metal & Engineering Workers' Federation of India (SMEFI). These migrant workers were organized in the existing union Mumbai, Port Trust, Dock and General Employees' Union (MPTDGEU) by amending the constitution and reducing the rates of subscription. Noneconomic demands like civic amenities, occupational health and safety (OHS) and social problems were taken up, were some of the finding of the research paper.

Keywords: Migration, Migrant Labours, Organization

Introduction

A labourer or a worker is a person who puts his physical labour to gain some money or thing in return. The careful perusal of the Indian history reveals that primarily agricultural and domestic workers existed in ancient and medieval India. But in the 18th and 19th century when industrial revolution took place in Europe, a new class of factory workers was also emerged in the world economy. Migration is not new to the human race. Migration has been contributing to economic and social development by enabling man to overcome the tyranny of space. Migration in India has largely been fueled by push and pull factors, the increasing regional disparities, rural urban disparities and urban bias in economic planning. Urbanization is one of the key dimensions in the modernization process of a society. Several studies have shown that small cultivators and landless migrate to urban centers for work.

Labour migration has been an integral and vital part of human development. Infact, the history of population migration is as old as man itself. Labour migration may be defined as a form of labour mobility towards districts or States or outside where industry and employment are expanding. In other words migration may be phenomenon of the flow of people over shorter or longer distances from one origin to a destination either for temporary or permanent settlement.

The rapid industrialization has attracted a major chunk of labourers from rural to urban, and thus not only causing the problems for urban growth as well as development, but also for the labourers. The word migrant workers came into picture in the 19th century. This was the time when land revenue was assessed in India at high rates by the British rulers. It created a new class of landless labourers. These landless poor labourers began to migrate to various British colonies. Because at that time there was acute shortage of labour in the British colonies. During 1870s, more than half a million labourers – men,

women and children collected from various parts of India were exported to British colonies. In the 1830s and 1840s, the recruiting ground was mainly the tribal areas. Most of the emigrants were so called "hill coolies" who were recruited from Chotanagpur division, Shahabad, Bankura, Birbhum and Bardhman districts of Bengal Presidency.

The bulk of the rural population in our country has to depend on the agriculture for the main source of their Livelihood. Failure of rain and consequent failure of agriculture hits the main source of income of this large segment of population. In India droughts occur once in every five years in some parts of India viz., West Bengal, Madhya Pradesh, Kerala, Costal parts of Andhra Pradesh, some parts of Maharashtra state, like Marathwada, east and west parts of Maharashtra, inferior of south Karnataka, Bihar, Orissa, Rajasthan and other parts of India.5 The drought of 2012 in Maharashtra is the latest example which affected a large number

of cultivators, small and marginal farmers, agricultural labourers, landless labourers in rural areas. Thousands of people from these extents were enforced to migrate towards city in search of work. Besides drought there are some other factors also which play a major role in the seasonal migration of this class. It is a fact that India does not have short of land quantitatively but qualitatively, that is to say, arable lands are not fertile and productive which ultimately leads to the result that, people move from these poor soil areas to the urban and agro-based industrial areas.

The other factor is that the majority of the agricultural labourers, small and marginal farmers do not get enough work during the off season, consequently, they migrate from insufficient food and limited sources of geographical areas to job opportunities areas.6, other various causes of migration of labour are agricultural poverty, the decline of village and cottage industries, poverty of the people, drought disturbed villages in which absconder of work for about six months per annum, and the existence of a large size of small cultivators whose holdings are extremely inadequate and landless labour in economically weaker sections of the community and lower caste people.7 So, there are two important reasons for rural labour migration: (i) migration for survival (ii) migration for subsistence. The primary reason indicates the severe social and economic hardships faced by rural labourers, a situation where migration becomes necessary to stay alive. These communities are generally landless, illiterate and drawn largely from Scheduled Castes, Scheduled Tribes and other depressed castes. The secondary reason for migration is also rooted in continuation and arises because of the need to extra revenue in order to fill the gaps of periodic employment. Such communities often migrate for shorter periods and don't ordinarily travel very far from their homes. Now, system of migration has become regularized and various types of contractual systems have emerged.

Migrant labourers have not only become an integral part of India's economy, but also important constituents of society. For the migrant workers many terms are used keeping in view the duration of their stay and their wish to move.

The labourers can be termed as 'migratory labourers' most suitably to the permanent workers. The circular migrants are known as 'turnover migrants' or 'pendular migrants' or 'largest migrants' or 'short term' migrants. Under such migration process, a move is made for a short period with the intention of returning to the place of usual residence.8 Potential migrants could be identified as those wishing to move, if the circumstances allowed or the opportunities arose. Active migrants are those who act as pioneer movers, and whose location behaviour is not coordinated with other migrants. A passive migrant is one who in selecting a destination is dependent on earlier migrants.

9 Migrant labour can broadly be divided into two categories, i.e., rural farm labour and industrial labour. Punjab and Haryana are the pioneer states in the field of agriculture after the ushering in of the Green revolution since the mid-sixties. There is not only an influx of a large number of seasonal migrant workers in agriculture but it is widespread in other fields also, such as brick kiln, stone quarries, the construction industry and household industries (other than organized ones).

The main driving force behind migration is a better standard of living away from home. In the recent decades migration has been taking place amidst increasing global economic, political and social integration which has been accompanied by greater speed and ease of transportation. Migration carries human capital to regions of destination, entails investment in the employment of migrants, permits acquisition of new skills and accentuates economic cycle.

Contemporary migration often involves short-term, temporary sojourns in the host region. The direction of people's movement has always been guided by the specific needs of the time. In the pre-transitional stage of development, migratory movements assume a definite and regular path and migration of people takes place from rural to rural area. As the country enters early transitional stage of development, the movement of people is directed from rural to urban areas. The urban ward migration is in response to the creation of new employment opportunities in secondary and service sectors which tend to be spatially located in cities and towns and it is also fueled by improvements in agriculture.12 In the later transitional stage of development, the rapid growth of industrialization, transport and communication and other economic and social overheads in urban areas encourage people to migrate in large number from smaller towns to big and specialized metropolitan cities in search of better employment opportunities. In super advanced stage of development, the migration is mostly from urban to rural areas. The reverse migration is also due to congestion of industries and pollution in urban areas which induces industrialists to set their projects in sub-urban areas where the initial costs of setting new industries is tremendously low. The rising cost of living in mega cities also forces people to undertake reverse migration.

Objectives Of The Study

To understand and study:

a) Categorization of Indian Migrant Labours
b) Causes of Migration
c) Conditions and Magnitude of Migration

Categorisation of Indian Migrant Labours

The total population of India according to GOI, 2011 is 1.21 billion. India's participation in human migration of all types is acknowledgeable. According to GOI 2001, the total population of the country involved is approximately 1.02 billion. Following are the details of migration on different basis.

A) Migrants by Place of Birth and Sex

As shown in Table 1.1 the total population number of migrants born in India, about 307 million (29.9 per cent)) were the migrants born outside the village / town of their enumeration. Of this population 216.7 million were females outnumbering their male counterparts (90.4 million), mostly due to change of their residence due to marriage. The number of those who had migrated from within the district and the state was to the place of enumeration 181.7 million and 76.8 million respectively; and 42.3 million migrants migrated from other states or union territories, while approximately 6.1 million migrated from abroad.

Table 1.1 In-Migration by Place of Birth and Sex

Category	Persons	Males	Females
(a) Total Population	1,028,610,328	532,156,772	496,453,556
(b) Born in India	1,022,442,977	528,981,861	493,461,116
(c) Born in the place of enumeration	721,460,171	441,746,082	279,714,089
(d) Total migrants (a-c)	307,149,736	90,410,496	216,739,240
(e) Born within the state of Enumeration	980,101,274	509,306,087	470,795,187
(i) Born elsewhere in the district of Enumeration	181,799,637	42,781,678	139,017,959
(ii) Born in other districts of the State	76,841,466	24,778,327	52,063,139
(f) Born in other States in India beyond the state of enumeration	42,341,703	19,675,774	22,665,929
(g) Born abroad	6,166,930	3,174,717	2,992,213
(h) Unclassified	421	194	227

Source: Census of India 2001

B) Migrants by Place of Birth

The Table 1.2 below presents the ten most common states to which the individuals migrated and also, those which reported in-migrants (more than one million in number) by place of birth, from outside the state and from other countries. Maharashtra recorded the highest number of in-migrants with 7.9 million in-migrant populations, followed by Delhi and West Bengal with 5.6 million and 5.5 million populations respectively. The percentage of in-migrants to the total population in these three states was 8.2, 40.8 and 7.0 respectively. The total number of in-migrants in Punjab was approximately 2.1 million which was 8.7 per cent of the total population.

Table 1.2 Total Inter-state Migrants by Place of Birth in Major States

States	Total Population	Total In-migrants (Inter-state & from Abroad)	Percentage of In-migrants to Total Population	Share of Total Migrants
INDIA	1,028,610,328	48,508,633	4.7	100.0
Maharashtra	96,878,627	7,954,038	8.2	16.4
Delhi	13,850,507	5,646,277	40.8	11.6
West Bengal	80,176,197	5,582,325	7.0	11.5
Uttar Pradesh	166,197,921	2,972,111	1.8	6.1
Haryana	21,144,564	2,951,752	14.0	6.1
Gujarat	50,671,017	2,602,631	5.1	5.4
Madhya Pradesh	60,348,023	2,305,999	3.8	4.8
Karnataka	52,850,562	2,152,096	4.1	4.4
Punjab	24,358,999	2,130,662	8.7	4.4
Rajasthan	56,507,188	1,845,782	3.3	3.8
Jharkhand	26,945,829	1,798,037	6.7	3.7
Bihar	82,998,509	1,794,219	2.2	
Andhra Pradesh	76,210,007	1,052,165	1.4	2.2
Chhattisgarh	20,833,803	1,020,337	4.9	2.1
Rest	198,638,575	6,700,202	3.4	13.8

Source: Census of India 2001

C) Duration of Residence by Last Place of Residence

The Table 1.3 below helps in understanding the pattern of migration. The data on migration by last residence in India as per 2001 Census, shows that the total number of migrants were 314 million which is more than the number of total migrants by place of birth which was 307 million which thus, explains that the migrants migrated for various reasons but then returned to the place of birth at the time of enumeration and were regarded as migrants by place of last residence. Of the total 314 million migrants by last residence, 268 million migrants (85.00 per cent) migrated within the state and the number of those who migrated from outside the state was 41.1 million (13.5 per cent).

Causes of Migration

The main causes of migration are divided into five groups i.e. economic, social, psychological, political and natural causes. An attempt has been made to bring out the important push and pull factors of migration of the migrant respondents. It was found that poverty, low employment at native place and more employment and higher wages in Punjab and Maharastra, Delhi etc. were the prime factors for their migration. Other equally important economic causes of migration were indebtedness, smaller land holdings and low incomes in village. So, to escape from economic hardships in their native villager, the respondents migrated to the urban areas in many states.

Economic Causes

The causes, which are related to the money, wealth etc. are considered in the category of economic causes. Actually money is the basic necessity of every human being. The economy differs from person to person as well as country-to-country and place-to-place. The people migrate from one place to another place to earn money.

There are various reasons for migration of labours as follows:-

a) Poverty
b) Indebtedness
c) Lower wages
d) Small land holdings
e) Meager employment opportunities
f) Low income in village

Social Causes

The man is social creature. He cannot survive without society. He is always in the thinking of making his status high in the society. So, he leaves his native place and migrates to a society of better quality of life. The reasons, which are responsible for the migration of the labours, are as give below:

a) Relatives settled in various states
b) Friends settled in various states
c) Urge to earn more respect in family
d) For better quality of life
e) For better housing facilities
f) Freedom to enjoy life Psychological Causes

There are some Psychological reasons too which are concerned with mentality of human beings. Though the labours are hard working by nature yet some of them fail to fulfill their daily needs such as food, clothing etc. As a result they became poor to very poor. They have developed a mentality that this place is not better for them. They considered this place is ill-omen. Consequently they leave their birth place and settled another place. Apart from this other psychological reasons are as followsa) Fed up with poor life b) Feeling of being away from family c) Feeling of being away from friends d) Attraction to see new place Political Causes The political party frames the government. The government is responsible to provide better facilities to the labours.

Sometimes it happens, the political parties creates hindrance at particular place for his own interest. As a result the people belongs to lower categories of society are compel to migrate from that place.

So there are additional reasons for migration on due to political causes are as follows:

a) Political instability
b) Low governmental facilities

Natural Causes

Nature is the creature of all the things. The nature has bad effect in the form of hail, storm, land sliding, earthquake and so on. When the natural disaster takes place again and again at a particular place/area, the people of that place are compel to migrate from that place and setelled at a distant place. Actually, they fed up with these natural calamities and finally takes decision to leave the place.

There are so many reasons of migration by nature some of them are being mentioned below:

a) Earthquake
b) Floods
c) Drought
d) Crop failure

Magnitude of Migration

Migration in India is mostly small distance with around 60% of immigrants changing their dwellings inside their district of birth and 20% inside their State (province), while the rest interchange across the state borders. The total numbers of immigrants as per the survey of 1971 are 167 million persons, as per the 1981 census; 213 million were reported, as per 1991 census 232 million and by the year 2001,it reached to 315 million. As per the count of the year 1991, nearly 20 million people migrated to other states

looking for employment. Within a period of 10 years, the number of national migrants doubled to 41,166,265 persons as per the count (census) of 2001. It is likely that there are at current around 80 million wanderers of which, 40 million are in the structure and building industry, 20 million are household workers, 2 million are sex workers, 5 million are call girls and somewhere from half a million to 12 million work in illegal mines otherwise called "small scale mines". It is projected that at present around five and a half million Indians are working in the oil exporting nations of the Middle East and another 2 million are working in the advanced world. 92% of the household workers are women, girls and children and 20% of these females are under 14 years of age, as per a study conducted by the organization "Social Alert". There is a noticeable phenomenon in this migration, that is, the fantastic increase of female workers migrating either alone or in groups to find employment. They are moving very long distances even for short-term employment, in the nonappearance of any prospect or potential of employment, still they are migrating. This is a disturbing trend, as in the event of not getting employment; they end up as victims of sexual abuse. Even if they get work, they have to do job under weird conditions.

Conditions of Migrant Labour

In terms of employment, construction is the largest employment sector in India after agriculture. Most of the employees in construction are migrants. The operational hours are from sunrise to sunset. The working day for females often sweeps from 14 to 16 hours, combining housework and job on site where women are paid Rs. 60-70 a day while men are paid Rs.100-175. Masons earn up to Rs.175-250 a day. Work places are unsafe. Workers have no communal security, reimbursement for injuries, approach to drinking water and health care. India has the world's maximum accident rate among construction workers. A recent study by the International Labour Organization shows that 165 out of every 1,000 workers are injured on the job.

There are 20 million domestic labors mostly refugees from rural India. Regular streams of new migrants leave behind scorched fields and emaciated families in the tribal belts of Bihar, Orissa, Chattisgarh, Jharkhand, Assam, Mizoram. And Telangana, they move to Mumbai and Delhi and other Metros. They are anxious to join the crowd of household laborers. They are willing to work for much less than those who are already working. They are victims of constant verbal and sexual abuse and work without any grievance mechanisms. Their situation is made worse by local governments' brutal eviction drives – dislocating and destabilizing the lives of the very people without whom the cities would come to a crippling halt. Further, they have to live in makeshift tents with plastic covers. They are enforced to wash and excrete out in the open. As they are migrant workers, they do not possess Public Distribution System (PDS) Cards and hence are forced to buy food grains and kerosene at higher than market prices. The ruling elite, which considers child labour a menace little, realizes that it is a natural consequence of migrations.

Gender Discrimination

Females form beyond half of the regional migrant workforce. As stated above, 92% of the 20 million domestic workers are women and children and 20% of these females are under 14 years of age. Women constitute more than one third in the construction industry. Yet the division of labour is gendered. Masonry is a maledominated skill as are carpentry and other skilled jobs. Women carry head-loads of brick, sand, stone, cement and water to the masons. Their earnings are very less than those salaried to men. In the mining area, females do unskillful jobs above ground. They fail to get their wages and also lose employment for taking leaves. They are subjected to sexual harassment. By conservative estimates only 15% of the cases of sexual assault are reported. Women are not provided with any extra facilities to take care of their children while they are working. Notwithstanding, women migration is the highest in the period from 1991 to 2000 due to the agrarian crisis. 73% of these seasonal women workforce are from rural areas.

Legal Provisions

The Government of India made an enactment in 1979 of the"Inter-state Migrant Workmen (Regulation of Employment and Conditions of Service) Act 1979". Though the act covers only interstate migrants, it

lays down that contractors must pay timely wages equal or higher than the minimum wage, provide suitable residential accommodation, prescribed medical amenities, protecting wardrobe, inform coincidences and causalities to specified authorities and kin. The Act delivers for the right to raise industrial disputes in the regional prerogative where they do their job or in their home province. The act sets penalties including imprisonment for non-compliance. At the similar time the act delivers a getaway route to main employers if they can show that crimes were committed without their information. Pointless to say, the Act endures only on paper and not in truth. The proof of trials or dispute settlement is almost nil. The migrant laborers face additional problems and constraints, as they are both labourers and migrants. Hence, there is no improvement

in the working and living conditions for migrant workers. There are no arrangements to effectively talk the basic issues regarding migrant labour relations, leave aside, tackling the whole range of labour relations. The reasons are obvious. The Indian Judiciary occasionally comes to the rescue of migrant labour and makes pronouncements and observations to fill the gap in the justice delivery system. It seems regulatory mechanisms are over stretched, inadequately structured, manpower deficient and resource crunched. One noteworthy enactment to address seasonal migration is the National Rural Employment Guarantee Act (NREGA), which guarantees 100 days of employment in a year. The rate of daily wages is, as per the minimum wage applicable to that territory. It is executed successfully only in a very few places which is a microscopic response. In most cases the funds are directed to conferred interests.

Research Methodology

The idea about this paper was generated on the basis of exploratory research carried using the secondary data. Extensive literature review was done in order to understand the concept of migrant labours, migration, its causes and factors. Several papers were reviewed to get an idea regarding this phenomenon popular mostly in developing countries.

Findings

The study reveals the following points:

- Migration can be categorised by place of birth,gender and their duration of residence.
- The main causes of migration are economic, social, psychological, political and natural causes.
- Migration in India is predominantly short distance with around 60% of migrants changing their residences within their district of birth and 20% within their State (province), while the rest move across the state boundaries.
- In terms of employment, construction is the largest employment sector in India after agriculture. Most of the employees in construction are migrants or migrant labours.
- Women form more than half of the interstate migrant workforce with respect to construction industry

Conclusion

Individuals migrate for different reasons but the goals are not equally attainable by all. People who are more competitive, more educated and possess better skills tend to achieve their goals and improve their economic conditions. People who migrate from rural areas do better economically than their non-migrant counterparts and thus, migrants migrate to economically well-off areas (Long and Heltman, 1995). Migration provides a base for development as it leads to expansion of ideas and information, cultural diffusion and social integration (Yadav et al., 1996). Rural-urban migration helps in making available cheap labour for industries and changes occupational structure for household in villages (Singh and Yadav, 1991). Migration benefits an individual through various ways like: brain gains, equalization of factor endowments of different economies, life long earning differential, professional advancement, rise in occupational status and aversion of immediate unemployment or underemployment. Migration is a result of uneven distribution of opportunities. People migrate from areas with less opportunities and safety to areas with more opportunities and safety. Migration of individuals has both pros and cons for both the areas, before and after migration.

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Metacognition, Self-efficacy and Self-esteem: As Correlates of Achievement Motivation among Secondary School Students

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Abstract

The present research was done to look at self-efficacy among secondary school students. The study included 576 students in the 9th class from both rural and urban schools in Siwan District, Bihar. The Self-Efficacy scale developed by Dr. Arun Kumar Singh and Dr. Shruti Narain was used for this study. The data was analyzed using statistical methods like the t-test and Karl Pearson's Product Moment Correlation (r). The results showed that there is no big difference in self-efficacy between male and female students. However, self-efficacy has a strong influence on how well students do academically. A positive link was found between self-efficacy and academic performance.

Keywords: Self-Efficacy, Academic achievement, Secondary school students.

Introduction

One of the key findings of 20th century psychology was the concept of the "Self." The "Self" is like the main program of a person's life. It is the collection of beliefs we have about ourselves and the world. It is a set of beliefs that help predict our actions and performance in different areas of life. The "Self" is the inner world of a person. It includes thoughts, feelings, goals, hopes, fears, and dreams. So, the "Self" is a natural drive that motivates people to develop their abilities and potential from both biological and psychological points of view.

Role of Self-efficacy

The modern concept of education should be the qualitative improvement in mind, body and spirit. According to Bandura, (1997) the qualities of an individual with strong sense of Self-efficacy are:

- They view challenging problems as the tasks they have to achieve
- They develop curiosity to go deep into the problem to find out solution
- They think in the innovative way
- They get motivation to find out the new dimensions to the problems
- They can easily recover from the setbacks

Self-efficacy acts as a natural motivator that helps people face challenges. Students who are more gifted and have high levels of intrinsic motivation tend to perform better in their studies. Therefore, it is suggested that both teachers and parents are responsible for encouraging students to take charge of their own academic success.

Review of Related Literature

Taylor (2014) looked at gifted students at Springfield Middle School in Williamsport, Maryland. These students had higher levels of self-efficacy compared to the average. For the study, 570 students

were selected. The conclusion was that self-efficacy did not have a significant effect on the students' academic performance.

Ubhe and Bombra (2017) studied the connection between self-efficacy and academic achievement in middle and high school students. The sample size was 125, with 65 students from middle school. Out of these, 44 were boys and 21 were girls. A positive relationship was found between self-efficacy and achievement motivation among the students in the study.

Objectives of the Study

1. To find out the level of self-efficacy of secondary school students in relation to their locality.
2. To find out the impact of self-efficacy on academic achievement of secondary school students in relation to their locality.
3. To find out the relationship between self-efficacy and academic achievement of secondary school students.

Hypotheses Of The Study

1. There is no significant difference on Self-efficacy of Rural and Urban Secondary school students.
2. There is no significant impact of Self-efficacy on Academic achievement of Secondary school students according to the Locality.
3. There is no significant relationship between self-efficacy and academic achievement of secondary school students.

Delimitations Of The Study

1. The study is confined to Siwan district only.
2. The study was restricted to 9^{th} class students only.
3. The study is limited to the variable Location only.

Sample

A sample is a small proportion of a population selected for observation and analysis. This makes it possible to draw generalizations by studying a small portion of the population. For the present study the researcher took a stratified random sample of 576 secondary school students.

Equipment used

The Self-Efficacy Scale developed by Dr. Arun Kumar Singh and Dr. Shruti Narayan was used. This scale was designed for individuals aged 12 years and older. The scale consists of 20 items. It is a five-point scale with responses "strongly agree, agree, neutral, disagree, and strongly disagree." The weight of each article is 5, 4, 3, 2 and 1 respectively. And for negative items the scores are reversed. The reliability of the instrument was established using the test retest reliability method and the value was 0.82.

Statistical Techniques Used

Mean, standard deviation, t-test and Karl Pearson's product moment correlation were used to study the self-efficacy of secondary school students.

Data Analysis and Discussion

Hypothesis -1: There is no significant difference on Self-efficacy of Rural and Urban Secondary school students.

Table-1: Significance of difference between Mean Scores on Self-efficacy of Secondary school students according to the Locality (N=576)

Locality	*N*	*Mean*	*S.D*	*"t" Value*
Rural	288	76.668	7.231	1.831 @
Urban	288	77.770	7.225	

Note: @ Not Significant at 0.05 level

The average score of rural and urban students was 76.668 and 77.770 respectively, while S.D. The scores were 7.231 and 7.225 respectively. A slight difference (1.102) was observed between the mean scores on self-efficacy of rural and urban students. This suggests that urban samples had slightly higher self-perceptions of their abilities. "t" value 1.831 was insignificant at 0.05 level of significance. This shows that there was no significant difference between rural and urban students. Therefore, the null hypothesis "There is no significant difference on self-efficacy of rural and urban secondary school students" was conditionally accepted.

Hypothesis-2: Self-efficacy has no significant effect on the academic achievement of secondary school students according to locality.

Table-2: Significance of difference between Mean Academic achievement Scores with Low and High levels of Self-efficacy according to the Locality (N=576)

S. No	*Locality*	*Self-efficacy*	*N*	*Mean*	*S. D*	*"t" Value*
1.	Rural	Low	110	302.813	43.459	11.385 **
		High	70	370.409	35.634	
2.	urban	Low	102	318.490	41.907	8.834 **
		High	82	370.036	37.145	

Note: **Significant at 0.01 level

The average scores for rural students with low and high levels of self-efficacy were 302.813 and 370.409, with standard deviation values of 43.459 and 35.634. The difference between the scores of low and high self-efficacy groups was 67.596. This shows that students with high self-efficacy achieved higher scores.

The 't' value (11.385) was significant at both levels, indicating significant difference in academic performance between low and high self-efficacy groups in rural students. The mean academic scores for urban students with low and high self-efficacy levels were 318.490 and 370.036, standard deviation values were 41.907 and 37.145. The difference between the low and high self-efficacy groups was 51.546.

The 't' value (8.834) was significant at both levels, meaning that there was a significant difference in academic achievement between low and high self-efficacy groups in urban students. The average marks of rural and urban students were compared. In the low self-efficacy group, rural students scored 302.813 points and urban students scored 318.490 points. In the high self-efficacy group, rural students scored 370.409 points and urban students scored 370.036 points. This shows that urban students scored higher in the low self-efficacy group, while rural students scored higher in the high self-efficacy group. This shows a significant gap in achievement between rural and urban students. Therefore, the null hypothesis, "There is no significant effect of self-efficacy on the achievement of secondary school students according to locality," was rejected.

Hypothesis-3: There is no significant relationship between self-efficacy and academic achievement of secondary school students.

Table-3: The Coefficient of Correlation between the Self-Efficacy and the Academic Achievement of the Secondary School Students

Variable	*N*	*Correlation*	*Significance level*
Self-Efficacy	576	0.477	0.05
Academic achievement		576	

From Table 3, it is clear that there is a correlation of 0.477 between self-efficacy and Academic achievement of secondary school students, and this correlation is significant at the 0.05 level.

This shows that the two factors are closely related for this group. Therefore, the null hypothesis is rejected. There is a significant positive correlation between self-efficacy and academic achievement of the students.

Findings Of The Study

1. There is no significant difference in self-efficacy between rural and urban secondary School students.
2. Self-efficacy has a significant impact on the academic Achievement of secondary School students, depending on their locality.
3. There is a significant positive correlation between self-efficacy and Academic achievement of the students.

Conclusion

In the last century, the importance of the concept of self-education was also highlighted by the currents of thought of the "new pedagogies" and the "new schools", which called for forms of self-government life and in school career. The sense of collective self-efficacy of teaching contributes, for example, to promoting a climate of collaboration, the reconciliation of conflicting interests, the development of a shared sense of commitment, in order to improve, through evaluation, the quality of the education system as a whole.

In general, findings showed that the student's ability to monitor one's own learning process

lead him/her to increase his/her sensitivity to the feedback that the educational context offers him/her, but, above all, helps to develop the curiosity and interest of the student about the object of study. Interpretation of the data also showed that the quality of the student's own study will help to make him/her more active and responsible, as well as to promote the development of some higher skills such as the selection of the correct strategies to take an exam and the identification of relevant information within a text. Commitment and concentration help the student to manage time more efficiently, with a selection of the effective strategies tailored to the objective of the study. The ability to self-assess the level of preparation helps the student to connect the previously acquired knowledge to the new by integrating it into a uniform and consistent set thus increasing the sense of self-efficacy.

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Adjustment Patterns of Adolescent Students to Academic Stress

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Abstract

Adolescence is a critical phase in life and is the period of growth and development, the presence of stress is a matter of concern. In the present study an attempt has been made to understand the adjustment patterns of adolescent students in relation to academic stress. A total number of 200 adolescents (100 boys and 100 girls) studying in private as well as government schools of Siwan district were selected randomly.

Bisht battery of stress Scale (2005) and Adjustment Inventory for school students were administered to assess the stress and adjustment of adolescents respectively. The results revealed that i) Adolescent girls have better adjustment as compared to adolescent boys. ii) Adolescents of government schools have better adjustment as compared to adolescents of private schools. iii) Adolescent boys have more academic stress as compared to adolescent girls. iv) Adolescents of private schools have more academic stress as compared to adolescents of government schools. v) Adjustment is significantly and negatively correlated with academic stress.

Key Words: Adjustment, Academic Stress and Adolescents

Introduction

In the adolescence period patterns and characteristics of childhood i.e. Physical, intellectual, and emotional gradually get replaced with adult ones and both girls and boys head towards relatively independent socio-economic state. Adolescents in the early stage begin to explore decision-making opportunities, while in the middle stage; they begin to develop a sense of identity, established more fully in late adolescence. Adolescents experience a number of physiological and psychological changes in this transitional period. An adolescent usually is a person of strong impulses. At this stage, adolescents have to start their vocational planning and for them achieving a good score is really necessary. Due to which an unwanted stress arise in their minds. Out of number of stresses faced by adolescents and young adults, academic stress emerges as significant mental health problem in recent years. Often students at secondary level undergo considerable level of academic stress that affects their academic performance, psychosocial adjustment along with their overall well-being. Students aged between12-18 years account for more than one fifth of the world's population i.e., almost 230 millions.

In India this age group forms 23 per cent of the total population. Moreover, it is necessary to invest in adolescents as the future leaders and guardians of the Nation's development. In various studies, the term "academic stress" has been used interchangeably with "academic pressure", "educational stress" and "educational pressure" and is viewed as a negative psychological mood related to academic activities such as tests, exams, schoolwork, homework, grades and future education. Lee and Larson (2000) conceptualized academic stress as a disturbance induced by a student's appraisal of academic stressors, is common in children and often leads to psychological and somatic distress.

Academic problems have been reported to be the most common source of stress for students. Stress associated with academic activities has been linked to various negative outcomes, such as poor health, depression, and poor academic performance. Academic stress is mental pressure installed onto the student's brain due to overload of excess and unnecessary load of school work and high parental expectations (Urban Dictionary: Academic Stress, 2017).

Good (1959) defines "Adjustment as the process of finding and adopting modes of behavior suitable to the environment or the changes in the environment".

Adjustment it means change or to make to compensation for something. Adjustment is the never ending process in which any individual try to alter his/her behavior to establish some harmony amongst himself/ herself with his/her surroudings. It's not only a sort of apprehensive feeling that maximum adolescents undergo while in their teens. Young one learns something the bad from his/her parents, surrounding environment and studies. Among these stresses, academic stress is emerged with most of frequently cited stressor from adolescence. Scholastic stressors might be excess homework, assignments, projects and trying to keep up or beat other kids at something. Examination related stresses are reported as one of the principal source of academic stress among class IV and above followed by overwork of class room assignments. The problem arises when the adolescents are unable to cope with these stressful situations and end-up themselves in the distressed state of mind. In this kind of situation they are not even able to adjust themselves. Therefore investigator felt the need to conduct this study.

Objectives

1) To study the difference in adjustment patterns of adolescents with respect to gender.
2) To study the difference in adjustment patterns of adolescents with respect to type of schools.
3) To study the difference in academic stress of adolescents with respect to gender.
4) To study the difference in academic stress of adolescents with respect to type of schools.
5) To study the relationship between adjustment and academic stress of adolescents.

Hypotheses

In order to achieve the forecasting objectives the following hypotheses were framed:

1. There will be no significant difference in adjustment patterns of adolescents with respect to gender. 2. There will be no significant difference in adjustment patterns of adolescents with respect to type of schools.
3. There will be no significant difference in academic stress of adolescents with respect to gender.
4. There will be no significant difference in academic stress of adolescents with respect to type of schools.
5. There will be no significant relationship between adjustment and academic stress of adolescents.

METHOD AND PROCEDURE

Sample

The stratified random sampling technique was used to select 200 students studying in IX and X class (both male and female adolescents) from private as well as government schools of Siwan district.

Type of Research

The study falls under the domain of descriptive research as it intends to study the adjustment patterns of adolescent in relation to student's academic stress.

Tools Used

Following tools were used: Adjustment Inventory for school students by Singh and Sinha (2007) Bisht battery of stress Scale (2005)

Analysis and Interpretation

Hypothesis No. 1: First hypothesis was framed to examine the significant difference between adjustment patterns of adolescents with respect to gender. To test the hypothesis, t- test was applied to determine the significant difference between adjustment patterns of adolescent with respect to gender. The result of this analysis has been reported in table 1.

Table 1: t- ratio of adolescent boys and girls on adjustment scores

Gender	Number	Mean	S.D.	SE_D	t-value
Boys	100	18.51	7.58	1.094	2.84**
Girls	100	15.41	7.87		

**Significant at 0.01 level, df 198

The table 1 reveals that calculated t- value 2.84 was found to be more than tabulated (2.58) at 0.01 level of significance. So, it suggests that there is significant difference between adjustment of adolescent boys and girls. An examination of the means of two groups suggests that adolescent girls have better adjustment as compared to adolescent boys because the scoring of the scale is opposite i.e. less score means more adjusted and vice versa. The null hypothesis stating that there exists no significant difference in adjustment patterns of adolescent with respect to gender was therefore rejected at the specified level.

The result is consistent with the study conducted by Rao, (2009). The results of the study revealed that there exists significant difference on adjustment scores of adolescents in relation to their gender. The result shows that girls are better adjusted as compared to adolescent boys.

Hypothesis No. 2: Second hypothesis was framed to examine the significant difference between adjustment patterns of adolescents with respect to type of schools. To test the hypothesis, t- test was applied to determine the significant difference between adjustment patterns of adolescents with respect to type of schools i.e. government and private. The result of this analysis has been reported in table 2

Table 2: t- ratio of adolescents of government and private schools on adjustment scores

Type of school	Number	Mean	S.D.	SE_D	t-value
Government	100	15.51	7.979	1.096	2.65**
Private	100	18.41	7.518		

**Significant at 0.01 level, df 198

The table 2 reveals that calculated t- value 2.65 was found to be more than tabulated (2.58) at 0.01 level of significance. So, it suggests that there is significant difference between adjustment of adolescents of Government and private schools. As the scoring of the adjustment is in reverse pattern i.e. less score more adjusted and vice versa so examination of the means of two groups suggest that adolescents of government schools have better adjustment as compared to adolescents of private schools. The null hypothesis stating that there exists no significant difference in adjustment patterns of adolescent with respect to type of schools was therefore rejected at the specified level. The result is consistent with the study conducted by Hussain (2008) which revealed that Government school students were significantly better in terms of their level of adjustment as compared to adolescents of private schools.

Hypothesis no. 3: Third hypothesis was framed to examine the significant difference in academic stress of adolescents with respect to gender .To test the hypothesis, t- test was applied to determine the significant difference between academic stresses of adolescents with respect to gender. The result of this analysis has been reported in table 3.

Table 3: t- ratio of adolescents of boys and girls on academic stress scores

Gender	Number	Mean	S.D.	SE_D	t-value
Boys	100	17.79	6.506	.879	5.33**
Girls	100	13.10	5.918		

**Significant at 0.01 level, df 198

The table 3 reveals that calculated t- value 5.33 was found to be more than tabulated (2.58) at 0.01 level of significance. So, it suggests that there is significant difference between academic stress of boys and girls. An examination of the means of two groups suggests that adolescent boys have more academic stress as compared to adolescent girls. The null hypothesis stating that there exists no significant difference in academic stress of adolescents with respect to gender was therefore rejected at the specified level.

The above result is consistent with the result of the studies conducted by Busari (2012) and Calaguas (2011) that there is significant difference between adjustment and academic stress of adolescents in relation to gender. The result revealed that boys have more academic stress than girls, is consistent with previous study conducted by Rao (2009).

Hypothesis No. 4: Fourth hypothesis was framed to examine the significant difference between academic stresses of adolescents with respect to type of schools. To test the hypothesis, t- test was applied to determine the significant difference between academic stresses of adolescents with respect to type of schools i.e. government and private. The result of this analysis has been reported in table 4

Table 4: t- ratio of adolescents of government and private schools on academic stress scores

Type of schools	Number	Mean	S.D.	SE_D	t-value
Government	100	13.87	6.548	.913	3.45**
Private	100	17.02	6.369		

**Significant at 0.01 level, df 198

The table 4 reveals that calculated t- value 3.45 was found to be more than tabulated (2.58) at 0.01 level of significance. So, it suggests that there is significant difference between academic stress of adolescents of government and private schools. An examination of the means of two groups suggests that adolescents of private schools have more academic stress as compared to adolescents of government schools. The null hypothesis stating that there exists no significant difference in academic stress of adolescent with respect to type of schools was therefore rejected at the specified level. The above results are consistent with the previous study conducted by Hussain (2008) that private schools have more academic stress than government school.

Hypothesis No. 5: Fifth hypothesis was framed to examine the significant relationship between adjustment and academic stress of adolescents. To test the hypothesis, product moment correlation was applied to determine the significant relationship between adjustment and academic stress of adolescents. The result of this analysis has been reported in table 5.

Table 5: Co-efficient of correlation between adjustment and academic stress of adolescents

Variables	N	df	r
Adjustment scores	200	198	.019
Academic stress scores	200		

** Significant at 0.05

From the calculations, we concluded that co-efficient of correlation (r) = .0.19** . The table no. 5 indicates that adjustment is significantly correlated with academic stress (r = .19 significant at 0.05 level). Thus the null hypothesis stating that there exists no significant relationship between adjustment and academic stress of adolescents was therefore rejected. Here positive sign in the value of r actually indicates a negative correlation because the scoring of the adjustment test is in reverse pattern. The above result is consistent with the previous study conducted by Hussain (2008), that academic stress and adjustment are significantly correlated.

Findings Of The Study

1) Adolescent girls have better adjustment as compared to adolescent boys.
2) Adolescents of government schools have better adjustment as compared to adolescents of private schools.
3) Adolescent boys have more academic stress as compared to adolescent girls.
4) Adolescents of private schools have more academic stress as compared to adolescents of government schools.
5) Adjustment is significantly and negatively correlated with academic stress.

Conclusion

Thus, it may be concluded that private school students by and large suffer from higher level of academic stress than their Government school counterparts. Not only that their level of adjustment was also much poor than the Government school students. On the basis of results it can be said that academic

stress adversely affects overall adjustment of students. By understanding the stressors and its impact efficient management strategies should be developed. Techniques like yoga, life-skills training, mindfulness meditation, and psychotherapy should be utilized to reduce academic stress among students. The boys perceived more academic stress as compared to their female counterparts; therefore teachers and parents should provide an open and friendly environment as well as proper guidance and counseling sessions for students so that they feel comfortable to share their academic related issues frankly. The parents should help their wards and also provide them guidance to adjust properly in this world. The parents should also give extra time to their wards so that there should be more communication and sharing of views and feelings between them.

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A Study of Psychological Well-being, Mental Health and Adjustment Among Married and Unmarried Men

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Abstract

Quality of life is defined as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and their goals, expectations, standards, and concerns. (W.H.O 1996)

This definition reflects the view that quality of life refers to a subjective evaluation that is embedded in a cultural, social, and environmental context. Because this definition of quality of life focuses upon respondents' "perceived" quality of life, it is not expected to provide a means of measuring any. This study aims to determine and compare the quality of life among married and unmarried individuals in Panjab University, Chandigarh. For this purposive sampling technique was used across the married and unmarried individuals of Panjab University after obtaining permission from the respective department. The sample includes 388 randomly selected individuals for this purpose. A standardized WHO questionnaire (WHOQOL-BREF) for quality of life is used for data collection. After the data collection, the obtained results were compiled using the Microsoft excel and the data is presented in form of various graphs and tables.

Keywords: Quality of Life; Married; Unmarried; North India; WHOQOL-BREF

Introduction

Quality of life is defined as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and their goals, expectations, standards, and concerns (W.H.O.1996). This definition reflects the view that quality of life refers to a subjective evaluation which is embedded in a cultural, social and environmental context. Because this definition of quality of life focuses upon respondents' "perceived" quality of life, it is not expected to provide a means of measuring in any. Many a times the terms Quality of Life (QOL), subjective wellbeing, happiness, life satisfaction, good life is used synonymously, they do overlap conceptually. However QOL is multidimensional rather than unidirectional concept. It looks into many domains and facets that have an impact on lifestyle. An assessment of HRQOL is effectively an evaluation of QOL and its relationship with health. Quality of life as a measure of health is therefore a broad concept and is concerned with whether disease or impairment limits a person's ability to accomplish a normal role (for example, whether the inability to climb stairs limits a person at work).

Determinants for QOL

As medical and public health advances have led to cures and better treatments of existing diseases and delayed mortality, it was logical that those who measure health outcomes would begin to assess the population's health not only on the basis of saving lives, but also in terms of improving the quality of lives. Developing countries reported poorer environmental, psychological and physical QOL than developed countries, although social QOL was good, and no different for the two development bands. Only psychological QOL distinguished between every educational level, in developing countries. Increased positive feelings serve to link better mental health with more education. Across each domain, secondary and tertiary education was associated with better QOL in developing countries. Every community has different factors affecting QOL like in Japan interpersonal trust is significantly associated with QOL Jude et al. in a study in Kuwait found that age was negatively correlated with all the domains

QOL but Sabbah et al. reported that Older people have more satisfaction with some domains of life than younger people, except for physical functioning. And also the QOL of women is poorer than men.

Most of the studies found that females had poor QOL as compared to their male counterparts. Males had significantly higher scores for physical functioning, leisure activity, vitality and health perception than women. Females had low vitality and negative environmental domain perception, but were more satisfied with their family life than men and reported higher social domain scores males. Depression was the most important predictor of QOL. Men had significantly higher scores than women. And also some researcher claims that most important predictor of scores of all domains of QOL is education.

QOL increases significantly, consistently with increasing education level of population. QOL deteriorates significantly with an increase in age as the age advances, the health-related problems become more common to a person. Gradually the power to work decreases and people are more confined to his/her own house. QOL of elderly people is closely associated with different socio-demographic factors. The triple evils of ill-health, loneliness, and social disconnection deteriorate the QOL of elderly.

It is found that there is positive correlation between SES and all domains of QOL, with an increase in per capita monthly income the QOL score improve significantly, which was reported in Alexandre et al., study over the QOL elderly in Brazil by using Brazilian version of WHOQOL-BREF.

One study from India found that small families have more female literacy rates, high family planning adoption rates, less history of mortality in preceding year, better standard of living (good house, vehicle, TV, lack of debts) but were not happy regarding positive feeling towards life as compared to big families. Marriage being a significant event in one's life is bound to have an impact on QOL of an individual, more so for a woman. It is even more pronounced in the case of women in developing countries, such as India where traditional concept of family, household and socially determined gender roles are more intense.

Jaswal reported higher level of stress among the working women individuals. However, Richter et al. reported that working mothers had better physical and mental health, quality of life and social relationships than housewives.

A study was conducted in Korea by assessed QOL by tool EQ-5D, (assessment tool for QOL) analyzed values are higher in order married > marriage problems (separation/divorce/bereavement) > single for men and EQ-5D values for women were higher in the order married > single > marriage problems (separation/divorce/bereavement). However, a study also reported that being married and not living in a joint family is associated with poor psychological health than their counterparts. The better quality of life among married individuals is due to better physical and psychological support as well as social security; however poor quality of life in unmarried individual is due to poor physical health and psychological conditions like, depression, stress, social insecurities, familial & peer pressure.

Review of Literature

Quality of Life (QOL) is an overarching term for the quality of the various domains in life. It is a standard level that consists of the expectations of an individual or society for a good life. These expectations are guided by the values, goals and socio-cultural context in which an individual life. It is a subjective, multidimensional concept that defines a standard level for emotional, physical, material and social well-being such as freedom from pain, freedom from worry and freedom from sickness. It serves as a reference against which an individual or society can measure the different domains of one's own life.

The extent, to which one's own life coincides with this desired standard level, put differently, the degree to which these domains give satisfaction and as such contribute to one's subjective well-being, is called life satisfaction. Academic interest in quality of life grew after World War II, when there was increasing awareness and recognition of social inequalities. This provided the impetus for social indicators research and subsequently for research on subjective well-being and quality of life.

A study was conducted by Rajeshwari Bangalore Sathyananda, Usha Manjunath on assessment of quality of life among the health workers of primary health centers managed by a nongovernment organization in Karnataka, India, showed the domain- specific results and gender differences showed

that women were more satisfied with physical health domain and men more satisfied with psychological health domain. The least satisfaction was seen in their opportunity for leisure activities and the highest satisfaction was with their ability to perform daily living activities.

A study was conducted by Venu R Shah on "Quality of life among elderly population residing in urban field practice area of a tertiary care institute of Ahmedabad city, Gujarat. The QOL as per four different domains was significantly better among males as compared to females. Physical, environmental, and psychological domains were better in those who were educated and married individuals living with their spouse.

Aims and Objective

To determine and compare quality of life among married and unmarried individuals in Panjab University, Chandigarh.

Objectives:

1. To ascertain the determinants of quality of life of married and unmarried individuals in Panjab University.
2. To compare quality of life of married and unmarried individuals in Panjab University, Chandigarh.

Materials and Methodology

Study area: Panjab University is located in sector 14 and sector 25 of Chandigarh Sampling technique: Purposive sampling technique.

Study tool: A standardized WHO questionnaire (WHOQOLBREF) for quality of life used for data collection. It is composed of 26 questions, covering four domains: physical, psychological, social relationships and environment, besides a global quality of life score two items measured overall QOL and general health. The remaining 24 items were divided into four domains including physical health (7 items), psychological health (6 items), social relationships (3 items), and environment (8 items). All items were presented on a five-point Likert scale (1= ''very unsatisfied'' to 5= ''very satisfied'').

It emphasizes the subjective responses rather than objective life conditions, with assessment made over the preceding two weeks. The items on ''overall rating of QOL'' (OQOL) and subjective satisfaction with health, are not included in the domains, but are used to constitute the general facet on OQOL and general health (general facet).

Sample size: Data was collected using questionnaire form which was filled up by married and unmarried individuals of the Panjab University after obtaining permission from the respective Department. Sample includes 388 randomly selected individuals

Data validation and analysis: It was done using the Microsoft Excel.

Ethical clearance: Informed written consent was obtained from the participants.

The Objectives of this was explained to the participants in detail.

Inclusion criteria: Individuals of age range between 19 to 45 year in the above said area.

Exclusion criteria: Individuals was excluded:

1) who did not give consent for the study.
2) Separated from marriage,
3) widows.

Results

During Conduction of the study among married and unmarried individuals in Panjab University. The participants included in the study were the individuals who were residing or working or studying in the Panjab University Campus Chandigarh, based on that the following results were obtained. Among married participants 18.5% (8 out of 194) belongs to upper, 30.4% (59 out of 194) belongs to upper middle, 35% (68 out of 194) belongs to middle, 7.2% (14 out of 194) belongs to lower SES while among unmarried 44.3% (86 out of 194) belongs to upper middle, 44.3% (86 out of 194) belongs to middle and 1.5% (3 out 194) belongs to lower SES i.e. majority of participants belongs to middle, upper middle SES.

53% married participants have been married for less than 5 years while 10% of individuals have been married more than 15 years.

The participants rated their quality of life which shows that average score of QOL for married participants of total 194 was 4.35 out of 5, whereas average score for unmarried was 4.15 out of 5. Among married 36% (70 out of 194) rated their quality of life as very good and 61 % (119 out of 194) married rated QOL as good while 68 % (132 out of 194) of unmarried rated their quality of life as good only.

And nobody rated it as very poor. Among all participants, 65.9% (128 out of 194) married rated their health as satisfied while 58.2% (113 out of 194) unmarried were satisfied with their health. (n=388). The mean QOL score obtained by married and unmarried participants was 4.2 & 3.9 out of 5 respectively.

The QOL of married participants with duration within 5 years of marriage have highest QOL score (88.17) and while married participants with the duration of marriage more than 15 years has lowest QOL score i.e. 83 but it is still higher than over all QOL score of unmarried i.e. 75.60.

The QOL of married individuals who are married with love marriage without the consent of family, have highest QOL (90 score) while lowest 86.19 score obtained by participants with arrange marriage.

Discussion

In our study the quality of life of individuals who were studying, working and residing in Panjab University in were assessed by means of the WHOQOL-BREF, the short version of the WHOQOL-100 instrument. Our study included 388 participants out of which 194 were unmarried and 194 were married. The participants were asked to undergo through questionnaire with informed consent to ensure the confidentiality of the information provided by the participants. The responses of the respondents were entered in data sheets and results were computed by using Microsoft Excel and the results obtained were analyzed by keeping the view of previous studies performed on individuals using WHO_QOL BREF and other Quality of life measurement tools.

The average QOL score obtained by the married and unmarried individuals were 85.27 and 75.60 respectively which suggested that married individuals in Panjab university have better QOL than Unmarried individuals which was very high in comparison to a study by Qadri et al. among elderly population in District Ambala, Haryana showed that married individuals had QOL score 69.46 while unmarried individuals had QOL score 68.67.

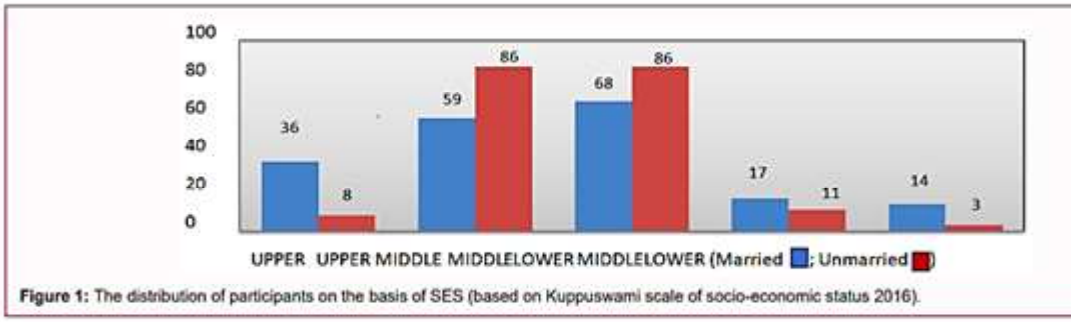


Figure 1: The distribution of participants on the basis of SES (based on Kuppuswami scale of socio-economic status 2016).

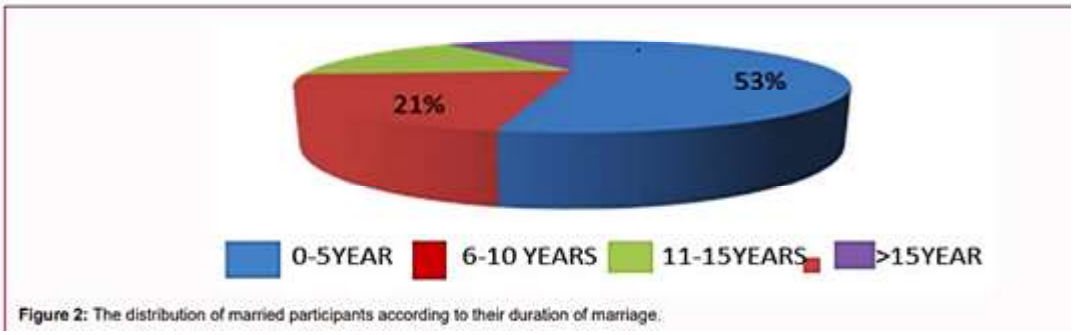
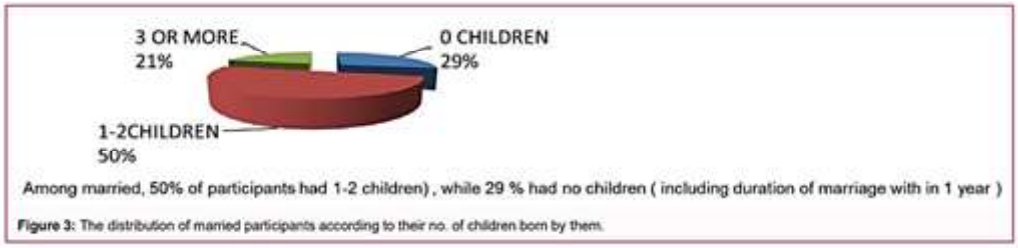


Figure 2: The distribution of married participants according to their duration of marriage.



Among married, 50% of participants had 1-2 children) , while 29 % had no children (including duration of marriage with in 1 year)

Figure 3: The distribution of married participants according to their no. of children born by them.

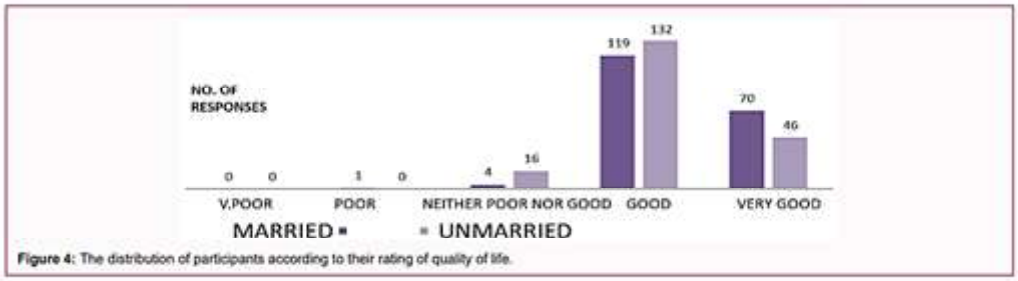


Figure 4: The distribution of participants according to their rating of quality of life.

A study was conducted by Kyu-Tae Han in Korea which showed that married women had better QOL than single and people with marriage problems like divorce/separated, while married men had higher score than who had marriage problems or were single while A study done in Chandigarh a had revealed that despite of all odds, married individuals were more satisfied with their QOL than unmarried ones. While in contrast, study done by Saurabh Saxena et al. showed that overall QOL score of unmarried individuals was 68.63 and for married QOL score was 65.59, Other different studies were conducted which showed the association to QOL with marital status.

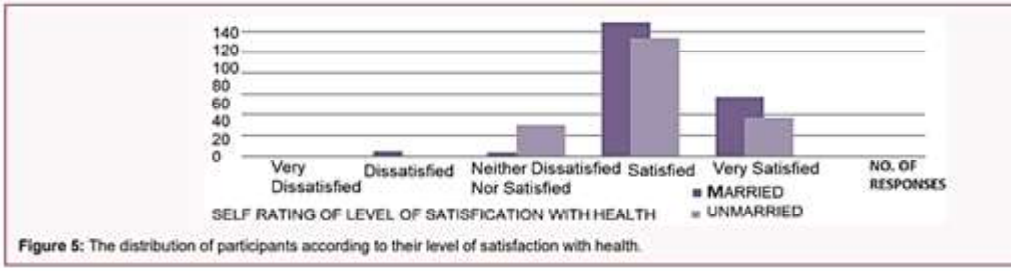


Figure 5: The distribution of participants according to their level of satisfaction with health.

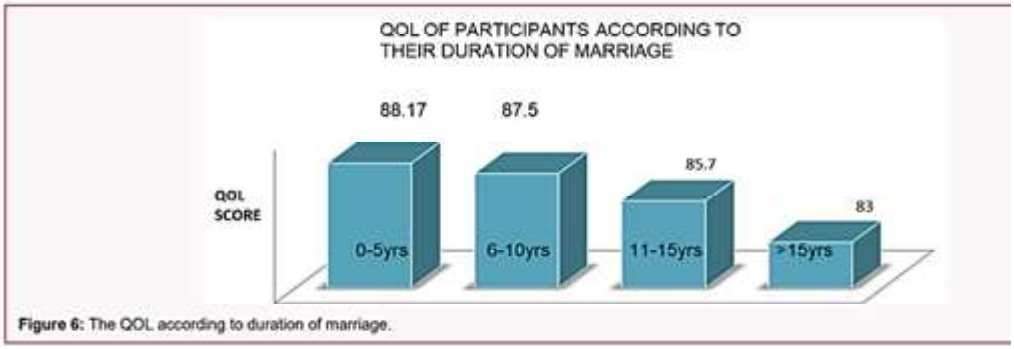


Figure 6: The QOL according to duration of marriage.

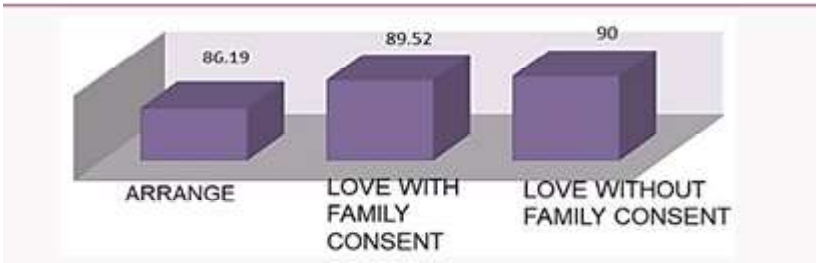


Figure 7: QOL of married Participants according to type of marriage.

Our study has shown an overall self-rating of QOL among married individuals has 4.35 score compared to unmarried individuals who scored slightly lower score 4.15 out of 5 which also shows that

the level of satisfaction with life is higher in married participants than unmarried individuals to, which is similar to other studies. We found that married individuals enjoyed their family extremely and scored the average mean value as 4.6 out of 5 whereas unmarried scored 4.3, this again shows the higher level of satisfaction among married individuals than unmarried ones. These findings show that the married individuals perhaps are more satisfied with their life as compared to unmarried individuals.

In our study QOL score according to SES was analyzed, the findings showed that QOL was highest in upper SES participants (married 89.8, unmarried 78.57) than QOL score of upper middle (married 86.63, unmarried 77.6) /middle SES (married 86.8). There was no participant from lower SES. These findings are similar with the other studies.

In our study QOL score was found positively associated with better education status of the participants irrespective of marital status. The QOL score for married who were graduates (88.14) and post graduates (88.93), PHD or Higher (87.13) scored more QOL than married participants who were below graduates (secondary 84.13, primary 82.4, illiterate 85.87) whereas secondary level educated unmarried participants scored highest among the counterparts. (primary 74.4, secondary 80.8, graduate 76.4, post graduate 78.6, PHD or higher 79.4) which predominantly showed the directly proportional relationship of education status with QOL, which is similar to other studies.

In our study, the QOL of married individuals decreases gradually with increasing duration of marriage i.e. QOL was highest (88.17) in participants with marriage duration 0 to 5 year and lowest in participants with marriage duration more than 15 years. In this study it was observed that QOL score also influenced by the number of children born by married participants. Study participants who have more than 3 children scored marginally lower QOL score (85.48) than those participants either who had no children scored or those were married for less than 9 months (88.49). It may be explained by the fact that larger families resulting in more financial burden, our study revealed that married participants (who were married with love and without family consent) surprisingly had highest QOL. It may be due to small sample size.

Conclusion

Our study concluded that overall quality of life of married individuals of the Panjab University, Chandigarh has been found better than unmarried individuals including staff and students in all domains i.e. physical, psychological, social and environmental domains. But it goes down with increasing age, with increasing duration of marriage as well as with more no. of children. It was also found, QOL among all individuals married and unmarried, QOL was better in homemaker than working and non-working individuals including students.

Recommendations

The concerned authority of Panjab University Chandigarh may be asked to appoint Counselor for the counseling of unmarried individuals Including staff and students, who can do comprehensive counseling including all four domains of Quality of life. Since QOL scoring was found better in married individual than the unmarried and among the married better QOL in individuals with better SES and less no. of children, it is therefore recommended that there should be less no. of children in the family, therefore, all individuals may be counseled to adopt "small family norms".

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Academic Stress, Anxiety and Well-being As Correlates of Achievement Motivation Among Secondary School Students

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Abstract

Students in secondary and tertiary education settings face a wide range of ongoing stressors related to academic demands. Previous research indicates that academic-related stress can reduce academic achievement, decrease motivation and increase the risk of school dropout. The longer-term impacts, which include reduced likelihood of sustainable employment, cost Governments billions of dollars each year. This narrative review presents the most recent research concerning the impact of academic-related stress, including discussion of the impact on students' learning capacity and academic performance, mental health problems, such as depression and anxiety, sleep disturbances and substance use.

Keywords: Academic, adolescent health, education, mental health and well-being, stress

Introduction

Students in secondary and tertiary education settings face a wide range of ongoing normative stressors, which can be defined as normal day to day hassles such as ongoing academic demands. Accordingly, secondary/high school (defined here as junior/lower secondary education and senior/upper secondary education)] (UNESCO, Citation2012) and tertiary (defined here as post-secondary education) students commonly self-report experiencing ongoing stress relating to their education, which we refer to as academic-related stress, such as pressure to achieve high marks and concerns about receiving poor grades.

For example, the Organisation for Economic Co-operation and Development (OECD) recently conducted a survey involving 72 countries and consisting of 540,000 student respondents aged 15–16 years. On average across OECD countries, 66% of students reported feeling stressed about poor grades and 59% reported that they often worry that taking a test will be difficult. The OECD further found that 55% of students feel very anxious about school testing, even when they are well prepared. As many 37% of students reported feeling very tense when studying, with girls consistently reporting greater anxiety relating to schoolwork compared to boys (OECD, Citation2017). This data demonstrates that education and academic performance are a significant source of stress to students. The impact of this ongoing academic-related stress to student outcomes and well-being has not been comprehensibly explored. Therefore, the current narrative review explores the impact of academic-related stress on students' academic performance, mental health and well-being.

Methods

A single author (MP) searched PubMed and Google Scholar for peer-reviewed articles published at any time in English. Search terms included academic, school, university, stress, mental health, depression, anxiety, youth, young people, resilience, stress management, stress education, substance use, sleep, drop-

out, physical health with a combination of any and/or all of the preceding terms. A snowball strategy allowed for examination of references in identified articles, and inclusion of additional articles as appropriate. The author reviewed all potential articles for inclusion. Articles from all countries were included in this narrative review, if a school based (secondary [as defined at grade 7 or higher] or university) population was included and the study assessed the impact of stress on student mental health, substance use, sleep, dropout rates, physical activity or academic outcomes. Articles were included regardless of study design.

Academic-related Stress and Mental Health

Previous research indicates that self-reported stress is associated with the presentation of anxious states and lower well-being. The recent above-mentioned OECD survey reports that secondary students who self-report higher levels of academic-related stress also report lower well-being, measured using psychological, social, cognitive and physical components (OECD, Citation2015). A systematic review of 13 studies showed that in individuals undertaking higher education, self-reported levels of stress are associated with poorer quality of life and well-being. Ongoing stress also precipitates the development of more serious mental health issues such as anxiety and depression. The prevalence of anxiety is as high as 35% in tertiary students and the prevalence of depression is 30%. The reciprocal relationship between stress and depression and anxiety is well established. Indeed, major stressful life events are one of the best predictors of the onset of depression. Accordingly, in young people the first onset of depression is often preceded by major life stressors.

Aside from impairing overall health and well-being, depression and anxiety symptoms can further adversely affect academic achievement. In undergraduate university students from the United States, those with higher self-reported anxiety and depression symptoms were found to achieve poorer grades on examinations. A longitudinal study of Hawaiian secondary school students showed that self-reported depressive symptoms resulted in subsequent poor academic achievement. This is consistent with the findings of Humensky et al. (Citation2010) who found that self-reported depressive symptoms were associated with concentration difficulties and trouble with completing school tasks, in 83 students from the United States between the ages of 14–21, and at-risk for major depression.

In a sample of Finnish students aged 13–17, self-reported depression severity was associated with concentration difficulties, and poorer social relationships, self-learning, poorer academic performance, and worse reading and writing outcomes. Therefore, it is not surprising that young people with depression, particularly males, are less likely to undertake higher education, as shown in a 15-year longitudinal study of Swedish adolescents.

Importantly, adolescent depression can also result in longer-term poor employment outcomes, as demonstrated by a 25-year longitudinal study of New Zealand children (n = 982). This study found that people who had depression at ages 16–21 had greater rates of welfare dependence and unemployment, demonstrating that the impact of poor mental health in adolescence can have long-lasting impacts. Enhancing support in the education setting may improve the mental health of young people. A national telephone survey of United States households showed that the incidence of depression in college students decreases if students have positive adjustments to academic life as well as adequate social support. Indeed, an Australian randomised control trial reported that a gamified online cognitive behaviour therapy intervention was effective in reducing depressive symptoms in 540 final year secondary students. This study demonstrates the potential of education settings in mediating the impacts of academic-related stress on young people's mental health.

Academic-related Stress and Substance Use

The health and risk behaviours of young people, including substance use and abuse, are all important determinants of their current and future health and well-being status. Academic-related stress can increase substance use among young people.

In a survey study of 128 Grade 11 students attending competitive private schools in the United States, students who reported experiencing high ongoing stress, particularly in relation to academic achievement and the tertiary education admissions process, also reported high rates of drug and alcohol use. The authors report that substance use was associated with a greater desire for academic achievement, higher perceived stress, less effective coping strategies, and less closeness with parents.

Among 7th and 8th grade students in the United States, self-perceived stress has been similarly related to substance use. Among these students, coping strategies that included information gathering, problem solving, and keeping a positive attitude, as well as adult social support and relaxation, were inversely related to substance use. This study demonstrates the importance of protective social factors in mediating the effects of academic-related stress. In a cross-sectional study of United States tertiary nursing students, those with higher self-reported stress had a higher incidence of substance abuse. Students who had higher perceptions of faculty support used less stimulants to assist with studying, further demonstrating the active role of social factors.

Finally, The Canadian Institute for Health reports that young people aged 12–19 who feel connected to their school report less anxiety and less risky behaviours, such as smoking and drinking alcohol, compared to those who do not feel connected to their schools s associated with substance use among students and that perceived social support, including from within the education environment, may positively mediate this relationship.

Academic-related Stress and Sleep

Insufficient sleep in adolescents is recognised as a serious health risk by the American Medical Association and the American Academy of Sleep Medicine, who report that many young people do not get enough hours of sleep. Stress is a contributing factor to poor sleep in young people. Noland et al., found that 42% of 9–12th Grade students report that stress is an impediment to good sleep, in 384 students surveyed. Self-perceived stress has been shown to result in poorer sleep in female university students from the United States, medical students from Saudi Arabia, university students from Portugal and Pakistani medical school students, demonstrating the cross cultural impacts of stress on sleep quality and quantity tertiary education students. In a study from the United States, over 90% of 9–12th Grade students reported that they have an inadequate number of hours of sleep on most school nights. These youth report that the effects of lack of sleep include difficulty paying attention, lower grades, higher stress, and trouble getting along with other people. Some students reported problematic strategies to help themselves fall asleep, such as taking sleeping pills, smoking cigarettes, and drinking alcohol. It has been shown that the quality and quantity of sleep is closely related to a student's learning ability and academic performance. Lack of sleep is often linked to poor learning. Therefore, stress-related disruption in sleep quality and quantity is a significant factor contributing to poor learning and well-being among students.

Academic-related Stress and Physical Health

Experiencing high levels of academic-related stress increases young people's risk of developing preventable physical health problems in later life. A systematic review of prospective studies found that people who were stressed, such as during an examination period, were less likely to be physically active, an effect potentially linked to inter-related poor physical health outcomes. Stress may also lead to the development of non-communicable diseases, including metabolic syndrome, obesity and reduced insulin sensitivity, resulting from unhealthy lifestyle habits and stress system dysregulation. Similarly, stress has been shown to be associated with increased appetite and higher body weight. Therefore, academic-related stress can contribute to the development of health issues, including chronic non-communicable diseases, due to decreases in physical activity and increases in unhealthy lifestyle habits.

Academic-related Stress and Achievement

The World Health Organisation states that students must be healthy and emotionally secure to fully participate in education. Indeed, the abovementioned OECD survey reports that anxiety about schoolwork, homework and tests has a negative impact on students' academic performance in science,

mathematics and reading. The survey reports that top-performing girls report that the fear of making mistakes often hinders their test performance. Students in the bottom quarter of academic performance are experiencing far more stress than students in the top quarter of academic performance. 63% of students in the bottom quartile of science performance are anxious about exams, no matter how well prepared they are, while 46% of students in the top quartile are feeling anxious.

This shows that higher perceived stress levels are associated with poorer academic performance. Previous research shows that the experience of positive and negative emotions is directly related to the level of student engagement. In 293 students in grades 7–10 from the United States, frequency of positive emotions during classes was associated with higher student engagement. In contrast, frequency of negative emotions was associated with less engagement. This finding is important because engagement in learning is essential for achievement, as shown by the findings of a survey conducted by the National Union of Students.

This survey reported that the main factors affecting the tertiary studies of Australian university students aged 17–25 was stress.

In an observational study of 456 German undergraduate medical students, higher perceived academic-related stress was found to predict poor academic performance. In another study of 121 medical students from Hong Kong, high self-reported stress levels were similarly related to poorer academic performance.

The above findings demonstrate that the academic-related stress that secondary and tertiary students experience constitutes a major factor affecting their academic achievement. Students with higher perceived stress are likely to have lower academic achievement.

Academic-related Stress and Dropout

Academic-related stress and burnout includes exhaustion, depersonalization, cynicism and inefficacy or reduced accomplishment. Academic-related stress is strongly related to decreased student academic motivation and academic disengagement (National Centre on Addiction and Substance Abuse at Columbia University (CASA) United States of America, Citation2003). The relationship between academic-related stress, motivation and dropout does not appear to be culturally specific, with similar findings shown from a number of international studies.

In 298 Chinese secondary school students, academic-related stress in Grade 10 negatively predicted intrinsic academic motivation and positively predicted lack of motivation in Grade 12. This indicates that reducing academic-related stress can preserve students' ongoing intrinsic academic motivation.

Similarly, in 495 Japanese students in junior secondary school, self-reported academic-related stress was found to be negatively related to feelings of self-development and academic motivation. A recent literature review highlights how stress and burnout may also impact academic achievement by increasing the risk of dropping out of school. This was especially true for students who experience more stressful life events of a more serious nature, as well as students who do not seek support from their parents or other family members, as well as students from ethnically diverse groups.

Dropping out of school is associated with reduced lifetime earning potential and secure employment. Individuals with lower education levels have worse mental health and are more likely to be ill than those with higher levels of education. It has also been reported that early dropout from school leads to intergenerational problems including unemployment, poverty, and low educational attainment. Educational attainment and secondary school completion increase employment prospects, reduce dependence on social welfare assistance and are more likely to participate in further education. These outcomes in turn increase the likelihood of sustainable employment, adequate income and self-sufficiency, which can save Governments hundreds of millions of dollars every year.

Discussion

The present narrative review highlights that students typically report high levels of academic-related stress cross-culturally. Academic-related stress experienced by secondary and tertiary students impacts their mental and physical health and leads to many academic problems.

Good stress-management skills have the potential to benefit young people throughout life, given that many long-term health-related behaviors and patterns, both positive and negative, are established during adolescence and early adulthood. Therefore, providing opportunities to improve youth's academic stress-related coping abilities during this highly stressful, critical period of development is an important goal.

The OECD highlights that education settings are places where young people develop many of the social and emotional skills needed to become resilient and thrive (OECD, Citation2015). Therefore, education settings can work to improve student academic related stress through the provision of programmes shown to decrease stress and increase stress management and coping. Discussion regarding the efficacy of particular school based stress management programmes to teach students to cope with stress is beyond the scope of the current review. It worth noting, however, that education-based initiatives that focus on increasing students skills and ability to cope with stress have been previously demonstrated to directly and positively influence educational achievement and decrease health risks.

For example, a meta-analysis of 19 randomised controlled trials or quasi-experimental studies found that school programmes targeting stress management or coping skills reduced stress symptoms and improved coping skills among students. Schools provide access to large numbers of young people from diverse backgrounds, during an early developmental period. Thus, even if marginally effective, population level implementation of stress management and coping skills programs will help youth develop healthy coping strategies to deal with the inevitable stressors of life. Understanding and addressing the barriers and enablers to the implementation of stress management programs in schools will aid in the development of effective implementation strategies that will result in significant health, economic, and social benefits for large numbers of youth, their families, and the community. A strength of the present review is that we discussed studies from multiple countries, indicating that academic-related stress experienced by students in education is cross-cultural and wide-ranging and is of international concern. We reviewed studies that have demonstrated multiple negative effects of academic-related stress, highlighting the potentially broad spectrum of benefits that could result from the implementation of stress-management interventions. A limitation of the present study is that we did not draw between studies that have assessed the impact of academic-related stress during different stages of secondary and tertiary education. It is more likely that needs, and therefore the most advantageous coping strategies, may vary across the life span. Therefore, the most appropriate stress-management education approaches may differ between early high school and tertiary education years.

Conclusion

This narrative review highlights that academic-related stress is a major concern for secondary and tertiary students.

The ongoing stress relating to education has demonstrated negative impact on students' learning capacity, academic performance, education and employment attainment, sleep quality and quantity, physical health, mental health and substance use outcomes. Increasing students' stress-management skills and abilities is an important target for change.

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Emotional Intelligence and Gender Differences in the Adolescent Children of Employed Mothers and Homemakers

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Abatract

The present study assessed the impact of maternal employment on the emotional intelligence of the adolescents. The sample included 69 adolescents from employed mothers, including 35 girls and 34 boys, and 74 adolescents from housewives, including 41 girls and 33 boys. The total sample size was 143 adolescents from Ahmedabad city, studying in 8th and 9th class. The Emotional Intelligence Scale, translated into Gujarati by Dr. Pallavi Patel and Dr. Hitesh Patel, was used to collect data. Data were analyzed using the "t" test. The results showed that teenage children of employed mothers had higher emotional intelligence. The female children of employed mothers showed more emotional intelligence, while there were no gender differences in the emotional intelligence of adolescent children of homemakers.

Keywords: Adolescents, Emotional Intelligence, Maternal Employment, Gender Differences

Introduction

Adolescence is one of the important periods of life. It is characterized by innumerable and unique problems. With the demands of globalization, the nature and number of challenges have become greater than before. The family, which plays an important role in the personality development of adolescents, is undergoing structural, emotional and interactional changes. The contributions of mothers in shaping the personality of their children cannot be ignored. But an unprecedented number of women, especially mothers are entering the labor force either due to economic necessity or in search of identity. This has led to radical shift in the traditional role of mother as a 'care taker' to a 'bread earner' and has altered child rearing goals and practices. Hence, an effort is made to see the effects on emotional intelligence of children.

Emotional Intelligence

In the last ten years, the concept of emotional intelligence has aroused much interest in society and in academia. Emotional Intelligence is the ability or tendency to perceive, understand, regulate and harness emotions adoptively in self and others. Research is confirming the relation between emotional intelligence and some positive developmental outcomes such as: subjective well-being, adaptive coping styles and mental health, mental ability and positive personality traits, academic achievement, school adjustment (Adeyemo, 2005), and physical and psychological health.

Several factors affect the development of emotional intelligence in children. Child's character, neurophysiology and cognitive enhancement are the important factors (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004). However it has been seen that emotional intelligence may strengthen or dull with the effect of both these factors and social relationships like family and circle of friends. Family environment is especially the most important one among these.

Family environment affects children's emotional intelligence in three aspects. First of all, children learn emotions by observing the people around them. Secondly, parents' experiences and behavior related to their emotions ensure that children conform to society's expectations. Third, factors reflecting the emotional state of the family such as the quality of emotional attachment between the child and parents, parental attitudes, emotional and social openness, and marital relationship influence emotional intelligence (Morris et al. 2007).

Maternal Influence and Children's Emotional Intelligence

With the cutting of the umbilical cord, our physical attachment to our mother ends and emotional and psychological attachment begins. While the first attachment provides everything we need to thrive inside the womb, many psychologists believe that the second attachment provides the psychological foundation and perhaps even the social and physical barrier we need to thrive in the world. There is an influence of mothers' nature, personality, competencies etc. on the child. The child develops intellectual and emotional traits by getting influenced by her mother.

Evidence comes from Eisenberg and Fabes (1994) who found a link between mothers perceptions of their children's temperament and mothers' reactions to their children's negative emotions. In another study, mothers perceptions of girls negative emotionality were positively associated with mothers who were minimizing their children's negative emotion, and were negatively associated with reports of helping to solve the issue that resulted in the negative emotion.

Gottman, Feinsilber-Katz, and Hooven (1997) have recently proposed that parents' metamotion philosophy represents an important component of how children's emotions are socialized. 1.Meta-emotion philosophy can be conceptualized as an emotional understanding between parents and children, and can be theoretically understood as an organized set of emotions and cognitions in relation to one's own 6.emotions and the emotions of others" (Gottman et al., 1997, p. 7).

Maternal Employment and Emotional Intelligence

In the field of children of working and non-working mothers, interest of sociologists, social psychologists and educationists increased to know what problems the children of working mothers face.

Hoffman (1963) found that children of working mothers appeared to be less assertive and less affectionate in their interactions with their peers. These children were less likely to help with household chores than children of non-working mothers.

Moore's (1963) data indicate that children who were abandoned by their mothers in infancy showed a more dependent attachment to their parents than any other child. They also showed other signs of insecurity such as nail biting and nightmares.

Miller (1975) revealed that daughters of working mothers were found to be more aggressive and less passive than daughters of non-working mothers.

Ribble (1979) has found that children who were not fortunate enough to have the loving, caring and constancy of their mother during their earlier years reacted with negativism, hypertension, stupors sleep, diarrhea and emotional imbalance.

According to Hoffman (1980), fulltime employment may result in less effective socialization of sons because their more active behavior requires greater parental monitoring and intervention than is necessary for girls.

Bronfenbrenner, Henderson (1984) and Alvarez (1985) have found that highly educated full time employed mothers described their three year old sons in especially negative terms. Their boys seemed demanding and non-compliant.

Sharma (1986) has revealed that the children of non- working mothers were found to be more excited, tender hearted, sensitive, dependent and more protective.

Mody and Murthy (1988) have revealed that the children of employed mothers were found to be careless and slightly emotionally unstable in the early years compared to the children of non-employed mothers.

Vandell & Ramanan (1991) have found that children with latch key experience have more behaviour problems. They are emotionally weak.

Sroufe et al (1993) have found that insecurely attached infants by contrast, often have later problems: inhibitions and negative emotions in toddler hood, hostility towards other and dependency during the school years. Walzer (1996) has revealed that working mothers are more likely to think about their babies and to feel guilty if they become so consumed with the demands of their jobs that they fail to think about their babies.

Hill and others (2001) found that when a child's mother works in the first year of life it can have a negative effect on the child's later development.

Koschanska (2001) has found that insecurely attached toddlers show more negative emotions (fear, distress and anger) while securely attached children show more joyfulness, even in the same situation. Brooks – Gunn, Han and Waldfogel (2002) in their longitudinal study found that the three year old children of mothers who went to work before the children were nine months old had poorer cognitive outcomes than three year old children who had stayed at home with their mothers in the first nine months of the child's life.

Vijayalaxmi & Bowlby (2007) have found that the adolescent children of home makers have significantly higher self-concept. The children of home makers have significantly higher self-concept and higher achievement motivation than the children of employed mothers. The female children of home makers are having significantly higher emotional maturity compared to the male children of home makers. The children of employed mothers are more socially maladjusted and lacked independence to a very highly significant level compared to the children of home makers.

This is perceived as a threat to the child's well-being and/or to her own psychological equilibrium. Such anxiety may be reflected in feelings of worry, sadness, or guilt. Most researchers have focused their attention on elementary school aged children, because of the widely held belief that adolescents need less contact with their mothers than do the younger children who might at a risk for a variety of psychological problems as a result of repeated separations from their mother.

This view may not be warranted, however, since adolescents continue to interact with their mothers and alterations of the family system as a result of maternal employment might have a profound effect on adolescent development. On the positive side, adolescents with working mothers may develop a greater degree of autonomy and adult maturity than those with nonworking mothers. Employed mothers may have a less stressful relationship with their adolescent children because they would not be as fully invested in childrearing and so could more easily relinquish maternal control than the fulltime homemakers. With such varied results over a period of time, an attempt is made by the investigator to find the effect of maternal employment on emotional intelligence of adolescents and the gender differences in the adolescent of the employed mothers and homemakers.

Objectives

The following objectives were formulated:

1) To identify the adolescent children of the employed mothers and homemakers.
2) To study emotional intelligence of the adolescent children of employed mothers and homemakers.
3) To study the gender differences in the emotional intelligence of the adolescent children of employed mothers and homemakers.

Null Hypotheses

The following hypotheses were framed:

1) There is no significant difference in the mean scores of emotional intelligence of the adolescent children of employed mothers or homemakers (Composite score).

2) There is no significant difference in the mean scores of emotional intelligence of the adolescent children of employed mothers or homemakers (Factor wise).
3) There is no significant difference in the mean scores of emotional intelligence of the adolescent girls or boys of employed mothers (Composite score).
4) There is no significant difference in the mean scores of emotional intelligence of the adolescent girls or boys of home makers (Composite score).

Method

Sample: For this study, total sample size of 143 adolescents of Ahmedabad City, studying in 8th and 9 th standard were included. The sample consisted of 69 adolescents of employed mothers including 35 girls and 34 boys and 74 adolescents of homemakers including 41 girls and 33 boys.

Tools

(a) The personal data sheet was prepared to collect the information regarding student's age, standard (class), sex, income-status, number of children in the family, their mother's qualification, employment etc.
(b) The Emotional Intelligence Scale: This scale is translated into Gujarati by Dr. Pallavi Patel and Dr. Hitesh Patel was used to measure the EI of adolescents. The scale consisted of 77 statements where the respondents had to tick mark in one of the four alternatives provided. This scale consisted both positive and negative statements which were calculated as per the manual.

Procedure

For the data collection two schools of Ahmedabad city were approached. The permission of the principal and the teachers was taken and then the high school students were approached personally. A rapport was built with them and then the above mentioned test along with the personal data sheet was given. The sample consisted of 143 students in 8th and 9th grade. The data collected was being analyzed based on four components of emotional intelligence scale and the details regarding maternal employment derived from personal data sheet. 't' test was the statistical technique used to analyze the data.

Results

Table 1: Showing the Mean, SD and "t" of emotional intelligence and its factors of the adolescent children of Employed mothers and Homemakers.

	Employed Mothers			Home Makers			"t"	Significance
	N	Mean	SD	N	Mean	SD		
Emotional Intelligence	69	240.18	15.85	74	227.05	15.67	2.06	0.05
Factors of EI								
Self Awareness	69	118.92	10.40	74	111.21	12.34	3.05	0.01
Self management	69	64.32	6.70	74	64.364	15.05	0.98	Not significant
Social awareness	69	29.5	5.61	74	25.95	4.28	1.98	0.05
Social skills	69	34.59	6.85	74	34.33	6.38	0.81	Not significant

Table 1 shows the mean, SD and t of emotional intelligence and its factors of the adolescent children of employed mothers and homemakers. The difference between the emotional intelligence of the adolescent children of employed mothers and homemakers was found to be significant at 0.05 (t= 2.06). It means that the emotional intelligence of adolescent children of employed mothers is more than those of the homemakers. Hence, the null hypothesis is rejected. The Self-awareness of the adolescent children of employed mothers is higher than their counterparts. The null hypothesis is rejected at 0.01 level (t=3.05). Similarly, the social awareness of the adolescent children of employed mothers is significantly high at 0.05 level (t=1.98).

The probable reason would be that the dual role of the employed mother as a professional and a care taker would help the child in developing an insight and ability to cope with the situations independently than the constant helping homemakers. Moreover, the children would be able to make decisions, discuss emotions and will be able to communicate clearly and directly. The social awareness would be more as the adolescent children of employed mother would see their mothers interacting with outside and adopt such attitude easily than their counterparts. Moreover, they would be aware of the importance of the role of physical appearance and attributes in social acceptance and success as they are exposed to a wider world apart from home and school because of maternal employment.

However, it should be noted that there is no significant difference in the self-management scores of the adolescent children. The probable reason would be that adolescents today are career oriented and hence they are able to develop skills like adaptability and self-control from the outside world. Similarly, the social skills are not affected by maternal employment as the child interacts with many people at school, coaching, on social networking sites and is not merely bound to interact with the family.

Table 2: Showing the Mean, SD and "t" of emotional intelligence and its factors of the adolescent Girls and Boys of Employed mothers.

	Girls			Boys			"t"	Significance
	N	Mean	SD	N	Mean	SD		
Emotional Intelligence	35	243.38	16.78	34	228.91	18.21	3.12	0.01

Table 2 shows the mean, SD and t of the emotional intelligence of adolescent girls and boys of employed mothers. The mean of emotional intelligence of girls is more than the boys. Hence, the null hypothesis is rejected at 0.01 level (t=3.12). The probable reason could be that the girls would take up few responsibilities in the absence of the mother during the day unlike boys. Also the girl would learn to take care of the house and try to play dual roles like her mother.

Table 3: Showing the Mean, SD and "t" of emotional intelligence and its factors of the adolescent Girls and Boys of Homemakers.

	Girls			Boys			"t"	Significance
	N	Mean	SD	N	Mean	SD		
Emotional Intelligence	41	243	15.11	33	242.75	16.59	0.95	Not significant

Table 3 shows the mean, SD and t of the emotional intelligence of adolescent girls and boys of homemakers. There is no significant difference in the mean of the emotional intelligence of girls and boys of Homemakers. Hence the null hypothesis is accepted. The probable reason would be the same kind of constant attention and care by the homemakers to both the genders.

Conclusion

1) It has been found that the emotional intelligence of the adolescent children of employed mothers and homemakers is significantly different on composite score. The emotional intelligence of the adolescent children of employed mothers is more than their counterparts.
2) The study has revealed a significant difference in the self-awareness of the adolescent children of employed mothers and homemakers. The children of employed mothers showed signs of intelligence and ability to cope with the challenges.
3) The study showed that there is no significant difference in the self-management score of children as they develop skills like adaptability and self-control from the outside world.
4) The study revealed significant difference in the social awareness of the adolescent children of employed mothers and homemakers. The adolescent children of employed mothers showed more organizational awareness and empathy than their counterparts.

5) It has also been found that there is no significant difference in the social skills of adolescent children of employed mothers or homemakers as children develop communication skills and leadership qualities while interacting with the outside world.
6) There were gender differences in the composite score of emotional intelligence of the employed mothers. The emotional intelligence of girls was more than the boys as they adapt a sense of responsibility easily.
7) There were no gender differences in the composite score of emotional intelligence of homemakers. The probable reason would be the same kind of care from the mother.

Suggestions:

1) There is a need for training in management of emotions among adolescents.
2) The mothers need to sensitize towards the need of their children.
3) The homemakers need to take more measures for their children's development.
4) Mothers also need guidance and counseling in bringing up their male and female children effectively with the egalitarian attitude.
5) Research is required on large samples measuring the development (physical, social and emotional) of adolescent children of employed mothers and homemakers.

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A Comparative Study of Working and Non-working Women in Relation to Stress, Anxiety, Depression and Well-being

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Abstract

The present study examined mental health and depression in working and non-working women. A total of 100 urban women (50 working and 50 non-working) were selected through random sampling method from Kolhapur city of Maharashtra state, India. The study variables were measured using the Mithila Mental Health Inventory developed by Anand Kumar and Giridhar P. Thakur and the Depression Scale developed by Dr. Shamim Karim and Dr. Rama Tiwari was used in this study. The data obtained were analyzed using mean, SD, t test and correlation. The results showed that no significant difference was found between working and non-working women with respect to mental health and depression. The results also showed that no association was found between mental health and depression among working and non-working women.

Keywords: Working Women, Non-Working Women, Mental Health, Depression

Introduction

Mental health plays a significant part in human being particularly in women's life. It may affects on relationship, self-esteem, work performance as well as physical health. There is need to recognize and get help for mental health concerns. Mental health conditions are not common among the men and women. Some research results indicate that more than 1 in 5 women in the United States have mental health problems. Some biological and psychosocial factors also impact women's mental health. In recent times most of the women are facing common mental health problems like depression and anxiety.

According to Beck (2006), depression is a maladaptive cognitive process and is linked to our emotions and feelings. This led to various types of psychological disorders. We know that women are proving that they have more independence as well as more talent than men. At present she is working actively in every field. She is showing her cleverness and talent and is proving to be a good employee, employer and boss. But, in a male-dominated culture, a woman has to face many problems, especially mental health related problems, in proving her achievements. Women face many mental health problems at workplace such as poor working environment, discrimination, inequality, excessive workload, insecurity, work related stress, workplace bullying, sexual harassment etc. Research results show that working women perform multiple roles such as household and workplace duties and are at higher risk of stress-related diseases.

In another side, non-working women also facing a lot of mental health problems such as anxiety, depression, loneliness, emotional disturbance, irritability, sleep disturbance, eating problems etc. Non-working women are engaging in the household duties such as cooking, cleaning and maintaining house, watching clothes etc. In this regard, she is facing a lot of problems such as role conflict, family conflicts, interpersonal and intrapersonal conflicts which caused to make poor mental health.

Review of Literature

1. Dudhatra Revati and Jogsan Yogesh (2012) studied effect of mental health and depression among working and non-working women. The total sample was 80 working and non-working women. An

effective tool of mental health inventory prepared by Dr. D. J. Bhatt and Gita R. Geeda (1992) and depression scale developed by Beck (1961) were used for the data collection in this study. The obtained data was analyzed with mean, SD. T test and correlation. The study results stated that there is significance difference in mental health and depression among both working and non-working women. The study results also stated that there is positive correlation found between mental health and depression among both working and non-working women.

2. Kumari Reeta (2014) explored the study of relation between marital adjustment, stress and depression of working and non-working women. The sample of the study comprised of 240 women (120 working and 120 non-working). The Dyadic adjustment scale (2000), Beck's depression scale (1996) and stress scale were used for the assessment of the study variables. The study results show that working married women combats marital problems more. It also indicates that non-working women shows less depression than working women.
3. Puthanikar et al. (2017) conducted a study on depression among working and home making women. The total sample of 120 women (60 working and 60 non-working) from Dharwad district, Karnataka state, India involved in the study. The descriptive research method was used for this study. The Depression Inventory developed by Beck was used for the data collection. The obtained data was analyzed through Mean, SD and t test. The study result reveals that there is significance difference between working and non-working women in relation to depression. This also shows that non-working women have more depression than working women.
4. Bhardwaj Vinod Kumar (2018) examined stress levels between working and non-working women in relation to health, well-being and depression: A comparative study. This was a cross sectional study. The total sample consisted of 150 women (75 working (teachers) and 75 non-working (housewives)) and the age group of the participants was 30 to 45 years. The variables of the study were measured through Beck's depression scale (1961), perceived stress scale (1983), Friedman welfare scale and Lady Healthiness scale (1996). The data obtained was analyzed using mean, SD and t test. The researcher Found that there is a significant difference in depression, health and well-being between working and non-working women. The results of the study also show that working women show better health than non-working women. However, non-working women shows less depression than working women.

Need and Importance of the Study

We know that women are a gift of God. Women has fulfilled with a lot of good characteristics such as empathy, adjustment, honesty, tolerance, innovativeness etc. Ascompare to past, todays' women has entered every sector and working her duties responsibility be honestly. She is working at home as well as in other sectors. Today's women are playing different roles in society. But, there is need of to understand and develop mental health of women. A lot of psychological issues such as depression, a lot of anxiety, loneliness, irritation etc. are increasing day by day among the both working and nonworking women. So, it is an attempt to understand and develop the mental health of the women.

Statement of the Study

To investigate the mental health and depression among working and non-working women.

Objectives

1. To measure the mental health of working and non-working women.
2. To measure the depression of working and non-working women.
3. To measure the correlation between working and non-working women in relation to mental health and depression.

Hypotheses

1. There will be no significance in mental health among working and non-working women.
2. There will be no significance in depression among working and non-working women.
3. There will be no significant correlation between working and non-working women in relation to mental health and depression.

Methodology

Sample The total sample comprised of 100 women (50 working and 50 non-working) from urban area of Kolhapur city, Maharashtra state, India. The sample of the study adopted through simple random method. Following table is showing sample of the study.

Table No. 1 Sample of the Study

Independent Variable	Area	Total
Working Women	Urban	50
Non-working Women		50
Total		**100**

Variables

Independent Variable:

- Working women
- Non-working women
- Dependent Variable:
- Mental Health
- Depression

Operational Definitions:

- Working Women: Working women are those women who are working outside the home for earning money.
- Non-working Women: Non-working women are those women who are working at the home and work household duties.

Tools

The following standardized two scales were used to data collection in this study.

I) Mithila Mental Health Status Inventory (MMHSI): This inventory is developed by Anand Kumar and Giridhar P. Thakur. It consists of 50 items. There are five parts including egocentrism, alienation, expression, emotional instability and social non-conformity with five options such as very true, true, doubtful, false and completely false. The scoring procedure of the inventory is different for each statement. The positively worded items of the inventory indicate scores of 5, 4, 3, 2 and 1 and the negatively worded items of the inventory indicate scores in reverse way. The following table indicates the scoring procedure of the inventory.

Table No. 2 Scoring Procedure

Score for Positively Worded Items	Scoring Procedure	Score for Negatively Worded Items	Scoring Procedure
Very True	5	Very True	1
True	4	True	2
Doubtful	3	Doubtful	3
False	2	False	4
Completely False	1	Completely False	5

The maximum possible score for the each scale is 50 and minimum score is 10. The maximum and minimum score of the whole inventory is 250 and 50 respectively. This inventory is divided into five scales. The high score on MMHSI indicates poor mental health and low score indicates good mental health. The original form of MMHSI is English but it also available in Hindi form. This is self-administrating inventory. There is no time limit for solve the scale but it can be complete within 20 to 30 minutes. The reliability coefficient of the established through split-half method and test-retest method was found 0.90 and 0.87 respectively.

II) Depression Scale (DS): This scale is developed by Dr. Shamim Karim and Dr. Rama Tiwari. It consists 96 items related to twelve aspects of depression such as apathy, sleep disturbance, pessimism, fatigability, irritability, social withdrawal and self-centeredness, dejected or sadness, selfdislike, self-acquisition, self-harm, somatic reoccupation and indecisiveness. There are five responses such

as not at all, a little bit, moderately, quite a bit and extremely. There is no time limit to solve the scale. The scoring procedure of the scale is very simple. The following table indicates the scoring procedure of the scale.

Table No. 3 Scoring Procedure

Sr. No.	Response	Scoring Procedure
1	Not at all	0
2	A little bit	1
3	Moderately	2
4	Quite a bit	3
5	Extremely	4

The maximum raw score of the scale indicates high depression and minimum raw score indicates low depression of an individual. The coefficient reliability of this scale found high and test-retest reliability found 0.891.

Statistical Analysis

The very effective statistical tools such as Mean, SD, 't' test and correlation were adopted for analyzing the obtained data.

Result and Discussion

Table No. 4 Mean, SD and 't' value of Mental Health among Working and Non-working Women

Dependent Variable	Independent Variable	N	Mean	SD	't' Value	Significance
Mental Health	Working Women	50	35.8	5.94	0.17	NS
	Non-working Women	50	34.7	5.14		

Figure No. 1

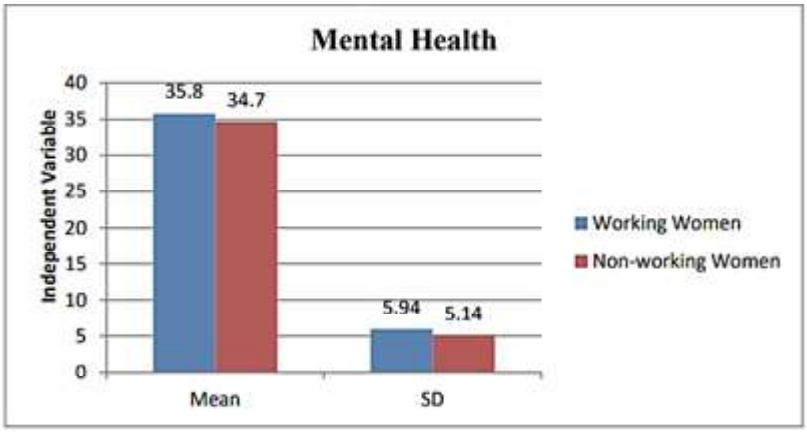

Table No. 4 and Figure No. 1 depicts that mean, SD and 't' value of mental health of working and non-working women. Mean score of working women is 35.8 and SD is 5.94. Mean score of non-working women is 34.7 and SD is 5.14. The obtained 't' value is 0.17 which statistically not significant. It means that hypothesis no. 1 "There will be no significance in mental health among working and non-working women" is accepted.

This result might be occurred because of, both working and non-working women shows equal interest and attitudes towards their family responsibility and distributed work. Both are equally emphasis on boost of mental health. Both women may be faces to incoming challenges, conflicts and hazards in same manner. Similar studies show that, Ashabahen Tadvi (2014) found that there is no significance difference between working and nonworking women on mental health. Sapna et al. 92018) also indicates that there is no significance difference between mental health of working and non-working women.

Table No. 5 Mean, SD and 't' value Depression among Working and Non-working Women

Dependent Variable	Independent Variable	N	Mean	SD	't' Value	Significance
Depression	Working Women	50	178.24	30.06	0.23	NS
	Non-working Women	50	184.98	26.75		

Figure No. 2

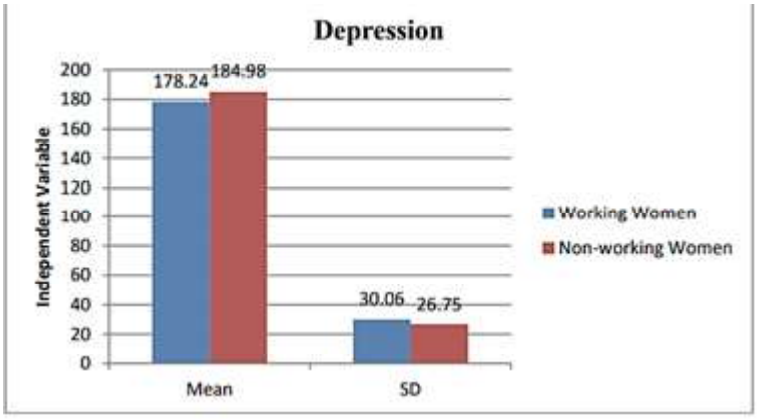

Table No. 5 and Figure No. 2 depicts that mean, SD and 't' value of depression of working and non-working women. Mean score of working women is 178.24 and SD is 30.06. Mean score of non-working women is 184.98 and SD is 26.75. The obtained 't' value is 0.23 which statistically not significant. It means that hypothesis no. 2 "There will be no significance in depression among working and non-working women" is accepted. This result might be occurred because of, both working and non-working women shows control their emotions and thoughts equally. Both may be emphasis on exercise and physical as well as mental health. Both are equally promote to family, involve and communicate with family members. Similar studies shows that, Diker Joshi (2021) highlighted that there is no statistically difference found between depression of working and non-working women.

Table No. 6 Correlation between Mental Health and Depression among Working and Non-working Women

Correlation	Dependent Variable	Mean	SD	'r' value	Significance
Correlation between Mental Health and Depression	Mental Health	35.27	5.55	0.04	NS
	Depression	181.61	28.51		

Figure No. 3

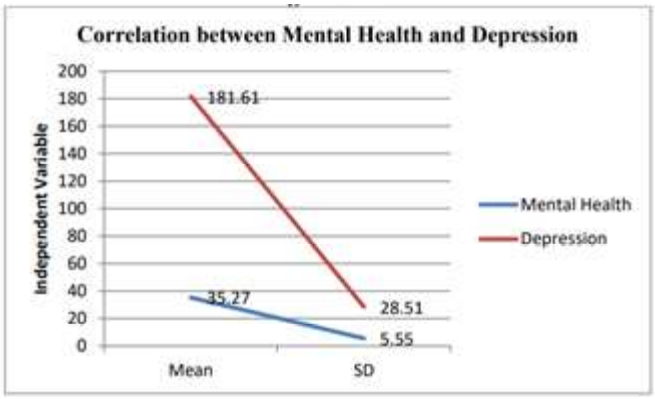

Table No. 6 and Figure No. 5 depicts that correlation between mental health and depression among working and non-working women. The obtained 'r' value is 0.04 which statistically not significant. It

means that hypothesis no. 3 "There will be no significant correlation between working and non-working women in relation to mental health and depression" is accepted.

This result might be occurred because of; depression is a major aspect of mental health. A good mental health is a strong dimension of physical and mental health. A good mental health reduces depression and anxiety. So, there is negative association between mental health and depression.

Conclusions

The present research work entitled as "A comparative study on Stress Management of Working and Non-Working Women with special reference to Rewa district" focused on Stress management by women belonging to both the groups

There were three hypotheses tested in this study and following conclusions were drawn. 1. There is no significance difference found between working and non-working women on mental health. 2. There is no significance difference found between working and non-working women on depression. 3. There is no significance correlation found between mental health and depression among working and non-working women.

Hence, there is significant difference in working and nonworking women in their ability to manage stress. It implies that the working women and non-working women have equally managed their stress. No one is more stressed than other. So, there is a big difference between working and non-working women. Overall, this study highlights the fact that working and non-working women both play different roles in their lives and shape them in their own ways. They deal equally with stress, the problem of time management, emotional issues such as anger, sadness, but they know how to deal with these problems.

There are some limitations to this study. The first and foremost limitation of this study is the small sample size

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Post-Independence Nationalism in India: Evolving Ideologies and Shifting Public Imaginaries

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Abstract

Since 1947, nationalism in India has undergone continuous redefinition as the nation navigated decolonization, democracy building, socio-economic transformation, and cultural contestations. This article examines the major phases and ideological shifts in Indian nationalism after independence, focusing on the consolidation of constitutional nationalism, the accommodation of linguistic and regional aspirations, the influence of economic reforms, and the rise of Hindu cultural nationalism. It also explores how globalization and digital communication technologies have introduced new modes of national consciousness, public participation, and polarization. The central argument is that post-independence Indian nationalism is not a single unified project but a layered and dynamic field shaped by historical experience, political competition, and the lived diversity of Indian society.

Keywords: Indian nationalism; post-independence India; secular nationalism; Hindutva; linguistic reorganization; regional identity; globalization; digital nationalism; democratic politics; nation-building.

1. Introduction

The achievement of independence in 1947 marked not only the end of British colonial authority but also the beginning of an unprecedented experiment in democratic nation-building. India entered sovereignty with immense cultural, linguistic, religious, and regional diversity, raising critical questions regarding the nature of the national community and the principles that would hold it together. Nationalism, once primarily a tool of anti-colonial resistance, now had to serve as an ideological and ethical framework for governance, citizenship, and collective belonging. This article explores how Indian nationalism has evolved since independence, tracking its ideological shifts and its adaptation to political, economic, and technological changes.

2. Constitutional and Secular Nationalism in the Early Republic

The first decades of independent India were dominated by a vision of nationalism grounded in constitutionalism, secularism, and developmentalism. Spearheaded by leaders like Jawaharlal Nehru, this nationalism envisioned India as a plural, democratic, and socially progressive nation-state. Its defining characteristics included:

- Civic equality guaranteed by the Constitution
- Secular governance, maintaining state neutrality toward religion
- Economic planning to address poverty and underdevelopment
- Centralized political authority to maintain territorial integrity during nation-building

While this framework successfully institutionalized democratic norms, it also encountered significant obstacles. Communal tensions, caste hierarchies, and regional economic disparities often challenged the inclusive ideals of constitutional nationalism. Nonetheless, this phase laid the ideological foundation for modern India's political culture and administrative structures.

3. The Linguistic Question and the Rise of Regional Nationalisms

The 1950s and 1960s revealed the limitations of a purely centralized nationalism. The demand for states carved along linguistic lines—triggered most famously by the movement in Andhra—initiated a nationwide reconsideration of how national unity could coexist with regional identities. The States Reorganisation Act of 1956 emerged as a landmark policy that redefined Indian federalism.

Regional nationalisms in Tamil Nadu, Punjab, Assam, and elsewhere illustrated that linguistic and cultural identities could flourish without threatening national cohesion. Instead of fragmenting India, linguistic federalism expanded the democratic space, allowing multiple forms of identity to coexist within the broader national framework. This accommodation of sub-national aspirations remains one of the most distinctive features of Indian nationalism.

4. Social Change, Political Upheaval, and Nationalism (1960s–1990s)

As India faced wars, political crises, and social movements, nationalism acquired new dimensions. The conflicts with China and Pakistan produced heightened patriotic sentiment, while internal challenges—such as the Emergency (1975–77) and growing student and farmers' movements—contributed to public debates on authority, rights, and democracy.

The onset of economic liberalization in 1991 profoundly altered the socio-economic landscape. A new middle class emerged, shaped by global markets, private enterprise, and expanding consumer culture. National identity increasingly reflected aspirations for economic growth, technological advancement, and global visibility. This developmental nationalism redefined patriotism in terms of competitiveness, modernization, and global integration.

5. Ascendance of Hindu Cultural Nationalism

From the late 1980s onward, India witnessed the growing influence of Hindu cultural nationalism, or Hindutva, which offered an alternative conception of national identity rooted in majoritarian cultural symbolism. Political mobilization around the Ram Janmabhoomi movement, the expansion of the BJP, and debates over secularism and minority rights significantly reshaped India's nationalist discourse.

Proponents claim that Hindutva restores civilizational continuity and asserts cultural self-confidence after centuries of colonization. Critics argue that it narrows the plural foundations of Indian nationalism and reorders the relationship between state, religion, and citizenship. Regardless of perspective, Hindutva has become a central force in contemporary Indian politics, influencing educational policy, public debates, and electoral mobilization.

6. Nationalism in the Era of Globalization and Digital Media

The 21st century has introduced new modalities of nationalism emerging from global mobility, digital communication, and online political engagement. Diasporic networks promote a transnational form of nationalism that merges cultural pride with economic aspirations. Social media platforms have intensified the circulation of patriotic symbols, political slogans, and national narratives.

Digital nationalism is characterized by:

- Rapid emotional mobilization through visual and viral content
- Online political activism that shapes public opinion and electoral behavior
- Increased polarization, driven by misinformation and echo chambers
- New forms of surveillance and data politics, influencing public trust and civic participation

These developments have expanded the reach of nationalist discourse while also complicating democratic deliberation and social cohesion.

7. Conclusion

Post-independence Indian nationalism is a multifaceted and continually evolving phenomenon. From the constitutional ideals of the early republic to the rise of regional aspirations, economic liberalization,

and the recent dominance of cultural and digital nationalisms, the idea of the nation remains a contested and dynamic field. The future trajectory of Indian nationalism will depend on how the state and society negotiate pluralism, democratic values, and socio-economic change. Rather than a singular ideology, Indian nationalism is a spectrum of overlapping and sometimes competing visions that together shape the country's political and cultural landscape.

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Aspiration for Justice and Empowerment through Charwaha Vidyalayas: A Mission of Social Justice That Lost Shine with Time

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Abstract

The population, having said to be lying on the sharp edge of a sword blessed with equal manifestations of falling either sides, appear into a productive capital necessary to cherish social cohesion, cultural affinity and economic prosperity in the society as outcomes of proper nourishments identical with education and health. In contrast, failures of the State in specified domains lead the population to turn into an undesirable liability along with associated challenges.

The state of Bihar, once known for the renowned educational centers and learnings, had been reduced to a place identical with rigid social stratifications based on birth culminating into educational deprivations among unprivileged sections and lower levels of literacy rates in the country over the period. However, various policies had nevertheless been formulated under the leadership of different chief ministers of the state in consultant with the center prior to the leadership of Shri. Lalu Prasad Yadav. As such, he, out of determinations to motivate unprivileged sections for education, has thus introduced a new model of formal schooling eloquently nomenclated into the Charwaha Vidyalaya. The Charwaha Vidyalayas, opened across multiple locations in combined territories of Bihar and Jharkhand, had drew attentions of policy makers, researchers and academicians in and across the country along with praises and criticisms. Unfortunately, such a novel scheme of educating unprivileged sections along with monetary stipends has unfortunately been brought to the verge of existence crises with time.

Key Words: Capital, Cohesion, Affinity, Stratification, Unprivileged, Deprivation

Introduction

Education is often regard as one of the fundamental requisites necessary for individual transformation, social cohesion, cultural enrichment and economic prosperity in the society. Referred to necessity of education in the society, formal education in Bihar, having said to be shaped by cultural traditions, economic disparities and policy experiments, has a long, dynamic and complex journey in order to remain consistent and relevant with requirements of time and society. Among all such experiments, conceptions of the Charwaha Vidyalaya, also termed as Shepherd School, has occupied a unique place in the history of reformations of the formal education of Bihar.

Though conceived by Karpoori Thakur in 1970s, the particular scheme of education had been provided practical shape in 1990s by Lalu Prasad Yadav as an attempt to bridge existing gaps between compulsions of children of unprivileged families in rural areas to contribute household labor in terms of grazing of cattle and requirements of formal learning in schools. As a result, the First Charwaha Vidyalaya had been opened at Turki near Muzaffarpur on December 23, 1991 that had thereafter got mushroomed at multiple locations in combined states of Bihar and Jharkhand.

In essence, the scheme of education of children born in unprivileged families had been largely guided by certain objectives with following interpretations –

1. Universalization of education by bringing children into the fold of the formal education in rural areas

2. Simplified curriculum by relaxing rigidity in frameworks of formal learning
3. Integration of learning and economic compulsions of children by ensuring facilitations for grazing concerns in school premises
4. Promotion of equality of educational opportunities in the society to break vicious cycle of discrimination, marginalization and exploitation
5. Development of an innovative pedagogy in domains of academic curriculum to suit needs and aspirations of the rural life.

Conceptualizations of universalization of the formal education in Bihar through the Charwaha Vidyalaya was however experimental but widespread. As evident, the state government, under the leadership of Lalu Prasad Yadav, had opened over hundreds of Charwaha Vidyalayas particularly at rural locations within a very short period of time. As such, certain underlying features had largely contributed to popularity of the Charwaha Vidyalaya among the public within the country and abroad –

1. Facilitation for learnings of children and pasture lands for cattle in school premises to bring children of unprivileged families in folds of formal learnings
2. Adjustable school hours according to grazing schedules of cattle to ensure balance between learning and grazing compulsions of children
3. Recruitment of educated youths locally available in the neighborhood to teach children catering needs of children
4. Incorporation of basic literacy, numeracy and general awareness in folds of the academic curriculum to promote functional education in contrast to rigid syllabi
5. Facilitation for both monthly and daily stipends of rupees 09 and 01 respectively for children to encourage their presence in classrooms

In the wake of a unique blend of considerations for solving both learning and grazing compulsions, the particular had in initial phases climbed the greater height of popularity and acceptance in the society. As a result, researchers, academicians and international organizations across the globe had not only got fascinated with the particular way of simplification of the formal education introduced by Lalu Prasad Yadav but also visited multiple Charwaha Vidyalayas to observe and experience objectives, functioning and achievements of such Charwaha Vidyalayas in the society. Among all listed achievements, following had been more forerunner -

1. Increment in gross enrollment ratio of children by ensuring educational access to so far deprived children born to unprivileged families who otherwise might have been illiterate for want of formal education
2. Inclusion of marginalized sections of the society in folds of the formal education
3. Promoted awareness among the public towards necessity and relevance of education through emotional and appealing slogans contributed to a sense of empowerment among them
4. Inspired debates and deliberations in public discourses on alternative ways of formal education to encourage enrollment and retention of children
5. Emerged as a symbol of transformation of the formal education into a right of the common public rather than remained a tool of privileged families in the society

Despite initial success and popularity among the public, the particular scheme, intending to bring children born to unprivileged families in the society into folds of the formal education, could not sustain for a longer duration in the backdrop of consistent criticisms especially in later phases of the leadership of Lalu Prasad Yadav from different corners of political and social leadership on following accounts -

1. Compromised quality of learnings among children due to lack of physical infrastructures and well sophisticated and trained teachers
2. Over emphasis on basic learning of academic contents resulted into severe crisis of employable skills and vocational learnings among children
3. Accused for being more symbolic and less substantive in outcomes on evaluation
4. Recognized by political opponents as a political experiment to consolidate political base among unprivileged and backward sections of the society

5. Inadequacy in number of such schools to cater educational needs of all children born to unprivileged families across the state

The initial popularity of the specific scheme of education, as a result of consistent criticisms from political opponents accompanied by non-sympathetic and non-cooperative bureaucrats, had sooner or later begun to fade at par with the intensity of such criticisms even during later phases of the leadership of Lalu Prasad Yadav. Further, irreversible disintegrations of Charwaha Vidyalayas, on account of a transition of the political leadership to Shri. Nitish Kumar in 2005, had however got a further boost leading to an ultimate closure.

Review of Literature

Narayan, Santosh (2013) has endeavored to share his experiences about the Charwaha Vidyalaya at Kamre-jhiri of Kanke block published his article in the Pioneer. As such, he has stated that the Charwaha Vidyalaya, inaugurated by Lalu Prasad Yadav in 1994, had been initially quite popular among unprivileged sections and therefore brought children in masses to the formal education. However, premises of the Charwaha Vidyalaya had been gradually turned into dumping grounds for garbage and cow dungs with passage of time resulting into an ultimate failure in achieving of objectives.

Sengupta, Joy (2010) has stated in an article published in the Telegraph Online wherein he has mentioned that the Charwaha Vidyalaya, once identical with a dream project of Lalu Prasad Yadav, is now remembered as a run-down building in the backdrop of devoid of financial aids and co-operations from the political leadership under Nitish Kumar. He has also incorporated that villagers are still optimistic for its revival post transition in political powers.

Singh, Shweta (2020) has comprehended in her article published in the Times Now Hindi that Lalu Prasad Yadav's conceptualization of education of unprivileged children through Charwaha Vidyalayas had not only drawn attention of global leaders but also simplified access to the formal education among unprivileged children. As such, arrangements were facilitated not only for education and stipends but also for cattles in school premises. Unfortunately, initial popularity and success of the Charwaha Vidyalaya had soon got faded away with time.

Objectives

The research article has propositions to accomplish the following objectives -

1. To explore necessities inspired for introduction of the Charwaha Vidyalaya model of formal education
2. To discuss objectives expected to be achieved via the Charwaha Vidyalaya
3. To analyze nature of education and other facilities among children provided in the Charwaha Vidyalaya
4. To comprehend such reasons that brought the vision of the Charwaha Vidyalaya to an ultimate failure

Hypotheses

Following hypotheses have broadly defined contours and structures of the study -

1. The Charwaha Vidyalaya has sowed seeds of motivation among unprivileged sections towards education of children
2. Continuous criticisms within diverse sections of the society across the state and country have paved a way for the failure of the Charwaha Vidyalaya.

Research Methodology

Having similar merits of the descriptive research, the research paper is more or less descriptive in nature that predominantly comprehends secondary information published in articles of multiple newspapers, journals and magazines. However, significant quantities of primary information have also been collected through an application of the random sampling to acquaint with additional information. Thereafter, both primary and secondary information have been together refined, processed and analyzed prior to drawing of inferences so to avoid even least possibilities of imposition of self-prejudices.

Findings

Referring to mindful interpretations of both primary and secondary information, the vision of education of unprivileged sections through Charwaha Vidyalayas, despite strange in nomenclature and peculiar in pronunciation, was nevertheless blessed with far reaching objectives requiring arrangements for teaching-learning exercises along with feeding requisites of domestic animals at the same place. In addition, provisions of daily and monthly stipends and multiple slogans in regional dialects had also been instrumental in appealing the conscience of unprivileged sections as well as poverty ridden families for formal education of their children. As such, Charwaha Vidyalayas, despite remained a short lived and controversial scheme of education, had not only simplified learning exercises but also made the formal education an easy access among so far unprivileged children in the society. As a result, both gross enrollment and school retention rates of children had also got boosted in the state during that phase.

The first Charwaha Vidyalaya, based on initial popularity, had therefore resulted into mushrooming of that particular at various locations across combined territories of Bihar and Jharkhand. However, the particular scheme of education could not sustain for a long in the backdrop of unfortunate incidences of popular criticisms, indifferent bureaucrats, unsympathetic teachers and ignorance of the political leadership. With passage of time and change in the political leadership in the state, the particular scheme of education was ultimately replaced other ones.

Conclusions

The conception of formal education through the Charwaha Vidyalaya was filled with both inspirations and cautions. As such, it, on the one hand, had been an effective initiative of Lalu Prasad Yadav to simplify and democratize formal education based on grass-root realities of rural areas so to meet a visionary dream of Karpoori Thakur. In essence, the Charwaha Vidyalaya had not been mere a school of learning, rather also symbols of a radical reorientation of formal education, equity and empowerment especially among unprivileged sections of the society. Unfortunately, its failure, in facilitation of qualitative and sustainable education, had however been on the account of limitations of short-term and populist solutions and non-co-operation from various stakeholders in the society on the other hand. Although, the Charwaha Vidyalaya, despite failed in fulfilment of predetermined aspirations, had been an attempt to promote formal education along with preservation of livelihoods among unprivileged families.

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Role of Guru Nanak Dev Ji in Sikhism

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Abstract:

Guru Nana Dev founded Sikhism, which established the core principles of unity of God (Ek Onkar), equality, selfless service, honest living, and meditation on God's name (Naam Japan). He advocated equality for all people regardless of caste, creed or gender and promoted universal brotherhood. Guru Nana Dev Ji challenged the caste system and promoted social justice; his teachings are compiled in the Guru Granth Sahib, and he charted a unique spiritual and moral path for millions. He was the first of ten Sikh Gurus to establish a new religion. He was a philosopher and social reformer who challenged the deeply entrenched caste system and communalism of his time. This research paper explores the role of Guru Nanak Dev Ji in Sikhism.

Key Words: Religion, Sikhism, Guru Nanak Dev Ji.

Introduction:

Guru Nanak spent his final years in Kartarpur. It was in Kartarpur that Guru Nanak laid the foundation for the new religion, Sikhism, and initiated the Guru ka Langar ("Guru's Community Kitchen"), establishing it as a major tradition of service and community. Although he initially lived a conventional life—marrying in Sultanpur and working as an accountant—his quest for truth remained strong. He is neither an incarnation of God nor a prophet. He is an enlightened soul. The third theory is that Guru Nanak is an incarnation of God. Many Sikhs including Bhai Gurdas, Bhai Veer Singh, Santokh Singh have supported it and Guru Granth Sahib also supports it. Guru Nanak Dev Ji was the founder of Sikhism. He was a spiritual leader, philosopher, and social reformer. His teachings laid the foundation for a religion that emphasizes equality, selfless service, and devotion to one God. Guru Nanak's life and legacy continue to inspire millions worldwide.

Guru Nanak was not only a spiritual leader but also a transformative messenger – a symbol of love, equality and justice in an era deeply divided by social inequality, religious conflict and caste discrimination. Guru Nanak's most famous teaching is that there is only one God, and all human beings can reach God directly without any rituals or priesthood. His life and teachings continue to light the way for those who seek a just and compassionate world. His teachings were preserved through 974 hymns, which were later compiled into the Guru Granth Sahib, the holy scripture of Sikhism. He received education from both Hindu and Muslim gurus and was exposed to diverse religious experiences. The Three Pillars of Sikhism are the duties that all Sikhs must follow. They were formalized by Guru Nanak and can be summed up in three words: prayer, action, and charity.

He met Mardana, with whom he initiated community singing and the langar tradition, promoting social equality. Nanak often meditated in solitude and at the age of about twenty, he attained divine enlightenment. Guru Nanak Dev, the revered founder of Sikhism, preached a message centred on love, compassion, and unity. He emphasized the belief in one supreme God and advocated for the equality of all individuals, irrespective of their religion or social status.

Guru Nanak's relevance lies in his timeless message of universal brotherhood, equality (regardless of caste, creed, gender), honest living, selfless service, and devotion to one formless God, principles that directly address modern societal ills like inequality, corruption, and spiritual emptiness, through institutions like the Langar (free kitchen) and practices like *Naam Japo* (meditation) and *Kirat Karo* (honest work) that promote compassion, integrity, and social justice.

Guru Nanak's teachings

- There is one God.
- God is without form or gender.
- Everyone has access to God.
- Everyone is equal before God.
- A good and holy life is a life lived within a community, through honesty and care for others. Religious rituals and superstitions are without value.

Role of Guru Nanak Dev Ji in Sikhism:

Guru Nanak is known for his political, social and spiritual beliefs, which were based on love, equality, fraternity and virtue. He traveled to far off places and spread the message of 'one God' and God constitutes the eternal truth and he resides in his creations. Guru Nanak's importance results not just from his inspirational teaching but also from the practical basis he provided for a new religious movement: he established a community of his followers in Kartarpur and he appointed a successor, Guru Angad, on the basis of his devoted service. Guru Nanak is known for his political, social and spiritual beliefs, which were based on love, equality, fraternity and virtue.

He travelled far and wide and spread the message of 'One God' and that God is the eternal truth and resides in his creations. Through his contact with diverse cultures and religions, Guru Nanak promoted the idea of universal brotherhood and equality, which became the fundamental principles of Sikhism. Guru Nanak presented an agenda of peace, reconciliation and communal harmony to make possible an inclusive society and a just world. He believed that integrity, respect and trust between different communities would bring dignity to all people.

Sikhism, founded on the Nanak's mantra of Ik Onkar (one God), is a monotheistic religion combining the influences of Hinduism and Sufi Islam. His teachings are embodied in Guru Granth Sahib and are very relevant in contemporary times when humanity is passing through all shades of serious conflicts. The Sikh community promotes love, equality, and acceptance for all. Like the American Bill of Rights, Sikh scriptures promote the ideals of equality and freedom to pursue a path of peace and prosperity. Guru Nanak's most famous teaching is that there is only one God, and all human beings can reach God directly without any rituals or priesthood.

Spiritual Leader and Reformer:

Guru Nanak is the founder of Sikhism. He was followed by nine other Gurus. The teachings of many of these ten Gurus are compiled in the scripture known as the Guru Granth Sahib, which is revered today as a "living Guru" in Sikhism.Guru Nanak Dev was the founder of Sikhism. He was a profound spiritual leader and social reformer who advocated monotheism, equality, and selfless service. He taught that true spirituality lay in devotion to one God and love for all humanity. He challenged racism and promoted women's rights. Guru Nanak established a spiritual path centered on practical morality, universal love, and social responsibility, which continues to inspire millions around the world to live lives of compassion, integrity, and devotion.

Guru Nanak Dev Ji's Role was Foundational:

Guru Nanak Dev Ji's role as the founder of Sikhism was fundamental. He established core principles such as the unity of God, equality, honest living, and selfless service, as well as institutions such as the langar (community kitchen) and sangat (congregation). He created a new spiritual path centered on universal brotherhood and righteous living, making Sikhism a distinctive and influential religion. He challenged caste discrimination and promoted women's rights, emphasizing equality and dignity for

all, a radical idea in the 15th century. He created practical ways to live his teachings, such as the *Langar* (free community kitchen) and *Sangat* (holy congregation) for community building. He preached a path of truthful living (*sachiara*) and God-consciousness (*gurmukh*) through a life lived in the world, not renunciation, inspiring millions. His hymns and spiritual insights formed the basis for the Sikh holy scripture, the Guru Granth Sahib. Guru Nanak Dev Ji's role as a "Sikh apologist" primarily reflects his role as the founder of Sikhism and as a revolutionary spiritual and social reformer who challenged the injustices of his time.

Conclusion:

In short, Guru Nanak did not just present ideas; he created a living tradition with practices and principles. Guru Nanak provided his followers with spiritual knowledge and guidance on how to live a moral life, making his role truly foundational to Sikhism. He also promoted women's equality and opposed social injustice. These values became the foundation of Sikhism and continue to guide millions even today. His message focused on creating a fair society based on compassion, honesty and equality. Guru Nanak Dev Ji was not only a religious leader, but also a great thinker and social reformer. His life and teachings centered on honesty, equality, and kindness—values that remain important today. He encouraged people to rise above caste and religious discrimination and create a just and compassionate society. His influence shaped Sikhism and inspired future generations to follow the path of truth and service.

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Gurbani Explanation of Sant Kartar Singh Ji

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Abstract-

Gyani Sant Kartar Singh fearlessly spoke out against the distortion of Sikh principles and defended the sanctity of the Sri Guru Granth Sahib, even against political figures, and highlighted the fundamental principles of Sikhism. His own life, filled with constant service and devotion, served as a living commentary on the principles he taught, inspiring devotion and action. This research paper explores Sant Kartar Singh Ji's interpretation of Gurbani.

Introduction:

Guru Gobind Singh Ji of Damdama Sahib After staying at that place for nine months and nine days, he got the form of Guru Granth Sahib Ji written by Bhai Mani Singh Ji. Guru ji also explained the meaning of Gurbani at this place itself. Of these, forty-eight Singhs recited the entire artha from Guruji. Out of these forty-eight Singhs, two traditions of meaning came from Baba Deep Singh Ji and Bhai Mani Singh Ji. She left. SantKartar Singh ji was in 3rd place after Baba Deep Singh ji. The second branch which is running in Bhai Mani Ji's Sant Ameer Singh Satho Ki Gali, Amritsar. In this pamphlet we will discuss about the life of SantKartar Singh Ji and his contribution in the interpretation of Gurbani. Describing.

SantKartar Singh ji was born on 4 October 1932. Baba Jhanda Singh's house at the holy house of Mata Labh Kaur, Kukhon village, old Bhure (भूराकोहना) tehsil. The incident occurred in District Lahore which is now in Tehsil Patti, District Amritsar. Kartar Singh ji was born in a Gurmati environment. Your father was a staunch Akali and a lover of the Guru's house, a devotee of Nitnemi and Kirta, and a devotee of chanting the name of Guru. The divisions were about to spill over. The same values were adopted by his son Kartar Singh. You learned to read Gurmukhi from village Gurmukh elder Baba Baga Singh, studied till eighth standard. Received at Khemkaran School. While coming to school, he used to recite 25 lessons of Japuji Sahib. After completing 9th and 10th from National High School, Bhikkhiwind, he completed F.A. from Khalsa College, Amritsar at the age of 16. Did it at an early age. 1958 AD He joined the Bhinderon group and continued studying Taksali till 1964.

Gurbani Explanation of Sant Kartar Singh Ji:

One of the most valuable services of SantKartar Singh Ji towards his community is the prayers of Sri Guru Granth Sahib Ji because Some people who were loose from Gurumati aspects propagated that the Mangal Ragas of Shri Guru Granth Sahib Ji To be above and not in. Controversy continued, finally a meeting of SantSamaj was held at Bhinder Kalan in which Sri Guru Granth Sahib Ji was very important. The printing service done by Shiromani GurdwaraParbandhak Committee by Pravana in the form of Damdami Saint It was put under the responsibility of Kartar Singh ji. During this time, some anti-Ragmala people had a discussion with SantKartar Singh Ji that Ragmala is not Gurbani. You left them unanswered. January 1967 AD Sikh sect celebrated the 300th birth anniversary of Sahib Shri Guru Gobind Singh Ji at Takhat Patna Sahib on 25th Celebrated at international level. Saint G. Gurbachan Singh ji, after praying in the congregation after Gurpurab, announced that after us, Dam Dammi The Jathedar of Taksal will be GianiKartar Singh ji. Saint G. You fulfilled this responsibility given by Gurbachan Singh ji with all your heart. At this time fake Nirankaris were active. You fought them bravely. On 3 August 1977, your car met with an accident and you left for Sachkhand on 16 August 1977.

Saint G. Kartar Singh ji's works named 'KhalsaJeevan and GurmatiRahitMaryada' are famous. In this creation, Gianiji has written about SantBishan Singh Ji Murale Wale, Sant Sunder Singh Ji Bhindranwale, Giani A brief description of the life of Gurbachan Singh ji has been given. Principles of Japuji Sahib, rules of Jatha and metaphors and illustrations to give guidance to life as per Gurmati. 50$G9(d While describing the sanskars according to GurmatiRahitMariyada, the greatness of the cases, the greatness of the deeds, Topics like respect for Gurbani, refutation of incarnate Gurus etc. have been touched upon.

"श्रीगुरुग्रंथसहाबीजीस्टीकतकसालश्रीदम्दमासहाबी (पोठीपहली) श्रीजपुजीसहाबी, श्रीRahrasi Sahib and Shri KirtanSohila" This book is a great work of SantKartar Singh Ji in which He has included the meanings of Japuji Sahib, Rahrasi Sahib and KirtanSohilaBani with Sakhis. At the beginning of the book, after the Mool Mantra, AkaalPurakh, Das Patshahiyaans, Guru Granth Sahib Ji, KhalsaPanth, Gurusikh and Sadh Sangat have been requested. The glory of the name Amrit and the prayer of GianiGurbachan Singh ji has also been done which is related to poetry and swayaya. Is in form. Before starting the book, Gianiji prays to Akal Purush -

Double- Dasni Das Kartar Singh, Chau darshana special.

The mind is always filled with dispassion, when will there be light?

I have taken the name of Guru Katha, but I cannot expand it.

ShesSarada is tired, there is no end.

Even though Gianiji had no idea of his own to write this book, the Singhs of all the groups came together and When requested, you couldn't refuse. Started the work by praying for the beginning of vaccination along with the five Singhs. Before starting the meaning of Japuji Sahib, questions arising in the minds of Jagyaasu like - Japuji Sahib Where pronounced? Questions regarding incarnation of Guru Nanak Sahib? Who was the Guru of Guru Nanak Dev Ji? What was the reason for Guruji taking incarnation? Is Gurbani according to the Vedas or against it? Where did the Gurmukhi letters go? Is Guruji's belief in dualism or non-divinity? Where did the tradition of meanings of Gurbani come from and who broke it? Answers to questions like illustrations, proofs (from Gurbani, Bhai Gurdas Ji's sayings, poetry) It is given through Swayam, DasamGranth, Gurmukh Prakash etc.

Gyaniji has emphasized on the correct pronunciation of 't', because many people also pronounce it as 'Ekonkar' or एकुंकारओंकार. Are chanting. Examples regarding the pronunciation of 'ੴ' have been given in Gurbani, Bhai Gurdasji's verses and KabitSwayam.

Omkari Brahma Utpatie ।।OmkaaruKiyaJiniChithie।।

Omkari cell "जुगभे।। Omkaribedanirmayee।।

Omkaarakaruchalitu createde।।

There is no shelter for one's bed.

सब्दसुरतिसाधसंगतिसमावै।।

Apart from the above references, the pronunciation of 'ੴ' is clarified on the basis of sectarian meanings, experience (argument or thinking). ਕੀਤਾਹੈ। The meaning of the original mantra was determined on the basis of various examples, metaphors, proofs and questions.

Conclusion:

Sant Giani Kartar Singh Ji Khals explained Gurbani through powerful *Katha* (discourses) focusing on deep understanding (*Santhia*), correct pronunciation, and embodying Sikh principles, emphasizing selfless service (*Sewa*), spiritual effort, and defending righteousness against falsehoods, inspiring millions to live a life dedicated to Guru's teachings, as seen in his talks available online and through organizations inspired by him.

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Cultural Tourism in South and Southeast Asia Shifting the Episteme of Sustainability and Constructing Re-engagement for Revitalizing Partnership

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Abstract

Climate change has prompted a discussion over sustainable development, which in turn has initiated several worldwide reforms. Amidst these transformations, the nexus between cultural tourism and regional cooperation emerges as a pivotal arena for exploration. This article aims to scrutinize how the cultivation and preservation of cultural heritage can catalyze enhanced regional cooperation in South and Southeast Asian countries. It will analyze how cultural commodification was done by the neoliberal market, that is profit-oriented only and not sustainable at all. With this market mechanism, the tourism sector faces impediments such as issues of autonomy, loss of culture, unequal and skewed benefits, etc. Sustainability lies in the indigenous tradition and culture that promotes a harmonious balance between development and the environment. The notion of 'developmentality' devastated the natural resources and culture of the global South. Socio-cultural sustainability is aligned with sustainable development and South and Southeast Asian countries projecting alternatives to this developmentality of the West with renewed convergences between states and peoples through soft power approaches, revisiting historical interactions, exploring new markets, mutual economic interests, and addressing common strategic concerns and changing the episteme of sustainability. The rising tourism activities and recollection of historical and cultural linkages have energized the ideological connection of the "Suvarnabhumi" (the land of gold referred to in ancient Indian texts). Recently, the meeting endorsed the ASEAN-India Tourism Work Plan 2023-2027, which recognized key focus areas within the ASEAN Economic Community (AEC) for 2023, including circular economy and decarbonization, digitalization, and ecotourism. The ASEAN-India National Tourism Organizations are urged to pinpoint collaboration opportunities aligned with these priorities for future joint efforts between their countries. India continuously plays a pivotal role in fostering regional tourism within organizations like the South Asian Association for Regional Cooperation (SAARC), the Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation (BIMSTEC), and the Bangladesh, Bhutan, India, and Nepal initiative (BBIN).

The South and Southeast Asian countries have large potential for tourism because of their beautiful sceneries, rich heritages, and culture. From spiritual tourism to adventure tourism, it has been nurturing its uniqueness yet engaging with socio-cultural dynamics. This research article will not only revitalize the industry but also safeguard the socio-cultural fabric of the destinations and socio-cultural sustainability is aligned with sustainable development that constructing new frameworks for engagement to breathe fresh life into partnerships within the region.

Keywords- Climate change, Cultural tourism, Sustainability, Developmentality.

Introduction

The enchanting landscapes, vibrant traditions, and rich cultural tapestry of South and Southeast Asia have long captivated the imaginations of travellers worldwide. Cultural Tourism in South and Southeast Asia seeks to analyze its influence on the concept of sustainability as well as to reveal the many dimensions of its attraction. Beyond mere exploration, this research paper studies the domains of constructive re-engagement to reinvigorate collaborations that could ultimately mould a future that is more sustainable and cooperative. As we explore the complexities of cultural tourism and its impact on the evolving concepts of sustainability and the creation of significant re-engagements throughout this culturally rich and diverse region, we invite you to join us on this thought-provoking journey.

The sustainability practices popularized by the West have failed to achieve its goals. Globalization and the dynamics of markets have a significant impact on climate change because of the increasing carbon emissions caused by deforestation, resource extraction, and international trade and transportation. This research paper presents the alternative for South and Southeast Asian countries to achieve sustainability through deconstructing the knowledge of the West and projects indigenous traditional practices that are culturally nuanced for true sustainability. This research paper aims to investigate how cultural tourism affects sustainability in South and Southeast Asia. The focus is on shifting perspectives and constructing strategies to revitalize partnerships for sustainability. The ideological connection also holds cultural and historical significance in the context of South and Southeast Asian countries. It symbolizes a shared story, historical trade, and cultural exchanges that unite these nations and add to the region's sense of connectivity. The idea supports the notion that the different countries of South and Southeast Asia have a common past and are united culturally.

Literature Review

Cultural tourism deals with the individuals and groups traveling to experience and appreciate the cultural heritage of a destination. South and Southeast Asian countries have presented a rich and diverse heritage in the region. The historical sites, traditional arts, festivals, and distinctive cultural experiences that nations like India, Thailand, Cambodia, Vietnam, and other South and Southeast Asian countries offer engagement with the customs of the community and foster cross-cultural understanding and preservation. Through this type of tourism, these countries have the vision to ensure sustainability which led to enhanced regional cooperation among them. The renowned temples of Angkor Wat, Pagan, Borobudur, and Prambanan showcase clear indications of the extensive influence of Indian art and architectural styles within these well-known Southeast Asian structures. India's civilization and cultural influence extended globally through trade, establishing strong foundations in Southeast Asia, notably leaving a lasting impact on various dance forms in the region (Observer Research Foundation, 2017). On the other side, the Western perspectives on tourism development and sustainability are not ethically oriented but motivated by profit-making only which is not sustainable at all.

'Development' as a Contested Concept

According to Sharpley and Tefler (2008) the present complex relationship between various elements of the international tourism system and transformation in the global political economy makes the 'development' a contested term. The developing countries are suffering from the balance of payment deficit. There are obstacles in the way of putting sustainable development into practice as well as in the way that many developing countries embrace the idea since they see it as a continuation of Western imperialism. Deb (2009) also stresses 'developmentality' and says that this mindset has devastated the natural resources of the earth as well as the traditional methodologies to conserve the environment and created an unjust system. This Eurocentric perspective involves hierarchical placement of mind over body, European culture over other cultures, and modern over traditional. According to Kothari, Salleh, Escobar, Demaria, and Acosta (2019) the 'development' is seen as linear, unidirectional, material, and financial growth by the West. It lacks justice and equity, common and collective ethics, and ecological sustainability features.

Market Mechanism of Tourism and Sustainability

In the context of tourism, McDonaldization manifests in the standardization of travel experiences, where destinations and services become homogenized, offering familiar and predictable encounters for tourists. "McDonaldization has succeeded because it offers consumers, workers, and managers efficiency, calculability predictability" (Ritzer, 1993, p. 13). This encourages the tourism sector to further the cultural commercialization of the locality's history, customs, or artifacts as consumer goods, frequently to attract tourists and produce financial gains. It brings up issues with possible cultural exploitation and distortion as well as the necessity to find a balance between upholding authenticity and satisfying visitor expectations. This continuous mindset of developmentality leads to the drastic impact of climate change that urges for international transformations and the concept of 'sustainable development' was popularised in Brundlant Report in 1987 named report of the 'World Commission on Environment and Development: Our Common Future' which defines "sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Report of the World Commission on Environment and Development: Our Common Future, 1987, ch. 2). This is based on the three-dimensional model of sustainable development that is social, economic, and ecological which lacks the culture. This model is biased by the economy and tries to universalize the idea of sustainability. As Lansing and Vries (2007) say this sustainable tourism term does not have any ethical perspective but it is merely a 'Marketing Ploy' to attract the morally conscious tourist. P. Ghosh and A. Ghosh (2019) say that responsibility for conservation and tourism development is a local subject. Both also urge that complex governance structure is the hurdle in managing tourism development and good tourism governance in local communities and there is an emerging issue of unequally shared benefits. In their study, it was observed that ecotourism is not a "Panacea" because it is based on neoliberal, market-based instruments for biodiversity and environmental protection which lack the knowledge gaps in theory and provide policy suggestions. Good tourism governance should be viewed from the local perspective so that responsibility for conservation and tourism is in the hands of local communities to sustain their social-cultural identity. But the neoliberal conservation model is motivated by profit-making that includes unfair steps such as land-grabbing, exploitation of natural resources, and accumulation of capital. On the other hand, sustainability lies in the indigenous tradition and culture.

Decolonizing the Episteme of Sustainability through Indigenous Knowledge System

South and Southeast Asian countries have lots of methodologies for the protection of the environment and sustainability. Their rich and diverse culture is the crucial element that hinges on integration through the pursuit of sustainability. For example, Santarita (2022) studied that in the realm of food, the transformation can be seen as an ongoing process of decolonization. Colonial cuisines, along with their subsequent hybrid nature, have taken on intriguing forms, providing enhanced or distinctive flavours compared to the original. This is achieved through the exploration of re-indigenizing materials and ingredients. The combination of ethnicity, environment, and experiences, represented by the Trinitas, has effectively shaped the preferences of the Southeast Asian palate. We have entered in a food chain which is dangerous created by the modern West that was focused on the continuous growth of benefits by using hazardous chemicals such as pesticides, herbicides, toxins, DDT, etc. The Nayakrishi Andolan (New Agriculture Movement) in Bangladesh presented its sustainable idea of agriculture and food chain that is based on biological civilization. The idea of 'Shahoj' was popularised as a tool for thinking and learning. It has deep roots in the spiritual tradition of Bengal, signifying an innately clear-cut and uncomplicated way of being in the cosmos. Philosophically speaking, it disapproves of hierarchies between the sensual, intellectual, and imaginative faculties and promotes a single method of responding to both internal and exterior realities. 'Shahoj', translated literally, is an exploration of the bio-spiritual potential of human societies to rise above oppressive and dehumanizing existence and strive for peaceful cohabitation with the actual material world (Akhtar, 2017). Along with this, many localized ideas, customs, cultures, practices, and knowledge systems in South and Southeast Asian countries have the true path of sustainability. By engaging these ideas and culture with our foreign policy we can shift the episteme

of sustainability. Quintana (2020) also suggests that there is a requirement for localized planning that gains approval from all stakeholders in tourism, ensuring it aligns with both economic feasibility and environmental sustainability, maintaining a manageable balance.

Local governments of South and Southeast Asian countries, who are frequently at the vanguard of sustainability projects, can cooperate and partner internationally to exchange policy frameworks, technology innovations, and best practices. These countries have an ethical philosophical basis for ecology such as India nurturing the idea of 'Vasudhaiv Kutumbkam' (to see the world as one family), 'Swaraj' meaning self-reliant and self-governance. If we look at the tourism sector it has launched a social awareness campaign 'Atitho Devo Bhava' meaning be the one from whom the guest is God. This is for advertising the stakeholders and public to sensitize tourists and also for good behaviour towards tourists, ensuring cleanliness, hygiene, and safety (GOI, Ministry of Tourism, 2022). Local towns can access a plethora of information and resources by forming sister-city partnerships or taking part in international networks, which promotes cross-border collaboration for sustainable development. To liberate knowledge production regarding the global context outside of Euramerica from the confines of elitist, male-centric positivist thinking prevalent in modernist ideologies of the 19th and 20th centuries, post-colonial and feminist criticisms are necessary (Derichs, Kalia, Knorr, & Fleschenberg, 2023). Their ideas and methodology truly suit sustainability and shift the episteme of sustainability from the West to the indigenous tradition and culture of South and Southeast Asian countries.

Strengthening International Collaboration in Tourism

Regionalism in South Asia promotes economic interdependence and the establishment of shared values and norms. New regional initiatives spearheaded by India's Look East Policy and then converted into Act East Policy evolved in South Asia in response to criticism characterizing the South Asian Association and Regional Cooperation (SAARC) as a "paralysed" institution and dismal results in intra-regional commerce. With the backdrop of growing global markets, these initiatives— Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation (BIMSTEC), Mekong Ganga Cooperation (MGC), Indian Ocean Rim Association (IORA), and Bangladesh, Bhutan, India, Nepal Initiative (BBIN) among others—aimed to promote interregional trade links and communication while offering chances for technological specialization and economic growth. It was anticipated that these modern institutions would promote unity among participating nations and foster prosperity for all (Paul, 2020). These initiatives have the potential to result in a variety of cultural exchanges, cooperative tourism promotions, enhanced infrastructure, cultural diplomacy, preservation of cultural heritage, development of cultural tourism circuits, and inclusive tourism policies through increased inter-regional dialogue and economic cooperation. Travelers may have a more connected and rewarding cultural experience as a result, of encouraging regional collaboration and sustainability in the travel and tourism industry. This also leads to resolving the security dilemma of the member states in this region. Gurudev Rabindranath Tagore, the renowned Indian poet, novelist, and philosopher, played a significant role in the intellectual exchange of ideas during his travels to Southeast Asia, China, and Japan in 1916, 1924, and 1927. As the first Asian Nobel Laureate, Tagore advocated for concepts such as freedom, fraternity, and universalism, transcending artificial boundaries and contributing to the emerging intellectual trend of "one Asia." His university, Visva-Bharati in Shantiniketan, was a reflection of the historical ties between Buddhist ideas of brotherhood and peace. Through lectures and trips to other Asian and Western locations, Tagore's views were spread, having a long-lasting effect on the intellectual scene (Battacharya, 2020).

By bringing together foreign delegates, particularly those from ASEAN member countries, the International Tourism Mart, which took place in Imphal, Manipur, in November 2019, promoted links between Northeast India and Southeast Asia. The 8th ASEAN-India Tourism Ministers Meeting was place virtually in February 2021, showcasing India's SAATHI (System for Assessment, Awareness, and Training for Hospitality Initiative) project for training and assessment in hospitality. Promoting the Buddhist Circuit was another goal of the gathering, hoping to draw more travellers from ASEAN to India. To increase traveller traffic between Southeast Asian nations and India, the Plan of Action (PoA)

for the ASEAN-India Partnership (2021–2025) emphasized the need for private sector involvement in the tourism sector (Kundu, 2021).

The ASEAN-India Tourism Work Plan 2023-2027, comprising 17 activities, has been endorsed to support the ASEAN Tourism Strategic Plan (ATSP) 2016-2025, ASEAN Tourism Marketing Strategy (ATMS) 2021-2025, Post-COVID-19 Recovery Plan for ASEAN Tourism, ASEAN Framework on Sustainable Tourism Development, and Phnom Penh Declaration on Transforming ASEAN Tourism. The meeting emphasized ASEAN's strategic priorities for 2023, including digitalization, ecotourism, circular economy, and decarbonization. Going forward, ASEAN-India National Tourism Organisations are encouraged to explore areas of cooperation aligned with these priorities (Vietnam National Authority of Tourism, 2023). India is actively constructing re-engagement with ASEAN through the ASEAN-India Tourism Work Plan 2023-2027. The five-year plan aligns with ASEAN's strategic priorities, supporting initiatives like the ASEAN Tourism Strategic Plan and Post-COVID-19 Recovery Plan. India aims to promote sustainable tourism practices, enhance connectivity, and encourage collaboration among National Tourism Organizations. This comprehensive approach serves as a diplomatic tool, fostering stronger ties and contributing to regional stability and economic growth. Emphasizing the ASEAN Framework on Sustainable Tourism Development, India seeks to integrate sustainable practices in tourism activities, ensuring the long-term well-being of both the industry and the region. To promote intra-regional tourism, the ASEAN Economic Community (AEC) intends to keep operating its Low-Cost Carriers (LCC) airline network. From 2019 to 2024, this effort is expected to promote intra-regional tourism arrivals within ASEAN at a Compound Annual Growth Rate (CAGR) of 5%, reaching a total of 56.6 million travellers by that time (Kundu, 2021).

India's Prime Minister Narendra Modi in 2014 upgraded Look East Policy to Act East Policy during the 9th East Asia Summit (EAS) held at Myanmar in November 2014. The Look East Policy had only one dimension which economy and the focal point was only Southeast Asian countries while the Act East Policy is a multi-dimensional approach and expands its focal point from Southeast Asia to East Asia. Experts claim that India places a greater emphasis on the 3 Cs—Culture, Connectivity, and Commerce—under the Act East Policy. This shift is likely to have a positive impact on tourism, promoting increased visitor exchanges, cultural interactions, and economic partnerships. India has bolstered its ties with important countries such as Japan, Australia, Vietnam, Indonesia, Malaysia, the Republic of Korea, and ASEAN to capitalize on the benefits of the "Act East Policy." India has demonstrated a strategic approach to enhancing regional cooperation and partnerships by actively cultivating tight ties with all of the countries in the Indo-Pacific region (Kotecha & Khatik, 2018). Increased collaboration with surrounding nations will result in cooperative projects for cultural heritage preservation, responsible tourism, and environmental conservation. The focus on proactive participation and teamwork raises the possibility of tackling sustainability issues together and enhancing the region's long-term well-being. In February 2018, Prime Minister Narendra Modi emphasized the Northeast region of India as at the heart of the Act East Policy during the Global Investor Summit held in Guwahati. For the summit, he came up with the slogan "Advantage Assam: India's gateway to ASEAN," highlighting the strategic importance of Assam in promoting economic ties with the ASEAN nations (Kotecha & Khatik, 2018). India's foreign policy is probably helping to create a more globalized and comprehensive view of sustainable practices that include social, environmental, and economic as well as cultural aspects by strengthening links with nations in East and Southeast Asia.

Future Direction: Toward a Sustainable and Engaging Cultural Tourism Landscape

There is a need for a genuine focus on sustainability with special reference to socio-cultural aspects because, in the South and Southeast Asian context, the meaning of tourism is different from the West. After all, we have nurtured our culture and traditions. India has four major religions that are Hinduism, Buddhism, Jainism, and Sikhism, plus influenced by Islam and Christianity and also has different tribes having a vast number of heritages, sites, and cultures. India also glorifies its freedom fighters and social reformers. That is why King (1959) said, "TO OTHER COUNTRIES I may go as a tourist, but to India, I

come as a pilgrim." India has the potential to guide the world and it is on its way to becoming the Vishva Guru. Yet, some natural impediments are evolving on its path but it's not going back and considering it as an opportunity to reimagining the future. Enhanced cooperation with South and Southeast Asian countries leads India as a Superpower by enhancing the flow of soft power through cultural tourism. India's tradition of non-violence and pluralism, diversity and tolerance, its Yoga and Ayurveda, and classical dances are popularized all over the world. We see increasing international recognition of India's cultural and civilizational heritage. Also, Southeast Asia is home to a plethora of religious festivals, pilgrimage sites, and events that attract travellers from all over the world. The region attracts both domestic and foreign tourists because of its ancient civilizations, rich cultural diversity, striking archaeological monuments, and historically significant religious locations. Choe and O'regan, (2015) suggest strategies that overcome barriers to developing religious tourism in the region. He suggests that the ASEAN nations must create a bottom-up strategy, include transparent goals established through community input into national programs, and outline their goals. ASEAN's role should expand beyond economic considerations to encompass the dynamics among diverse religions, ethnicities, and cultures. Utilizing religious tourism could serve as a significant instrument in the subsequent regional integration of this area. One of the ASEAN members that is Vietnam now holds the prestigious title of "World's Leading Heritage Destination 2023," establishing itself as the top historic destination worldwide. The country received this esteemed award at the World Travel Awards. Vietnam's rich cultural legacy draws a lot of tourists in addition to its stunning natural landscape of mountains, forests, and islands, which significantly increases the country's appeal in the travel and tourism industry (Outlook Traveller, 2024).

The examination of sustainability dimensions is crucial for fostering responsible tourism practices and ensuring the longevity of cultural and natural resources. The understanding of how to build re-engagement strategies for partnership revitalization will help in developing workable solutions to problems and encouraging cooperation between stakeholders.

Methodology

This research paper employs a rigorous and comprehensive approach to conducting a critical literature review. The primary aim of this review is to elucidate the research objectives by synthesizing existing knowledge and identifying gaps in the literature related to cultural tourism in South and Southeast Asia. The review process involved systematically searching for and analyzing relevant academic articles, books, reports, and other scholarly sources to establish a robust theoretical foundation for the research.

The first step in the literature review process was to define key terms and concepts related to climate change, cultural tourism, sustainability, developmentality. This step ensured a clear understanding of the scope and focus of the research. Next, a systematic search strategy was developed to identify relevant literature from various sources, including academic databases, libraries, and online repositories. The search strategy included keywords and phrases related to climate change, cultural tourism, developmentality, and sustainability.

The identified literature was then critically evaluated to assess its relevance, reliability, and validity. This critical appraisal helped in identifying key themes, trends, and theoretical frameworks within the literature. These findings were used to develop a conceptual framework that guides the analysis and discussion in this paper.

Furthermore, the literature review was instrumental in identifying gaps and limitations in the existing research, which highlights the need for further investigation in this area. This research aims to address these gaps by offering new insights and perspectives on cultural tourism in South and Southeast Asia, with a focus on cultural tourism shifting the episteme of sustainability.

Discussion

Another epistemology of sustainability is created by cultural tourism and indigenous methodologies to conserve the heritage, culture, tradition, etc. of the South and Southeast Asian countries. This research

also presents the idea of how the promotion of cultural tourism flows the soft power and how the South and Southeast Asian countries following these paths that is revitalization their partnership and ensure peace, prosperity, and security in this region. Amiruddin, Normelani, and Budhi's (2022) work focuses on only strategic scenario-based planning for tourists' destination development that constructs predominant roles in sustaining cultural values. P. Ghosh and A. Ghosh (2019) also unravel the ecotourism perspective of market mechanism that is unequal, uneven, and skewed benefits in nature. Both also urge for socio-culturally nuanced ecotourism. This research paper wider the area that discusses culture as well as sustainability and by thematic literature review it proposes cooperation in South and Southeast Asia.

The work of Lansing and Vries (2007) provides interesting arguments about sustainable tourism. It highlights the fragmented, multi-sectoral, private-sector dominated and profit-motivated tourism system that are using the term 'sustainable tourism' to advertise the ethically concerned tourists for the environment. This research paper also criticizes the unsustainable model of neoliberal profit-oriented tourism and also evolves the idea of true sustainability that the South and Southeast Asian countries are nurturing. We already have a knowledge system that discusses lessons learned and best practices that can contribute to sustainability and offer enhanced regional cooperation.

Conclusion

This research paper concludes by highlighting the dynamic nature of South and Southeast Asia's cultural tourism industry. It draws attention to how our notion of sustainability is changing and stresses how partnerships must be revitalized through re-engagement. The integration of sustainability aspects, collaborative tactics, and epistemic changes offers a way ahead for developing ecologically friendly and culturally diverse tourism practices. Decolonizing the knowledge system about sustainability is a crucial arena. There is a need for more study, improved policies, and active participation from a range of stakeholders to guarantee the long-term success of cultural tourism in the area. The results of the study are further complicated by the dynamic nature of relationships in cultural tourism and the impact of outside influences. Acknowledging these constraints is essential for nuanced analysis and to direct future investigations for a more thorough comprehension of the complexity of cultural tourism in the designated areas.

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Role of Christian Missionaries in the Expansion of English Education in India

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Abstract-

It can be assumed that Christian missionaries believed that modern Western English education would weaken people's faith in their traditional religions and lead them to adopt Christian values. The vision of the English missionaries was not limited to literacy alone, but also to bring about moral and religious changes in India in accordance with Christian beliefs and practices. The blend of Western and traditional education in India began during the British period and significantly shaped the educational landscape of the country. English education should be provided in place of traditional Indian education in India because Christian missionaries believed that oriental Indian culture was 'defective' and 'impure'. British Christian missionaries played a key role in spreading English education in India. The British government believed that the English language would spread Western liberal values into Indian society. The British believed that the English language would diminish the role of the Hindi language in India and this was good for the British administration in India. The British government believes that English is a global language and it can provide convenience for working British employees in India. Therefore, British government established many missionaries' English schools and colleges in India by making English the medium of education. Christian *Missionaries* introduced new curricula in modern subjects such as science and mathematics, allowing previously marginalised groups such as women and lower castes to gain access to education. Thus, British missionaries played a key role in establishing thousands of primary schools, hundreds of secondary schools and a large number of high schools and colleges throughout India. During British rule in India, Christian missionaries pioneered female education, which increased literacy rates and provided women with skills for economic independency, improving their social status in society. Although some English people wanted to spread English education for their own benefit, the government was primarily concerned with its own interests. This article attempts to explore the role of Christian missionaries in the spread of English education in India.

Key Words: Missionaries, Christian, English, Education, India.

Introduction

The 19th century saw profound changes in the political landscape of many regions, including the rise of nationalism and the subsequent formation of nation-states. Before British rule, India's education system was based on the guru-shishya tradition for a long time. Unlike modern schools, there were small schools at that time where children were taught Sanskrit, grammar, practical mathematics, economics and account by a local teacher. In the 19th century, Christian missionaries such as Alexander Duff and William Carey established several english schools in all India and especially around Calcutta to provide English education. Christian missionaries established several schools in West Bengal from 1819 onwards, with the aim of providing Western education to the people of Bengal for their socio-cultural improvement. George Pearce established an English school in Durgapur (West-Bengal) in 1827. Christian Missionaries had more success in teaching English in the late 1820s.

The British regime in India had pushed for social and educational reforms following the Charter Act of 1813, which allowed and provided financial support for the spread of English education in West

Bengal. The Serampore Mission and William Carey stand-out as examples of missionary influence in 19th century India. The Serampore Missionaries in West Bengal were particularly active in promoting western english education in India. Missionary English medium schools, which are remnants of the British Empire, are not inspired by egalitarian ideology; their sole purpose is to prepare the minds of children for conversion to Christianity.

Initially, the East India Company (EIC) feared that Christian missionary activities might provoke social unrest in India. In 1783, an act made it mandatory for missionaries to obtain a special license to enter India. The Charter Act of 1813 was a major policy change regarding English medium education in India. At that time, British Missionaries were officially permitted to carry-out religious and educational work in India. *The British* missionaries were parallel agents of modern English education, working alongside with the British state in India. They promoted vernacular studies, printing technology, and women's education, but with a strong religious agenda in India.

The English language was first introduced to the Indian sub-continent by the East India Company as a medium of communication between some Indian person and the East India Company. Then English Christian missionaries taught the natives English so that they could read the Christian script. To meet administrative needs, the British government established English schools, madrasas, colleges and universities in different parts of India to spread English among the natives and create an English-speaking class. Native Indian people became eager to learn English to achieve economic prosperity and higher social status from the British government. Thus the seeds of English were sown in British India and it flourished so rapidly that it is no longer possible to get rid of it quickly.

The British colonial period had brought significant changes to Indian education system. Before British rule in India, Indian education was based on traditional institutions focused on ancient texts. The British East India Company, which was primarily interested in administrative and legal requirements, laid the foundation of modern education in India and brought about significant changes in Indian educational policies and practices. It is a notable fact that Christian Missionaries played an important role in the development of English education by establishing many schools, colleges and professional institutions in India. Christian missionaries introduced a Western-style education curriculum in India, including modern subjects such as science and mathematics, and the medium of instruction was English.

The efforts of Christian missionaries were aimed at promoting literacy among marginalized communities, especially women, and had a lasting impact on India's educational landscape and the rise of an educated elite educated class. The missionaries established thousands of primary schools, hundreds of secondary schools and numerous high schools and colleges throughout India. The Christian missionaries made significant contributions to the spread of literacy and education, especially among marginalised communities, including girls, who had limited access to traditional education systems. The spread of English education created a Western-educated Indian middle class, which later played an important role in the nationalist movement. Christian Missionaries introduced Western-style education that included English language, science, mathematics, history and vocational training—subjects that were generally absent in indigenous Indian traditional education systems such as Pathshalas, Gurukulas, and Muslim Madrasas. Christian missionaries in India recognized the need for education to transform the Indian nation into a modern, educated, urban India. They resolved to eradicate the nation's illiteracy and ignorance through the study of the English language.

Christian missionaries in India played a significant role in the field of English education, including laying the foundation for the modern education system, focusing on girls' education and making education accessible to all communities. Christian Missionaries introduced teaching in local languages, improved teacher training and teaching methods, as well as promoted social reforms, such as opposing evils such as 'sati Partha' and 'child marriage'. It is important to note that the efforts of Christian missionaries were aimed at spreading education as well as values of Christianity. However, Christian Missionaries contributions to English education and social reforms are considered a significant factor in the development of the modern education system in India.

Role of Christian Missionaries in English Education in India:

The Christian missionaries' educational activities and publications, which included English newspapers and magazines, helped to spread western values, ideas and promote rational thinking. *Christian* Missionaries believed that modern western education would weaken people's faith in their traditional religions and lead them to convert into Christian religion. Christian Missionaries approach was not limited to literacy alone but also extends to moral and religious transformation in line with Christian beliefs.

The English Education Act 1835, was a legislative act of the Indian Council. It gave effect to a decision in 1835 by Lord William Bentinck, then Governor-General of the British East India Company, to reallocate economic funds appropriated by the British Parliament to be spent on English education in India. *English* Education in British India began with the initiative of Christian missionaries, who established schools to spread Western knowledge and Christianity values. Later, the East India Company and British administrators began to formulate formal education policy to modify Indian educational system.

Early educational institutions created a class of educated Indians who became vocal participants in the debate over India's educational future. Some people did not encourage English education because they did not see the need to review the social and political condition of India. Others people were concerned about the potential erosion of traditional knowledge systems. This tension would shape educational policy debates for decades to come. Macaulay's main recommendation was to create a class of people who were Indian by blood and colour, but English by taste, ideas, morals and intellect, who could act as intermediaries between the British rulers and the Indian people. In some cases, this led to the development of syncretic forms of Christianity, blending Christian and Indian religious elements.

The diversity of languages and dialects in India was a major inconvenience to its invaders, traders and some Indian native rulers. The Mughal rulers made 'Persian' language as the court language; the Brahmins gave 'Sanskrit' a high status and the British asked everyone to speak English to make things easier. No one was eager to invest time, talent, or resources into developing other Indian regional languages. Christians Missionaries established English medium schools and colleges to spread English education in India, teaching modern subjects and the English language and often giving priority to marginalised groups such as women and lower castes. Christians Missionaries introduced new educational structures, translated texts, and established educational institutions that served as models for reforms and contributed to the growth of a western educated Indian middle class. The missionaries' success in promoting Western-style education contributed to the rise of an English-educated Indian middle class, which later played a key role in the Independence movement.

The story of English education in India is not just about language learning – it is about how colonial power reshaped the intellectual landscape of the entire Indian sub-continent. When British missionaries first set foot on Indian land in the late 18th century, few could have imagined that their educational experiments would eventually transform the way millions of Indians thought, worked, and engaged with the world. This shift was not accidental. It was carefully orchestrated through economic policies, institutions, and ideologies that prioritised Western knowledge over traditional Indian education systems. The educational institutional structures established during this period – universities, colleges, and standardised curricula – reshaped Indian education system after India's Independence. Even today, English remains the language of opportunity and social mobility in India, a legacy of English still continue due to colonial policies.

Conclusion:

The Christian missionary activities in British India were primarily associated with the period of British colonial rule from the 18th to the 20th centuries. Missionaries opened schools and colleges in India in the 19th and 20th centuries, increasing literacy and encouraging women's education, laying the foundations of modern Indian education. English educational missionaries played a key role in bringing

Western values education, science and modern subjects to India in the 19th and 20th centuries.The British period saw the rise of educational reformers in India who challenged social evils such as sati, child marriage, and caste based social discrimination. Western English education played a significant role in promoting rationalism, modernization and scientific thinking in India. Because, at the global level, all the standard written contents have available in English language only. It can be said that English education helped the British rule to create a elite working class to run the Indian administration that could communicate in English and make the governance process more effective. Education under British rule in India not only produced clerks and efficient administrators, but also shaped Indian society in new modern ways. Christian missionaries also played an important role in spreading education in British India, establishing schools and colleges that emphasized western science, literature, and philosophy. Although there were some British persons who wanted to spread education for their own benefits and other side, the British government in India was primarily concerned about its own economic and political interests. Missionaries learned local languages and customs in rural areas and then contributed to cultural and linguistic studies, especially in backward areas. Overall, Christian missionaries established an education system in India that had both advantages and disadvantages, and whose impact is still clearly visible on Indian society and education today.

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Literacy Unleashed: Empowering Minds Through Reading and Writing.

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Abstract

Literacy is a fundamental necessity in the modern world, acting as a vital engine for individual

In today's complex, interconnected world, literacy is the foundation upon which individuals, communities, and societies build their futures. The expertise to read, correspond, and communicate effectually is no longer a luxury, but a necessity for navigating the complexities of modern life. Literacy empowers individuals to acquire knowledge, express themselves, and engage with others, fostering personal growth, social mobility, and economic development.

empowerment, economic prosperity, and democratic participation. While it serves as a gateway to better health and employment, a significant global gap persists, leaving hundreds of millions—including many in developed nations—struggling with basic skills. This deficit reinforces cycles of poverty and limits civic involvement, making the mastery of reading and writing a pressing societal priority.

Effective literacy development relies on a research-backed framework known as the Science of Reading, which emphasizes phonics, fluency, and comprehension. Addressing the literacy crisis requires a unified effort: educators must provide evidence-based instruction, individuals must commit to lifelong learning, and policymakers must secure the funding and resources necessary for community-wide support. Ultimately, literacy is a transformative tool that unlocks human potential and fosters a more informed, equitable society.

Keywords: literacy empowerment, science of reading, socio-economic mobility, civic participation, educational equity, reading comprehension, systemic reform.

The significance of literacy extends far beyond the individual level. It is a cornerstone of democratic societies, enabling citizens to participate fully in civic life, make informed decisions, and exercise their rights. Literacy also drives economic progress, as individuals with strong literacy skills stand more chance at securing better-paying jobs. They also have the more capacity to innovate, and adapt to changing circumstances. Moreover, literacy facilitates social cohesion, promoting understanding and empathy among diverse groups.

Despite its importance, literacy remains an elusive goal for many. According to a study of the United Nations Educational, Scientific and Cultural Organization (UNESCO), approximately 773 million adults worldwide lack basic literacy skills, with disproportionate numbers of women and marginalized communities affected. In developed countries, literacy challenges persist, particularly among disadvantaged groups. The National Assessment of Adult Literacy (2019) reported that over 36 million individuals of employable age in the United States lack basic prose literacy skills.

The consequences of low literacy are far-reaching. Individuals with limited literacy skills are more prone to experience unemployment, poverty and poor health outcomes. The other likely outcome of low literacy rate is that these individuals are less likely to participate in democratic processes, access information, or pursue education and training opportunities. Low literacy levels hinder economic growth, as businesses struggle to find skilled workers and innovators.

In response to these challenges, mastering literacy has become a pressing priority for individuals, educators, and policymakers. Effective literacy instruction, community-based initiatives, and technological innovations hold promise for addressing the literacy gap. By exploring the concept of

literacy, its importance, and strategies for mastery, this paper aims to contribute to the ongoing conversation about literacy education and its transformative potential.

Literacy encompasses various components, including phonemic awareness and recognition, phonics, fluency, vocabulary, comprehension, and writing. Phonemic awareness, ability and capability to recognize sounds within words, is the foundation of reading. Phonics, understanding sound-letter relationships, enables individuals to decode words. Fluency, reading with accuracy, speed, and expression, is essential for comprehension. Vocabulary, understanding word meanings, expands an individual's ability to communicate effectively. Comprehension, interpreting and understanding texts, is the ultimate goal of reading. Writing, expressing thoughts and ideas in written form, complements reading and reinforces literacy skills.

Literacy's impact on individuals and society is profound. Improved education and career opportunities are direct results of strong literacy skills. Literate individuals are more likely to have better-paying jobs, enroll for higher education, and engage in learning processes. Enhanced critical approach and problem-solving skills enable individuals to navigate complex situations and make well-informed decisions. Increased civic engagement and participation foster democratic values and community involvement. Better health outcomes and access to healthcare information empower individuals to manage their health effectively.

Effective literacy mastery requires a multifaceted approach. Individuals can practice consistent reading and writing, engage with diverse texts, and develop vocabulary through context clues and dictionary use. Joining book clubs or discussion groups fosters critical thinking and encourages reading. Utilizing digital tools, such as e-readers and reading apps, provides access to a vast library of texts.

Educators play a vital role in literacy development. Implementing evidencebased reading instruction, such as systematic phonics and phonemic awareness, lays the foundation for literacy mastery. Differentiating instruction to accommodate diverse learners ensures that all students receive tailored support.

Incorporating technology enhances literacy skills through interactive platforms, digital texts, and multimedia resources. Providing opportunities for peer-to-peer reading and writing fosters collaboration and reinforces learning.

Community-based initiatives also promote literacy. Establishing literacy programs for adults and children addresses the needs of underserved populations. Creating reading-rich environments, such as libraries and bookstores, encourages reading and exploration. Organizing community reading events and activities brings people together, promoting a culture of literacy.

Supporting literacy-focused organizations ensures sustained efforts to improve literacy rates.

Effective literacy instruction is grounded in research. The Science of Reading, a comprehensive framework, emphasizes phonics, fluency, vocabulary, and comprehension. Reading Recovery, a widely used program, provides individualized instruction for struggling readers. Literacy coaches and specialists offer expertise, supporting teachers and students.

Addressing literacy challenges requires collaborative efforts from policymakers, educators, and community leaders. Literacy mentorship programs, communitybased literacy centers, and digital literacy resources help bridge the gap. Policy initiatives, such as increased funding for literacy programs and professional development for educators, support systemic change.

Mastering literacy is a lifelong process requiring dedication, practice, and support. By recognizing the importance of literacy and implementing effective strategies, individuals, educators, and communities can work together to promote literacy development and empower individuals to reach their full potential.

The transformative power of literacy cannot be overstated. As individuals acquire literacy skills, they unlock doors to new opportunities, perspectives, and experiences. Literacy enables individuals to navigate the complexities of modern life, participate fully in civic life, and pursue their goals and aspirations.

However, the journey to literacy mastery is not without challenges. Addressing the literacy gap requires sustained efforts, collaborative approaches, and innovative solutions. Policymakers, educators, and community leaders must prioritize literacy education, allocating resources and support to ensure that all individuals have a way towards quality literacy edict.

Ultimately, mastering literacy is a collective responsibility. By working together, we can create a more literate, informed, and engaged society. A society where individuals can thrive, contribute, and reach their full potential.

Mastering literacy is a journey, not a destination. It requires perseverance, dedication, and support. As we strive to promote literacy development and address the literacy gap, we must remember that every individual deserves the opportunity to acquire literacy skills.

The power of literacy is transformative. It has the potential to change lives, communities, and societies. Let us work together to unlock this potential and create a more literate, informed, and engaged world.

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Inclusive Education regarding NEP-2020: Challenges and Remedies

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Abstract

National Education Policy -2020 is the latest visionary of our education system. This visionary leads our education system to take a large step towards equity and equality. Inclusion in main stream education is the central thought of NEP 2020. There is always a question mark behind every policy's implementation in the real field. This should be minimized with remedies and to imply that all remedies in a better way the challenges should be intercepted by all the stakeholders, teachers and parents. 'Learning for all' is the hidden motto of this education policy and through the objectives of inclusive education this would be fulfilled. The current scenario of regular classrooms is little different than the vision of NEP 2020. Somewhere lack of participation, lack of opportunities, lack of infrastructure and lack of humanity are also seen in the education system. These are the major challenges towards inclusive education but NEP-2020 has given gentle and effective suggestions for equitable and inclusive education. The remedies in terms of availability of resources, infrastructure, opportunities in each and every field and support of humans will definitely fill the lack of the education system. Some of the suggestions given by NEP-2020 regarding inclusive education; were already given in RTE-2009 Act,

NPE-1986, NPE-1968 and so forth policies but at the time of implementation in regular classroom all recommendations are not justified and applied therefore that kind of challenges must be emphasised for the better remedies to remove that kind of problems. NEP-2020 also focuses on Sustainable Economical and Developmental Goals to fill the gap in the education system. This study gives a sharp view about inclusive education, their recent challenges and remedies to resolve the glitches of it. Even this study shows the challenges of current education system which will be diminished by the visionary of NEP-2020.

Keywords: Inclusive Education, NEP-2020, Equality and Equity

Introduction

Inclusive Education is the area in which maximum implementation is remaining, due to number of challenges in any suggestion or recommendation of any policy. As inclusive education is the output of the historical process, from separated education to inclusive education. From separated education to integrated education and from integrated to inclusive education this journey is very impactful and meaningful. In the past the specially needed persons were excluded from the society, then time by time the improvement was happening than this group was satisfied with basic fulfillment and by the time integration in the mainstream; makes closer to every group of children. Under one roof both groups are treated equally but with different circumstances. At the end after the Independence of the nation; many policies and commissions suggested about the inclusive education in the field rather than the integrated or special education. Required ones are definitely satisfied with special education to fulfil their special need but under one roof all are equally treated must be followed by the people. National Policy of Education-1968 has suggested about the equalization of educational opportunity regarding reginal imbalances, common school system, education for girls, education for minorities and facilities to all children in mainstream education; if someone requires more facility than it must be provided.

Even this kind of recommendations are given in further educational policy documents like NPE-1986, PoA-1992, NCF-2005 and NEP-2020 as well. But major lack is in the implementation due to

practicalities of the approach to justify the needs. Somewhere the acceptance of all including CWSNs, person with disabilities, minority groups, women and all other people are lacking our objective of inclusive education. Ample number of challenges raised for the inclusive education and to fulfil that all challenges NEP-2020 is bringing remedies for enhancement of it. At glance the challenges are faced by the stakeholders, teachers and parents to make availability and conducive environment for the learners. Even in teaching training programs these kinds of special skills are not taught to teachers as well; therefore, teachers will fail at some point to handle the child in the classroom. Somewhere, lack of infrastructure in institutions and economical lack in administration make the loss of opportunities and participation for special children. NEP-2020 suggested about the solutions for the problems in current education system regarding inclusive classrooms and inclusive society. Remedies are given in the NEP-2020 will successfully implement than maximum resolution can be achieved in education system.

Historical view of Inclusive Education

There is a hierarchy of education system with upliftment of inclusivity in the regular classrooms and institutions. In ancient time period there was an exclusion in the education system, if the person was having disabilities or any deficiencies; were excluded from the society. By the time that groups are separated from the mainstream and facilitated separately in another area and community. Than to remove this kind of discrepancy educational policies suggested about the integration of special groups in the mainstream, but the facilities and dealings were allotted separately. From last two decades; approach of inclusivity was enhanced to involve all equally in mainstream education under one roof. By this way the availability of resources, infrastructure and the man power is deliberately expanded in every institution. Challenges regarding participation, competition, examination, suggested the remedies regarding these challenges to overcome and improve our education system.

NEP-2020 shows the pathway to make inclusive education system and inclusive society by the equality and equity in the society. All members of the society have own responsibility to take care of them and others to get comfortable environment to needed ones. Uniformity in the education system brings novelty in society in the manner of living styles, human relationships and conducive environment of the society.

Needs of learners regarding Inclusive Education

The latest challenge of learners is the enrichment of resources and fulfilment of basic needs in regular classroom arrangement. Some social barriers make children more uncomfortable in the social platforms. Rigidity of schooling system make them more demotivated towards the learning process in the classroom, somewhere it makes more internal suffocation in the public. Major challenge is regarding the lack of teaching learning materials and instructional strategies, due to this miscommunication in leaners make them hopeless and aimless.

These all problems are minimized at large extend by means of the suggestive pathways of NEP-2020. It brings changes in availability of teaching learning material, proper communication and give-take of instructions by mean of proper strategies used with different instrumental, digital devices. Social barriers can be minimized with the acceptance and promotion of special children by making conducive environment and motivation from the teachers and other authorities. By this way they feel secure and togetherness with regular children. They feel normal as others and even internal motivation and efforts for the work will be definitely boosted out. Equal opportunities to all and needed ones are provided with that much assistance in terms of equity must be provided. The current generation requires equity first than the equality; this will improve our education system for sure.

Role of stakeholders in Inclusive Education

Curriculum developers, policy makers and educationists played an important role in the education system and inclusive education is the novel approach nowadays in it. Therefore, all stakeholders have to take note in sincere consideration for better outcome from it. Flexibility and acceptance of the special

child in mainstream education resists the growth of children by their quality performance. Administrators have their important role in the management and administration of any institution, a big challenge to the administrators is if no one in the institute has been having any kind of disability or else than there would be no readiness for specific infrastructure and other facilities. Suddenly, if any admission in that is to be done than rapidly, they have to arrange all the facilities in the campus. In practicality, this will ne not fully possible because various circumstances are there to be processed in the system and it takes time for it. Economical expenses and funding issues are raising the challenges towards management system to fulfil the inclusivity of the campus.

NEP-2020 has suggested the remedy regarding this challenge; it ensures that in every school and college there must be the infrastructural facilities for special children and there must be an inclusive campus. Then only the authenticity of institution will be maintained otherwise the inspectional grade will be decreased. Even people are resisting themselves to raise an issue for the problem and taking its solutions. In that problems role of parents, teachers and other committee members of school management committee and committee of higher education as well.

Reflection of Teachers on Inclusive Education

Perspectives of teachers are very significant in every discipline of education because policy makers and curriculum developers form the norms and regulations regarding education and children are learning that new curriculum but bridge between these two groups is teachers,they connect theoretical work to be applied in real world in front of the children. Therefore, the role and reflections of teacher on inclusive education is mandatory. Challenges are there in terms of pedagogical practices of teachers for special learners. Lack of training and judgement in teachers to deal with the special child and fulfil their needs accordingly. Teachers may face difficulties in real classrooms therefore, there is huge need for special training in pre-service and in service teacher education programs.

NEP-2020 take the vibrant solution for this difficulty of pre service and in-service teacher training programs. Integrated Teacher Education Program (ITEP) is propounded by the NEP-2020 which brings ultimate solution of the problems regarding inclusive education in teacher education. Bachelor of Education (B.Ed.) in Special Education two-year course is also came with the new suggestions of NEP-2020. If these pathways are intimately implemented and followed properly than that challenges are minimized at very short time period.

Conclusion

This study is exclusively reflecting the challenges and remedies regarding Inclusive Education. The educational hierarchy of inclusive education shows the importance of it from the independence of India. As NPE-1968, NPE-1986, PoA-1992, NCF-2005, RTE-2009 and at last NEP-2020 are suggesting various pathways for inclusive education. But the lack in implementation makes always gap in the education system in regular classrooms. Somewhere the unique ways of NEP-2020 make hopes for more betterment in inclusive education. As NEP-2020 solves the problems with ITEP program, special B.Ed. program and training programs of pre-service and in-service teacher education. Needs of learners are in the focus by this policy as it reflects on challenges and relative remedies of the inclusive education. Definitely, these ways will lead to the perfect inclusive education in the India.

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The Contribution of Dr. Babasaheb Bhimrao Ambedkar in Nation Building

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Abstract

Bharat Ratna Babasaheb Dr. Bhimrao Ambedkar has a great contribution to the building of the nation. His contribution to the nation cannot be measured. As long as this country and the Constitution remain,Babasaheb's name will be inscribed in golden letters. Babasaheb has done the work of bringing equality by eradicating untouchability from the country while battling with the odd and dire circumstances of that time. Today, the formation of government, organizations, and institutions in the country is also done under the rules of the constitution. Governance and administration are also run according to the constitution and no one can go outside the constitution. Today there is an urgent need to carry forward the principles of Babasaheb.

At the time of Babasaheb, the society was divided into varna system and caste-caste and class distinctions. Babasaheb had many challenges in front of him, but he faced them stoically and has presented an unsurpassed example in front of the world by creating the constitution of the country. The Constitution of India is unique in the whole world. Babasaheb Dr. Bhimrao Ambedkar has given equal right to vote to all through the constitution. Babasaheb wanted to build a prosperous India and the present government is engaged in realizing the same. Babasaheb has worked for the upliftment of society throughout his life. This research paper has been written to find the answer to the question that what is the Contribution of Dr. Babasaheb Bhimrao Ambedkar in Nation Building, what is the importance of Ambedkar's thoughts for development of India, and how Dr. Ambedkar's thoughts related to nation -building are relevant even today.

Keywords: Dr. Ambedkar's thoughts, Nation Building, Constitution, Hinduism, Buddhism

Data Collection Method Used for Research: This research depends on secondary data like newspapers, books, magazines, reports, and websites.

The Objective of Research:

1) To study the Contribution of Dr. Babasaheb Bhimrao Ambedkar in Nation Building
2) Knowing the importance of Ambedkar's thoughts for development of India
3) To study Dr. Ambedkar's thoughts related to nation –building

I. Introduction

In the 1920s, Ambedkar returned to India after completing his studies abroad and started working in the social sector. At that time Mahatma Gandhi started the freedom movement under the leadership of the Congress party. On August 14, 1931, Ambedkar and Gandhi met for the first time at Mani Bhawan in Bombay. Till then Gandhi did not know that Ambedkar himself was a so-called 'Untouchable'. He considered him a social reformer of his own kind as a 'Savarna' or Brahmin leader.

Knowing about Ambedkar's arguments in the First Round Table Conference, Gandhi was convinced that this was some modernist young man fully absorbed in Western education and thought, who was also looking at Indian society from a European point of view. When Gandhi was assassinated, Ambedkar was the first person to reach the spot and according to eyewitnesses, he stayed there for a long time.

By 1927, Dr. Ambedkar decided to start a broad and active movement against untouchability. Through public movements, satyagrahas, and processions, he also fought for the right of untouchables to enter Hindu temples, along with opening the public resources of drinking water to all sections of society. He

also launched a Satyagraha for the untouchable community in Mahad city to get the right to draw water from the Chavdar reservoir of the city. In 1935, when Ambedkar announced to leave Hinduism and mass conversion, on March 4, 1936, at a program in Savli village of Gujarat, Jamnalal Bajaj asked Gandhi's opinion on this. Gandhi said- 'If I had been in place of Dr. Ambedkar, I would have been equally angry. I might not have become a non-violent being in that state. Whatever Dr. Ambedkar does, we should bear it humbly. Not only this, but the service of Harijans lies in this.

Ambedkar was ashamed that Congress did not do anything for the Dalits. Gandhi was most responsible for this, because, before his last days, he was not ready to oppose the varna system and caste system, but was content to be a Sanatani Hindu. Though Gandhi and Ambedkar remained political opponents of each other throughout their lives, they both played a complementary role in weakening the abusive social order. Ambedkar emphasized the abolition of untouchability as well as equal opportunity and dignity and claimed that Gandhi was opposed to it.

According to him, Gandhi used to talk about untouchability only so that he could connect the untouchables with Congress. He wanted the untouchables not to oppose his concept of Swaraj. Both Gandhi and Ambedkar's views on the issues of rural India, caste system, and untouchability were contradictory to each other. Though both tried to base the country on social justice and unity and both showed different paths towards these objectives.

According to Ambedkar, as long as the caste system is present in society, untouchability will continue to flourish in the society in new forms. Gandhi advocated for people to move to the village, while Ambedkar appealed to the people to leave the village and move to the cities. Gandhi and Ambedkar had somewhat different ideas about the village and the city.

In 1920, from Bombay, he started the publication of the weekly Mooknayak. The publication soon became popular with readers, when Ambedkar used it to criticize conservative Hindu politicians and the Indian political community's reluctance to fight caste discrimination. His speech given during a conference of the Depressed Classes greatly influenced the local ruler of Kolhapur State, Shahu IV, whose eating with Ambedkar caused a stir in the orthodox society. In the 1930s and 1940s, Ambedkar sharply criticized Gandhi. He was of the view that the Gandhian way of upliftment of Safai Karamcharis was condescending and degrading. Gandhi wanted to purify Hindutva by removing the stain of untouchability. Ambedkar, on the other hand, rejected Hindutva itself. He was of the view that if Dalits wanted to get the status of equal citizens, they would have to adopt some other faith.

While practicing law in the Bombay High Court, he made efforts to promote and uplift the education of the untouchables. Their first organized effort was the founding of the central institution Bahishkrit Hitkarini Sabha, which aimed to promote education and socio-economic reform as well as the welfare of the "boycotted" referred to as the depressed classes.

To protect Dalit rights, he brought out five magazines like Mooknayak, Bahishkrit Bharat, Samta, Prabuddha Bharat, and Janta. At the conference in late 1927, Ambedkar publicly condemned the ancient Hindu text, the Manusmriti, whose verses openly support caste discrimination and casteism, for ideologically justifying caste discrimination and "untouchability". , and they formally burned copies of the ancient text. Ambedkar saw the transformation of his political party into the All India Scheduled Caste Federation (Scheduled Caste Federation), although it did poorly in the elections to the Constituent Assembly of India held in 1946. Later he was elected to the Constituent Assembly from Bengal where the Muslim League was in power.

Ambedkar was also dissatisfied with the failures of British rule, he advocated a separate political identity for the untouchable community in which there was no interference from both the Congress and the British. On August 8, 1930, in London, during the first-round table conference of an oppressed class, Ambedkar presented his political vision to the world, according to which the security of the oppressed class lies in its independence from both the government and the Congress. Ambedkar criticized the Salt Satyagraha run by Congress and Gandhi. Due to his growing popularity and public support in the untouchable community, he was also invited to participate in the Second Round Table Conference to be

held in London in 1931. There he had a heated debate with Gandhi on the issue of giving separate electorates to the untouchables, and the British agreed with Dr. Ambedkar's views.

Dr. Bhimrao Ambedkar strongly criticized the alleged apathy of important mainstream political parties towards the abolition of the caste system. Ambedkar also criticized the Indian National Congress and its leader Mahatma Gandhi, accusing them of presenting the untouchable community as an object of compassion. In the Poona Pact Pact, Ambedkar announced to give up the right of separate electorate given to the Dalits in the Communal Award. But with this, instead of 78 reserved seats received from the Communal Award, the number of reserved seats in the Poona Pact was increased to 148. Along with this, an adequate amount was fixed in education grants in each province for the untouchable people and ensured the recruitment of the people of the depressed class from government jobs without any discrimination.

26 November has been a historic day for India as the Constitution was adopted on this day. The Constitution of India was adopted on 26 November 1949 and later on 26 January 1950 it was implemented throughout the country. The Constituent Assembly's hard work of 2 years 11 months and 17 days and prepared by thousands of amendments, the Indian Constitution was agreed on 26 November in the year 1949 itself.

II. Contribution of Dr. Babasaheb Bhimrao Ambedkar in Nation Building

We cannot understand the social and economic issues of India without reading Babasaheb. The caste in which he was born was considered the lowest in the Hindu varna system. That's why he had to fight for equality from birth. He did social struggle all his life and kept fighting for the self-respect of his society. In his social thoughts, we see the attempt to achieve social justice for the Dalit deprived society. He wanted to create an ideal society based on the ideas of equality, liberty, and fraternity. According to him, the caste system is fatal in building an ideal society. His research on various aspects of economics is remarkable, but Dr. Ambedkar is presented only as of the messiah of Dalits and Backward and the architect of the Indian Constitution, his economic side was never attempted to be raised.

Dr. Ambedkar, the architect of the constitution, was a jurist, economist, politician, and social reformer. He has made a valuable contribution in removing social evils and building the nation. Dr. Ambedkar's contribution to building a modern India is a revolutionary step. Babasaheb gave rights to the weaker and neglected sections in the constitution. He was the first to give the right to vote to the downtrodden class and played an important role in establishing democracy in place of monarchy. Ambedkar's political career began in 1926 and till 1956 he held various positions in the political field. He was a member of the Bombay Legislative Council till 1936.

Ambedkar settled in Mumbai in 1935, he built a three-storeyed big house 'Rajgriha' here, in which his personal library had more than 50,000 books, then it was the largest private library in the world. In 1932, when the British, agreeing with Ambedkar's views, announced a separate electorate for the untouchables. The announcement of the Communal Award was the result of the deliberations held in the Round Table Conference. Under this agreement, considering the demand for political representation raised by Ambedkar, the Depressed Classes were given the right of two votes in a separate electorate. Under this, the Dalits could choose their representative by one vote and there was freedom to choose the representative of the general class from the second vote.

Thus, the Dalit representative was to be elected by the vote of the Dalits only. With this provision, there was no longer any interference from the general class in electing the Dalit representative. But at the same time, the Depressed Classes could play their role by electing a representative of the common class using their second vote. In such a situation, the Dalit candidate chosen by the Dalits could well keep the problems of the Dalits, but it was not necessary for the non-candidates to try to solve their problems. In 1936, Ambedkar founded the Independent Labor Party, which won 13 seats in the 1937 Central Legislative Assembly elections. Ambedkar was elected as an MLA of the Bombay Legislative Assembly. He was a member of the Legislative Assembly till 1942 and during this time he also served as

the Leader of the Opposition in the Bombay Legislative Assembly. Ambedkar in his book Who Were the Shudras? (Who were the Shudras?) explained the existence of the lowest caste i.e., Shudras in the hierarchy of the Hindu caste system. He also emphasized how the Atishudras (untouchables) are different from the Shudras. Who Were the Shudras in 1948? In the sequel to The Untouchables: A Thesis on the Origin of Untouchability (Untouchability: A Research on the Origins of Untouchability), Ambedkar lambasted Hinduism.

Ambedkar was an intelligent constitutional expert; he had studied the constitutions of about 60 countries. Ambedkar is recognized as the "Father of the Constitution of India". Granville Austin described the Indian Constitution prepared by Ambedkar as 'the first and foremost social document'. 'Most of India's constitutional provisions have been reached either directly in an attempt to advance the cause of the social revolution or to promote this revolution by establishing the conditions necessary for its achievement.'

Ambedkar argued for comprehensive economic and social rights for women, and reservation of jobs in civil services, schools; and colleges for members of Scheduled Castes (SC) and Scheduled Tribes (ST) and Other Backward Classes (OBC). To start won the support of the Assembly, which was affirmative action. The Constitution was adopted by theConstituent Assembly on 26 November 1949. Speaking after completing his work, Ambedkar said: I feel that the Constitution is doable, it is flexible but at the same time it is strong enough to help the country in both peace and war. Can keep it together. In fact, I can say that if something ever went wrong, it would not be because our constitution was bad but the man who used it was inferior.

Dr. Bhimrao Ambedkar, the architect of the constitution, was not only a Dalit leader but also a messiah of women. After the implementation of the constitution, society got a fair justice system. Citizens got freedom of fundamental rights and also the responsibility of duties. Dr. Bhimrao Ambedkar is considered the architect and architect of the constitution. He was appointed as the chairman of the Constitution Drafting Committee on 29 August 1947. He believed that it was important to equalize the differences between different classes, otherwise, it would be very difficult to maintain the unity of the country. He emphasized religious, gender, and caste equality.

Ambedkar resigned from the cabinet in 1951 after the draft of his Hindu Code Bill (Hindu Code Bill) was withheld in the Parliament. There was talk of providing many rights to Indian women by the Hindu Code Bill. The draft demanded gender equality in the laws of succession, marriage, and economy. The text of the constitution drafted by Ambedkar provides constitutional guarantees and protections for a wide range of civil liberties for individual citizens, including freedom of religion, the abolition of untouchability, and the infringement of all forms of discrimination.

Ambedkar opposed Article 370 of the Constitution of India, which gave special status to the state of Jammu and Kashmir, and which was included in the Constitution against his wishes. Ambedkar was actually in favor of the Uniform Civil Code and opposed Article 370 in the case of Kashmir. Ambedkar's India would have been a country of modern, scientific thinking and rational thoughts, in which personal law would not have any place. During the debate in the Constituent Assembly, Ambedkar expressed his desire to reform the Indian society by recommending the adoption of a Uniform Civil Code. Ambedkar introduced the reservation system to create social balance among classes. It is the largest constitution in the world with 448 articles, 12 schedules, 5 appendices, and 98 amendments. Babasaheb also became the first law minister after the independence of the country and he also did many important works as a law minister.

The responsibility of making the Constitution of India was given to Ambedkar. Where he made the constitution keeping in view every particular caste, class. Indian Constitution was prepared with hard work of 2 years 11 months and 18 days. Dr. Bhimrao Ambedkar played an important role in the making of the Constitution of India, hence he is called 'the architect of the Constitution. The constitution came into force on 26 January 1950 Later in 1951, Ambedkar resigned from the cabinet after his 'Hindu Code

Bill' draft was stalled in Parliament. In this draft, gender equality was talked about in the laws of succession, marriage, and economy.

Ambedkar was also a great critic of the Islamic practices of South Asia. He supported the partition of India, but strongly condemned the practice of child marriage among Muslims and the mistreatment of women. Words cannot express the ill effects of polygamy and having mistresses which are the source of sorrow especially for a Muslim woman, he said. Take the caste system itself, everyone says that Islam should be free from slavery and caste, whereas slavery exists and it has got support from Islam and Islamic countries. While the prescriptions made by the Prophet regarding justice and humane treatment of slaves contained in the Quran are laudable, there is nothing in Islam that supports the abolition of this curse.

Babasaheb spent his whole life fighting for the rights of the Dalits, the poor, and the exploited sections of society. Babasaheb struggled against social evils and untouchability throughout his life. It is said that Babasaheb had knowledge of nine languages. He had received a total of 32 degrees from many universities in the country and abroad. In 1990, he was posthumously awarded the Bharat Ratna, India's highest civilian honor. Dr. Bhimrao Ambedkar's multi-dimensional personality and his invaluable contribution to nation-building reveal his extraordinary ability and ability. Dr. Ambedkar was not only an educationist, economist, jurist, politician, journalist, sociologist, and social reformer, but he has also made invaluable contributions in the fields of culture, religion, and spirituality. Babasaheb Ambedkar was called 'The Greatest in the World' by the Bharat Ratna, Columbia University. At the same time, Oxford University has been called 'The Universe Maker'.

The most important aspects of Babasaheb's vision are ethics, equality, self-respect, and Indianness. The glimpse of these four ideals and values of life is visible in the thoughts and actions of Baba Saheb. Their cultural thinking was basically based on equality. Dr. Ambedkar spread the thoughts of Lord Buddha. At the core of his efforts was the goal of taking Indian values like compassion, fraternity, non-violence, equality, and mutual respect to the masses and giving action to the ideal of social justice. Lord Buddha's message of compassion and harmony was the basis of his life and politics. Babasaheb had emphasized the need for politics based on the cultural values of morality and harmony. He used to say that I am an Indian first, then an Indian, and finally an Indian.

Babasaheb was always in favor of providing equal rights to women. In the constitution drafted by him, women have been given the fundamental right of equality at par with men. Even while working on social issues, his work is also associated with the economic side, when he talks about making women entrepreneurs or talking about helping the government to make Dalit's entrepreneurs. He believed that no social and political participationwould be possible without economic upliftment. Dr. Ambedkar discussed the problem of Indian currency (rupee), inflation and exchange rate, a national dividend of India, development of provincial finance in British India, ancient Indian commerce, administration and finance of East India Company, the problem of landless laborers, and Indian agriculture. Not only did research on important topics like problems, but also gave logical and practical solutions to the problems related to these issues.

Babasaheb Ambedkar had a practical approach to economic problems. He believed that the main reason for India's backwardness is the delay in the change of land-system, its solution is democratic socialism, which will increase economic efficiency and productivity, and the transformation of the rural economy will be possible, the most important feature of his approach to economic problems. It was that he used to condemn Laissez-faire and Scientific Socialism. After India gained independence on 15 August 1947, when the new Congress-led government came into existence, it invited Ambedkar to serve as the country's first Minister of Law and Justice, which he accepted. On 29 August 1947, Ambedkar was appointed to the post of the Chairman of the Drafting Committee of the Constitution to prepare the new Constitution of independent India. Ambedkar's study of early Buddhist Sangha rituals and other Buddhist texts also came in handy in the task of making the constitution.

III. Conclusion

The political parties are bound by caste and the country will never develop. Today there is a protest against the law made by independence, due to which democracy is in danger. Babasaheb was the messiah of the downtrodden and backward. Dalits and backwards should unite today. Today is the time to take a pledge to follow Babasaheb's path and to develop his ideology in the world. Babasaheb Dr. Bhimrao Ambedkar has made people aware of their rights and given them justice and a respectable place in society. Babasaheb made such a system in the Constitution of India that people of every class can get justice with equal status and India should be recognized by its universal constitution in the world.

Our true success lies in building a society and nation according to the values and ideals of Babasaheb. We have made progress in this direction, but much remains to be done. Awareness of our rights with injustice, exploitation, and illiteracy can be achieved only when we walk on the path of the constitution with the aim of making India strong. The country and society can be brought on the path of equality only by following the constitution and to bring peace, progress, compassion, love, and unity in the world, the ideas of Tathagata Gautam Buddha and Babasaheb Dr. Bhimrao Ambedkar will have to be adopted.

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"Civic Education and its impact on Political Participation of Urban Youths: A Case Study of Patna"

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Abstract

Civic education plays a pivotal role in shaping democratic values and fostering political participation among young citizens, especially in urban settings where exposure to diverse socio-political influences is significant. This study examines the impact of civic education on the political participation of urban youths in Patna, Bihar. Despite being literate and socially aware, a considerable segment of youth in Patna demonstrates political apathy, reflected in low voter turnout, limited involvement in policy discussions, and minimal engagement with civic institutions. By adopting a mixed-method approach, combining survey data from university students with interviews of educators and civil society actors, the research highlights how structured civic education enhances awareness of rights and responsibilities, strengthens democratic attitudes, and promotes active political engagement. The findings reveal that youths exposed to civic education are more likely to participate in voting, social movements, and community-level initiatives compared to their counterparts without such exposure. The study underscores the necessity of integrating civic education into the educational curriculum as a long-term strategy to strengthen participatory democracy. It further suggests that civic learning initiatives outside the classroom—such as debates, community service, and digital platforms—can complement formal education to counter political apathy among urban youths.

Keywords: Civic Education, Political Participation, Urban Youth, Democracy, Patna, Political Apathy, Citizenship

Introduction

Political participation is widely recognized as the cornerstone of a functioning democracy, yet the disengagement of educated urban youth from mainstream political processes continues to be a pressing concern in India. Youth constitute one of the most dynamic segments of society, and their involvement in democratic governance is essential for strengthening inclusive decision-making, accountability, and long-term political stability[1] (Verba, Schlozman, & Brady, 1995). Despite high literacy rates and greater access to information, many urban youths demonstrate political apathy, reflected in limited voter turnout, low activism, and minimal engagement with civic institutions[2] (Kumar, 2013). This paradox raises critical questions about the effectiveness of civic learning mechanisms in shaping political behaviour.

Civic education, both formal and informal, is widely acknowledged as a vital tool for instilling democratic values and fostering participation. It equips young citizens with knowledge of rights, responsibilities, and the functioning of political institutions[3] (Galston, 2001). Global research highlights that structured civic education enhances political efficacy, nurtures democratic values, and promotes active engagement with governance[4] (Torney-Purta et al., 2001). However, in the Indian context, civic education often remains confined to textbook knowledge, with little emphasis on experiential learning, debates, or critical thinking exercises[5] (Chopra, 2014). Such limitations may have significant implications

for the political attitudes of urban youth, particularly in transitional cities like Patna, which simultaneously reflect traditional socio-political structures and the aspirations of modern urbanization[6] (Jha, 2018).

This study seeks to examine how civic education influences the political participation of urban youths in Patna. Specifically, it aims to: (i) assess the level of civic knowledge among urban youths, (ii) explore the relationship between civic education and participation in democratic processes, and (iii) identify the barriers that restrict active youth engagement. By situating Patna as a case study, the research attempts to shed light on broader challenges in India's civic education framework and its implications for strengthening participatory democracy.

Review of Literature

Theoretical Foundations of Civic Education

The concept of civic education has long been associated with the strengthening of democracy through the promotion of political knowledge, civic virtues, and participatory skills. Almond and Verba (1963) emphasized that political culture, shaped through socialization and education, directly affects citizens' involvement in democratic processes.[7] Civic education is understood not only as classroom instruction but also as a process of cultivating political efficacy, tolerance, and a sense of responsibility towards governance[8] (Niemi & Junn, 1998). Such education, therefore, forms the foundation of democratic participation, especially among younger populations.

Global Perspectives on Civic Education and Youth Participation

International scholarship highlights the positive impact of civic education on political engagement. Torney-Purta et al. (2001), in a comparative study across twenty-eight countries, demonstrated that adolescents with greater exposure to civic education exhibited stronger democratic values and were more likely to engage in political activities[9]. Similarly, Galston (2001) argued that civic education reduces political apathy by enhancing political knowledge and participation[10]. Recent works also emphasize that experiential learning—such as debates, volunteering, and student-led initiatives—has a stronger influence on political participation than textbook-based instruction[11] (Kahne & Sporte, 2008).

In India, the potential of civic education has been recognized but underutilized. Chopra (2014) observed that civic education in schools largely remains theoretical, with limited opportunities for practical engagement[12]. Kumar (2013) noted that while urban youth demonstrate political awareness, their actual participation in electoral and non-electoral activities is constrained by disillusionment with political institutions[13]. Further, Jha (2018) highlighted that in transitional urban centers like Patna, the youth face a conflict between traditional political loyalties and aspirations for new forms of civic engagement[14]. These studies underscore that the effectiveness of civic education in India depends on bridging the gap between formal instruction and real-life political experiences.

While global and Indian studies recognize the significance of civic education, there is limited research on its localized impact in specific urban contexts. Most studies focus on general youth political participation or national-level trends, with little attention to mid-sized cities like Patna. Moreover, the role of higher education institutions in shaping civic engagement among urban youth remains underexplored. This research addresses these gaps by examining how civic education influences the political behaviour of youths in Patna and identifying the challenges that hinder their active participation in democratic processes.

Research Methodology

Research Design

This study employs a qualitative research design to gain an in-depth understanding of how civic education influences the political participation of urban youths in Patna. A case study approach has been chosen as it allows for a detailed exploration of context-specific experiences and perspectives[15] (Yin, 2018). The focus on Patna provides an opportunity to capture the intersection of traditional socio-political structures and contemporary urban youth culture.

Population and Sampling

The research targets urban youths aged 18–29 years in Patna, primarily students enrolled in colleges and universities. A purposive sampling technique is adopted to select participants who are likely to provide rich insights into the role of civic education in shaping political behavior. The study includes approximately 30 participants, comprising students, educators, and youth activists, ensuring a diverse representation of voices and experiences[16] (Patton, 2015).

Data Collection Tools

Data are collected primarily through semi-structured interviews and focus group discussions (FGDs). Semi-structured interviews allow for flexibility while maintaining a consistent line of inquiry, enabling participants to share personal experiences and opinions[17] (Kvale & Brinkmann, 2009). FGDs are conducted to capture collective perspectives, peer interactions, and group dynamics, particularly relevant for understanding youth political culture. Supplementary data are drawn from policy documents, civic education curricula, and NGO reports working in the field of youth development.

Data Analysis

The data are analyzed using thematic analysis, which involves systematically coding and categorizing interview transcripts and FGD notes to identify recurring themes and patterns[18] (Braun & Clarke, 2006). This method is particularly suited for exploring subjective experiences and generating insights into the links between civic education and political participation. The analysis focuses on themes such as civic knowledge, political attitudes, experiences with civic learning, and perceived barriers to engagement.

The study adheres to strict ethical guidelines. Informed consent is obtained from all participants prior to data collection. Participants are assured of confidentiality, and pseudonyms are used to protect their identities. They are also informed that their contributions will be used solely for academic purposes. The research design complies with ethical standards recommended for qualitative research involving human participants[19] (Israel & Hay, 2006).

Analysis and Findings

The analysis of interviews and focus group discussions with urban youths, educators, and youth activists in Patna reveals several interconnected themes that highlight the relationship between civic education and political participation.

1. Civic Knowledge and Awareness

Participants with exposure to civic education—whether through formal coursework or extracurricular activities—demonstrated stronger awareness of democratic rights and responsibilities. Many acknowledged that civic education gave them the vocabulary to articulate political issues and critically evaluate governance. This aligns with findings by Torney-Purta et al. (2001), who observed that civic education contributes significantly to civic knowledge and informed political choices[20].

2. Influence of Educational Institutions

A recurring theme was the limited role of schools and universities in promoting experiential civic learning. Students often reported that civic education was treated as a theoretical subject, lacking debates, simulations, or real-life applications. Similar concerns have been documented in the Indian context, where the curriculum emphasizes rote learning over critical engagement[21] (Chopra, 2014). Participants suggested that youth clubs, campus debates, and community service could make civic education more impactful.

3. Barriers to Political Participation

Despite awareness, many youths expressed skepticism about politics, citing corruption, lack of transparency, and unresponsiveness of political leaders. This perception has contributed to disillusionment and disengagement. These findings resonate with Kumar (2013), who noted that political cynicism remains a significant obstacle to youth engagement in India[22]. Such barriers reflect not only

institutional weaknesses but also the inadequacy of civic education in addressing real-world political frustrations.

4. Role of Peer Networks and Civil Society

Peer discussions and exposure to youth organizations were identified as crucial in motivating political involvement. Focus group participants noted that when civic education was reinforced by peer-led activities, their willingness to engage in voting or community action increased. Research shows that social networks can amplify civic learning by creating spaces for dialogue and mobilization[23] (Putnam, 2000).

5. Emerging Alternative Forms of Engagement

While electoral participation remained limited, many youths reported engaging in non-traditional political activities, such as digital campaigns, social media activism, and volunteering. This reflects a shift from conventional modes of participation to newer forms of civic engagement that resonate with younger generations. Such trends have been documented globally, where digital platforms provide new avenues for youth activism[24] (Loader, Vromen, & Xenos, 2014).

Overall, the study reveals that civic education has the potential to foster awareness and positive attitudes toward democracy. However, its impact on active political participation in Patna is constrained by systemic barriers and weak institutional implementation. Youths are more inclined toward alternative and digital forms of engagement than traditional political activities. Strengthening experiential learning and bridging the gap between theory and practice emerge as crucial steps to counter political apathy.

Discussion

The findings of this study reaffirm the central role of civic education in shaping democratic attitudes and political participation among urban youths in Patna. Consistent with Almond and Verba's (1963) framework on political culture, the study demonstrates that exposure to civic education enhances political awareness and strengthens democratic orientations[25]. However, the persistence of political apathy despite knowledge indicates a complex gap between awareness and action.

One key issue emerging from the study is the limited role of educational institutions in fostering experiential learning. While students gain theoretical understanding of rights and governance, opportunities for practical engagement remain scarce. This finding resonates with Niemi and Junn (1998), who argued that the effectiveness of civic education depends not only on curricular content but also on how it encourages critical thinking and participatory skills[26]. The absence of such practices in Patna reduces the transformative potential of civic education.

Another important theme is the impact of disillusionment with political institutions. Many participants expressed cynicism regarding corruption and inefficiency, echoing Kumar's (2013) observation that institutional credibility significantly shapes youth engagement in India[27]. This suggests that civic education alone cannot overcome systemic barriers; institutional reforms and political responsiveness are equally critical.

The role of social networks and civil society emerged as particularly significant. Peer-led discussions, youth organizations, and community engagement activities were found to amplify the influence of civic education. Putnam (2000) similarly emphasized that social capital—networks of trust and reciprocity—can strengthen civic participation[28]. This indicates that collaborative and peer-driven initiatives may bridge the gap between civic knowledge and political action.

Finally, the growing preference for digital activism among Patna's youth reflects a global trend where social media provides alternative avenues for participation. Loader, Vromen, and Xenos (2014) argue that online platforms enable youth to bypass traditional political structures and express agency in new ways[29]. This finding suggests that integrating digital civic learning into education could make civic education more relevant to younger generations.

In summary, the discussion highlights that while civic education positively influences awareness and democratic attitudes, its potential remains underutilized in Patna due to weak institutional support and systemic political barriers. Strengthening experiential and digital civic learning, alongside building trust in institutions, appears essential for fostering deeper youth participation in democratic processes.

Conclusion and Recommendations

This study examined the role of civic education in shaping political participation among urban youths in Patna. The findings revealed that civic education positively influences awareness of democratic rights and responsibilities, but its impact on active participation remains limited. While many youths demonstrated civic knowledge, skepticism toward political institutions and the absence of experiential learning restricted their involvement in traditional political activities. Instead, youths increasingly gravitated toward alternative forms of engagement, particularly digital activism.

The research underscores that civic education alone cannot fully address political apathy unless it is supported by responsive institutions and participatory opportunities. The case of Patna illustrates that the gap between knowledge and practice remains a key challenge in urban youth political culture. Strengthening the effectiveness of civic education requires not only curricular reforms but also broader societal efforts to foster trust in democratic processes.

Recommendations

1. Curriculum Reform: Civic education should move beyond textbook-based learning and include experiential components such as debates, simulations of democratic processes, and community service programs[30] (Niemi & Junn, 1998).
2. Integration of Digital Platforms: Educational institutions should incorporate digital civic learning initiatives to align with youths' preference for online engagement[31] (Loader, Vromen, & Xenos, 2014).
3. Partnerships with Civil Society: Collaborations between universities, NGOs, and local communities can create opportunities for youth-led projects and grassroots activism[32] (Putnam, 2000).
4. Institutional Responsiveness: Political institutions must demonstrate transparency and accountability to reduce cynicism among youth and encourage their participation[33] (Kumar, 2013).
5. Capacity Building for Educators: Teachers and facilitators should be trained in participatory teaching methods to ensure that civic education is transformative rather than perfunctory.

By adopting these measures, policymakers and educators can enhance the effectiveness of civic education in Patna and similar urban contexts. Strengthening youth participation through robust civic education will not only counter political apathy but also contribute to building a more vibrant and participatory democracy in India.

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Dhamma, Knowledge and Statecraft: Rereading Ashoka's Edicts within the Indian Knowledge System (IKS)

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Abstract

Ashoka's edicts have long been treated primarily as "authentic sources" for ancient Indian history, indispensable for reconstructing the political–administrative structure of the Mauryan Empire, Ashoka's Dhamma policy, and the emperor's personality. In the context of the recent revival of interest in the Indian Knowledge System (IKS), however, it becomes necessary to move beyond a purely documentary reading of these inscriptions. Read as a theoretical text within the Indian intellectual tradition, the edicts illuminate a triangular relationship between knowledge, power and morality, in which a distinctive ancient Indian voice becomes clearly audible.From this standpoint, Ashoka's rock and pillar edicts appear not only as royal proclamations but also as public manifestos of a carefully articulated knowledge vision, in which Dhamma functions as the key conceptual node. Situated against the backdrop of the Kalinga War and Ashoka's subsequent ideological transformation, Dhamma is here examined not as a sectarian religious creed but as a comprehensive moral–political conception that integrates personal conduct, social harmony, environmental sensitivity and structures of governance.

Keywords: Indian Knowledge System (IKS), Ashokan inscriptions, National Education Policy, Dhamma, Indian intellectual tradition, kingship/state authority, morality, knowledge.

Ashoka's reign begins roughly half a century after the establishment of the Mauryan Empire, when the centralized monarchy created by his predecessors had become relatively stable, yet faced acute questions of internal legitimacy and cultural plurality (Thapar, 1961/2015). The conquest of Kalinga, which Ashoka himself recalls in his Thirteenth Rock Edict, was the violent culminating point of this political expansion; noting the "death of more than one hundred and fifty thousand people, the deportation of many, and the suffering of countless others," he describes this as the initial moment of an inner transformation towards "conquest by Dhamma" (Hultzsch, 1925, pp. 46–48). Following this self critical experience, Ashoka announces a shift in his ideal of kingship from conquest by arms to conquest by Dhamma, which signifies not so much a turn to purely personal spirituality as an indication of a broader ethical political reconfiguration (Thapar, 1961/2015).

If Ashoka's inscriptions are read not merely as royal proclamations or historical sources, but as a theoretical text within the Indian intellectual tradition, they concretely bring into view several fundamental features of the Indian Knowledge System (Indian Knowledge System – IKS). Thapar (1961/2015) presents the policy of Dhamma as an "ethical political idea" and a "people based code of conduct" that redefines the relationship between knowledge, conduct, and power (Thapar, 1961/2015). According to Jetir (2024), Ashoka's inscriptions display a coordination of education, morality, administration, and the environment that is extremely relevant to contemporary IKS discourse (Jetir, 2024).

The moral spiritual transformation visible in Ashoka's personality after the Kalinga War can be understood as a recalling and reconfiguration of the foundational values of the Indian intellectual tradition—ahimsa, compassion, truthfulness, self restraint, and concern for the welfare of all beings. The conception of Dhamma, as reflected in the inscriptions, points not to a narrow, sectarian religion but to a broad ethical social order that encompasses personal conduct, familial relationships, communal harmony, environmental sensitivity, and the responsibilities of political authority. In this sense, Dhamma

may be seen as a comprehensive knowledge system that operates not only at the level of doctrine, but also at the levels of practice and policy. It is precisely this interpretation of Dhamma that provides a strong basis for reading Ashoka's inscriptions within the wider discourse on the Indian Knowledge System.

Concept and holism of IKS

Contemporary scholarship generally treats IKS as a collective term for those multiple knowledge traditions that have evolved over a long period within Indian society—philosophy, Ayurveda, yoga, mathematics, jyotisha, music, drama, architecture, agriculture, ecological knowledge, folk traditions, and ethical spiritual thought (Upadhyay & Pandey, 2025). Suresh (2024) understands IKS as a "holistic and multidisciplinary knowledge structure" that rests not only on conceptual claims but also on ways of life, practices, and community centred experiences (Suresh, 2024). A study published in IJIRT (2025) regards IKS as the primary source of a "holistic, value based, and context sensitive" educational vision in which knowledge is intrinsically linked to the balanced development of the individual, society, and nature (IJIRT, 2025).

IKS is not confined to philosophical or spiritual discourse alone; it also encompasses applied forms of knowledge such as medicine, agriculture, water management, architecture, and environmental conservation (IJIRT, 2025; Suresh, 2024). All of these dimensions are clearly signalled in Ashoka's inscriptions. In several rock edicts and pillar edicts cited by Hultzsch (1925), one finds references to the establishment of hospitals, arrangements for medicinal treatment for humans and animals, the planting of trees along roads, and the construction of wells and rest houses (Hultzsch, 1925). Jetir (2024) underlines the point that for Ashoka, Dhamma is not merely a set of moral exhortations but also the basis of a concrete, welfare oriented administrative programme—precisely the site at which ethical knowledge and technical administrative knowledge intersect (Jetir, 2024).

From this perspective, Dhamma can be understood as a historically embedded concept of IKS in the Ashokan period. In Thapar's (1961/2015) analysis, Dhamma is not restricted to any single scriptural discipline; rather, it integrates moral philosophy, social policy, religious tolerance, and sensitivity to the environment (Thapar, 1961/2015). Jetir (2024) further adds that through Dhamma Ashoka articulates a particular "knowledge vision" in which practical reason and compassion are equally operative in decisions of governance (Jetir, 2024). In this sense, Ashoka's inscriptions give concrete expression to that feature of IKS which Upadhyay and Pandey (2025) describe as the "non separation of knowledge and life" (Upadhyay & Pandey, 2025).

Upadhyay and Pandey (2025) argue that, within IKS, environmental traditions such as tree worship, river protection practices, and compassion towards animals are grounded in an imagination of a balanced relationship between human beings and nature (Upadhyay & Pandey, 2025). In Ashoka's inscriptions, directives concerning restrictions on animal slaughter, protection of certain species, and the planting of trees can be understood as early state level expressions of this environmental sensibility (Hultzsch, 1925; Jetir, 2024). In the context of IKS, IJIRT (2025) contends that contemporary notions of sustainable development have, in various forms, long been present in Indian traditions; Ashoka's inscriptions can therefore be read as historical documents of these tendencies (IJIRT, 2025).

Concept of Dhamma: Moral Political Discourse

The term "Dhamma" as used in Ashoka's inscriptions constitutes the central element of his overall vision of governance (Thapar, 1961/2015). Romila Thapar has suggested that Dhamma should be understood, in Ashoka's specific historical circumstances, as a "political ethical conception" whose purpose was to secure social harmony and political legitimacy within a vast, religiously and ethnically diverse empire (Thapar, 1961/2015). According to Jetir (2024), unlike traditional rulers, Ashoka presents himself not merely as a military conqueror but as a moral guide; Dhamma is the cornerstone of this moral leadership (Jetir, 2024). In this way, Dhamma can be seen as a moral political discourse that seeks to bind together the levels of personal conduct, social relations, and state policy into a single coherent framework.

To understand the concrete constituent elements of Dhamma, a close reading of the major rock edicts and pillar edicts is extremely useful. In the text edited by Hultzsch (1925), Major Rock Edicts 1, 2, and 7 and Pillar Edict 7 are particularly noteworthy, as in these Ashoka explicitly enumerates the standards of conduct he expects under the rubric of Dhamma (Hultzsch, 1925). These provisions include respect for parents and teachers, service to elders, gentleness towards slaves, maidservants, and attendants, truthfulness in speech, the suppression of theft, the renunciation of jealousy, moderation in food, and compassion towards all living beings (Hultzsch, 1925). Thapar (1961/2015) has described these as a "code of ethics related to popular conduct," which is not the pure doctrinal sequence of any single religious tradition, but rather a practical synthesis of values current across multiple traditions (Thapar, 1961/2015).

Jetir (2024) points out that it is not sufficient to view these components of Dhamma merely as "private virtues"; Ashoka explicitly links them to public life, administration, and the system of justice, through which they take the form of "civic ethics" (Jetir, 2024). For example, the pillar edicts contain instructions to judges and officials that, in determining punishment, they should give priority to compassion, an understanding of circumstances, and the possibility of appeal rather than sheer severity (Hultzsch, 1925). This humanized approach to penal policy is a direct outcome of the compassion centred perspective embedded in Dhamma, which appears closer to a conception of "people's dharma" (lokadharma) than to the conventional notion of "royal dharma" (rajadharma) (Thapar, 1961/2015).

Dhamma: Religion, Politics, and Intellectual Tradition

The distinctiveness of the concept of Dhamma becomes clearer when it is placed in the context of contemporary Buddhist and Brahmanical traditions. Thapar (1961/2015) argues that although Ashoka did personally accept Buddhism at the level of individual faith, his inscriptions do not confine Dhamma within any sectarian definition; on the contrary, he explicitly declares that all sects are worthy of respect, and that disparaging them amounts to self disparagement (Thapar, 1961/2015). For this reason, Jetir (2024) concludes that it is more appropriate to understand Dhamma as a "secular ethical code," even though its background of inspiration clearly includes the Buddhist vision of compassion and the principle of non violence (Jetir, 2024).

Despite being a self professed Buddhist ruler, Ashoka does not prescribe any obligatory recitation of mantras, sacrificial rituals, or Brahmanical ceremonies in his inscriptions; instead, he repeatedly emphasizes values such as "generosity" (dâna), "self restraint" (saCyama), "non violence" (ahiCsâ), and "right speech" (samyak vâk) (Hultzsch, 1925). This fact reinforces the view that Dhamma is fundamentally a standard of practical ethics rather than the name of any particular ritual complex (Thapar, 1961/2015).

Recent studies, such as "A Study of Ashoka's Reform through the Lens of Buddhist Ethical Principles" (IJAESM, 2023), have shown that the discourse of Dhamma is indeed internally related to Buddhist doctrines like the Four Noble Truths and the Noble Eightfold Path, but that Ashoka redefines these principles at the levels of administrative policy, legal structure, and social reform (IJAESM, 2023). In this way, Dhamma emerges within the Indian intellectual tradition as a concept situated at the intersection of moral philosophy and political thought, one that blurs conventional boundary lines between religion and politics.

Dhamma and the Model of Governance: Imagining the Moral State

The role of Dhamma is crucial for understanding Ashoka's model of governance. Jetir (2024) argues that Ashoka constructs himself not merely as a "protector" but as a "moral leader," for whom the legitimacy of kingship rests not only on military conquest but on the welfare and moral elevation of his subjects (Jetir, 2024). The appointment of the Dhamma mahamatras—officials charged with overseeing the ethical conduct of the populace, ensuring harmony among different communities, and monitoring the implementation of Dhamma policies—can be seen as the institutional expression of this moral state (Hultzsch, 1925; IAJESM, 2024).

A study published in IAJESM (2024) shows that, through the Dhamma mahamatras, Ashoka developed a form of "moral bureaucracy" whose purpose was not confined to tax collection or the maintenance of law and order, but extended to supervising the conduct of subjects and fostering concord among religious groups (IAJESM, 2024). This arrangement may be viewed, in the language of contemporary governance debates, as a precursor to "ethical governance" and "accountable leadership," wherein the state explicitly declares itself answerable to moral standards (Jetir, 2024).

Thapar (1961/2015) characterizes Dhamma as an "instrument of political integration," noting that Ashoka sought through it not only to reduce hostility among different sects but also to establish a common ethical standard for diverse social groups (Thapar, 1961/2015). In this sense, Dhamma functions somewhat like a form of "soft law"—a regulatory mechanism that shapes behaviour more through moral persuasion and social pressure than through formal legal sanctions.

Dhamma, Social Justice, and Pluralism

Within Dhamma there is also an implicit conception of social justice and pluralism. Jetir (2024) emphasizes that Ashoka repeatedly advises "equal respect" and "avoidance of disparagement" towards all sects in his inscriptions, explicitly stating that condemning another's doctrine is equivalent to harming one's own (Jetir, 2024). Thapar (1961/2015) interprets this as an "early form of religious tolerance," which, unlike the legal neutrality of a modern secular state, represents an attempt at moral cultural conciliation among communities (Thapar, 1961/2015).

Alongside this, the expectations of compassion and protection towards slaves and servants, women, the elderly, and living beings articulated within Dhamma have been identified by contemporary studies such as IJAESM (2023) as a form of "proto social justice discourse" (IJAESM, 2023). References to Ashoka's periodic inspection of prisons, remission or mitigation of punishments, and the suspension of death sentences indicate that, under Dhamma, the state understands itself not only as an agent of punishment but also as a bearer of the possibilities of repentance and reform (Hultzsch, 1925).

In this way, to confine Dhamma solely to a spiritual or religious category would be to reduce its complexity. It is at once a moral code, a political project, and a social justice oriented perspective. The shared conclusion of contemporary scholarship is that it is precisely this multi layered character of Dhamma that grants Ashoka's inscriptions a central place in the study of the Indian Knowledge System.

Dhamma and Structures of Governance: Knowledge based Statecraft

Within IKS discourse, "ethical governance" and "knowledge based policy making" have emerged as important themes (Upadhyay & Pandey, 2025; IJRLs, 2025). Ashoka's Dhamma oriented model of rule can be understood in this very perspective. Jetir (2024) shows that the inscriptions repeatedly mention "Dhamma mahamatras," whose role was not limited to enforcing royal commands but also included observing the moral and social life of the populace, fostering reconciliation among different communities, and conveying complaints and suggestions related to Dhamma to the emperor (Jetir, 2024). Studies such as IAJESM (2023, 2024) describe this arrangement as an early framework of "ethical bureaucracy," in which administrative offices themselves function as instruments for the dissemination of moral ideals (IAJESM, 2023; IAJESM, 2024).

Thapar (1961/2015) underlines that, in Ashoka's Dhamma discourse, the relationship between knowledge and power is not one directional; the emperor also presents himself as a "learning ruler" who, drawing lessons from the experience of the Kalinga War, alters his policies and henceforth places "public welfare" above a politics of domination (Thapar, 1961/2015). In Jetir's (2024) conclusion, this process represents a political manifestation of that IKS tradition in which self reflection and reform through experience are regarded as foundations of knowledge formation (Jetir, 2024).From this perspective, Ashoka's inscriptions can be placed in the category of IKS "foundational texts" — texts that demonstrate how, in the Indian tradition, knowledge has never been merely theoretical but has functioned as an active instrument of life organization, governance, and social formation (Thapar, 1961/2015; Upadhyay & Pandey, 2025).

Conclusion

Repositioning Ashoka's edicts within the framework of the Indian Knowledge System reveals them as more than archaeological evidence or royal propaganda. They become a historical site where kingship, morality and knowledge are re configured through the category of Dhamma. The analysis in this article has illustrated how Dhamma synthesizes everyday ethical norms, civic virtues, environmental sensitivity and welfare oriented administration, and how it is institutionally mediated through mechanisms such as the Dhamma mahamatras. In IKS terms, this represents a striking instance of the "non separation of knowledge and life," where epistemic claims are inseparable from forms of governance and social practice. Ashoka's Dhamma can offer powerful resources for designing value oriented curricula in history, ethics and civic education, and for thinking about ethical governance, only if it is approached as a complex, contested and multi layered discourse rather than as an unproblematic model to be emulated. Thus within IKS, Ashoka's Dhamma discourse is not merely a "glorious narrative of the past," but a living intellectual resource for the present and future, provided it is read in a critical and multi perspectival manner.

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Changing Cropping Patterns and Cropping Intensity in Uttarakhand from 2010, 2024

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Abstract

Agriculture and allied activities are the main source of livelihood in India. Uttarakhand a state of India is also an agrarian state. More than 70 percent of its population is directly engaged in this sector Geographically this state lies on Himalayan region and a huge variation in agro-climate diversity. The climate variation makes it suitable for performing varied cultivation. The Productivity of all the major crops in the region has increased manifold since the green revolution but now it is more or less stagnate. Hence, it is useful to examine the productivity of major crops in the state. The present paper in an attempt to highlight the overall agriculture production of major food crops of Uttarakhand from 2010-11 to 2023-24 The main focus of the paper is to analyze the variation in production and crop intensity at state level. The study is based on secondary data and is empirical in nature. The annual growth rate has been used to find out the growth of major crops.

***Keywords*:** Production Intensity Growth

Introduction

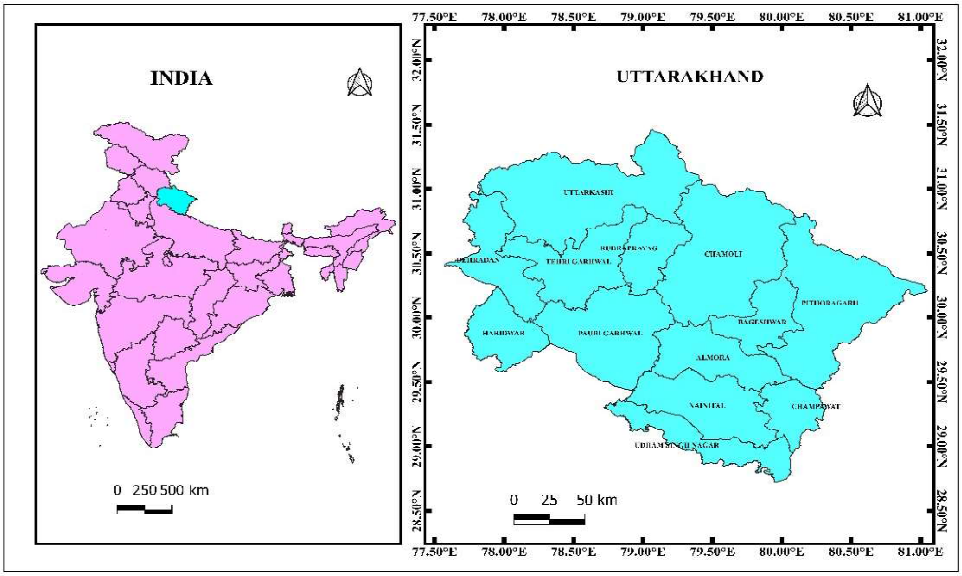
Uttarakhand, situated in the north-western Himalayas, is marked by diverse agro-climatic zones that shape its agricultural practices and cropping patterns. Agriculture in the state plays a crucial role in the livelihoods of its population, with over 70% of the rural population dependent on farming (Economic Survey of Uttarakhand, 2022). The state is characterized by a mix of plain and hilly regions, with the plains of the Terai and Bhabar regions supporting higher agricultural productivity compared to the hilly terrains, which are often limited by topography and accessibility (Uttarakhand State Agriculture Profile, 2021). The cropping patterns in Uttarakhand are influenced by a variety of factors, including soil fertility, irrigation availability, and seasonal rainfall. Major crops cultivated in the state include rice, wheat, maize, pulses, and a variety of fruits such as apples, peaches, and plums. As per the Uttarakhand Economic Survey 2022, rice is the dominant food crop, grown predominantly in the Terai region, while wheat and maize are also staple crops cultivated in both plain and hilly areas. Additionally, fruit cultivation has gained significant importance, particularly in the hilly areas, contributing to the state's agricultural economy (Agriculture Census, Uttarakhand, 2021). Crop intensity, defined as the ratio of the area sown more than once to the net sown area, varies across the state, with higher intensity observed in the plain regions where irrigation infrastructure is more developed. In contrast, hilly areas are constrained by limited irrigation and rely heavily on rainfed agriculture, resulting in lower crop intensity (Uttarakhand Agricultural Statistics Report, 2020). According to the State of Uttarakhand Agricultural Statistics Report (2020), the crop intensity in the plains can reach up to 1.5 times, whereas in the hilly

regions, it is much lower, typically ranging between 1.1 and 1.2 times. This disparity underscores the need for enhanced water management practices and better infrastructure to increase agricultural productivity in the state.

This research aims to analyse the cropping patterns and crop intensity of major crops in Uttarakhand, examining regional variations and identifying challenges that affect agricultural sustainability. The findings will provide insights into the current state of agriculture and suggest potential strategies for improving crop productivity and land utilization in the state.

Study Area

Uttarakhand is a hilly and small state located in the northern part of the country between 30 192 to 18 892 N latitudes and 78 12 to 35 822 E longitudes. The state was carved out of Uttar Pradesh on November 9th 2000. It is the 27 states of India. The administrative divisions of the state are into 13 districts. Seven districts in the Garhwal and six districts in the Kumaon division. Dehradun is the largest city in the state. In these 13 districts, four districts Nainital, Haridwar, Dehradun, and Udham Singh Nagar have a large area in the plains, whereas the other nine districts comprise the hill region of the state



Location Map of the Study Area. Source – (Prepared by authors using QGIS)

Objective

The study is based the following objectives

1) To find out how cropping patterns have changed in Uttarakhand from 2010 to 2024.
2) To study the relationship between gross sown area and net sown area.

Review of Literature

Sati (2024) analyzed land use and cropping patterns in Dehradun and Nainital districts, revealing substantial changes driven by climate variability, declining crop areas, altered food habits, population growth, and out-migration. Verma et al. (2022) observed a decline in food grain cultivation and a reduction in landholding sizes, indicating a shift away from traditional farming practices. A study by Hegde et al. (2024) utilized geospatial technology to estimate cropping intensity in the upper Gangetic plains of Uttarakhand, marking the first such attempt in the region. Another study reported an increase in average cropping intensity from 167.42% in 1990–1992 to 183.17% in 2022–2023, attributed to technological advancements and improved irrigation systems. The migration of rural populations has led to changes in land use patterns, with a notable impact on agricultural practices in Uttarakhand. Traditional agricultural practices are being affected by changing land use patterns, impacting the livelihood of a significant portion of Uttarakhand's population.

Methodology

The Present paper is based on secondary data. The main source of secondary data includes statical abstract of Uttarakhand economic survey of Uttarakhand 2023-24 Other source include the Ministry of agriculture and farmers welfare, Government of India Digest of statistics and other varies research papers reports journals websites and official records.to full fill the objective of the study descriptive statistics is used to analysis the cropping patterns in Uttarakhand state statistical tool such as percentage annual growth etc. are used

Cropping Patterns

Uttarakhand's agriculture exhibits diverse cropping patterns shaped by its varied topography and climatic conditions. In the hilly regions, traditional systems like *Barahnaja*—a mixed cropping method involving twelve or more crops such as finger millet, amaranth, and various pulses—are practiced, promoting soil fertility and food security. In the lower hills and plains, modern cropping systems prevail, with common rotations including rice-wheat The state's cropping intensity stands at 161.75%, surpassing the national average, indicating multiple cropping cycles on the same land annually. Government initiatives, such as the Nutri-Farm Scheme, encourage the cultivation of nutrient-rich crops like high-quality maize varieties to enhance nutritional security. Additionally, contingency plans have been developed to address weather-related challenges, recommending alternative crops and agronomic practices suited to different agro-climatic zones. These efforts aim to sustain agricultural productivity and support the livelihoods of farmers across Uttarakhand

Table:1 Production of food grains- Rice, Wheat, Cereal, Pulses (million tons)

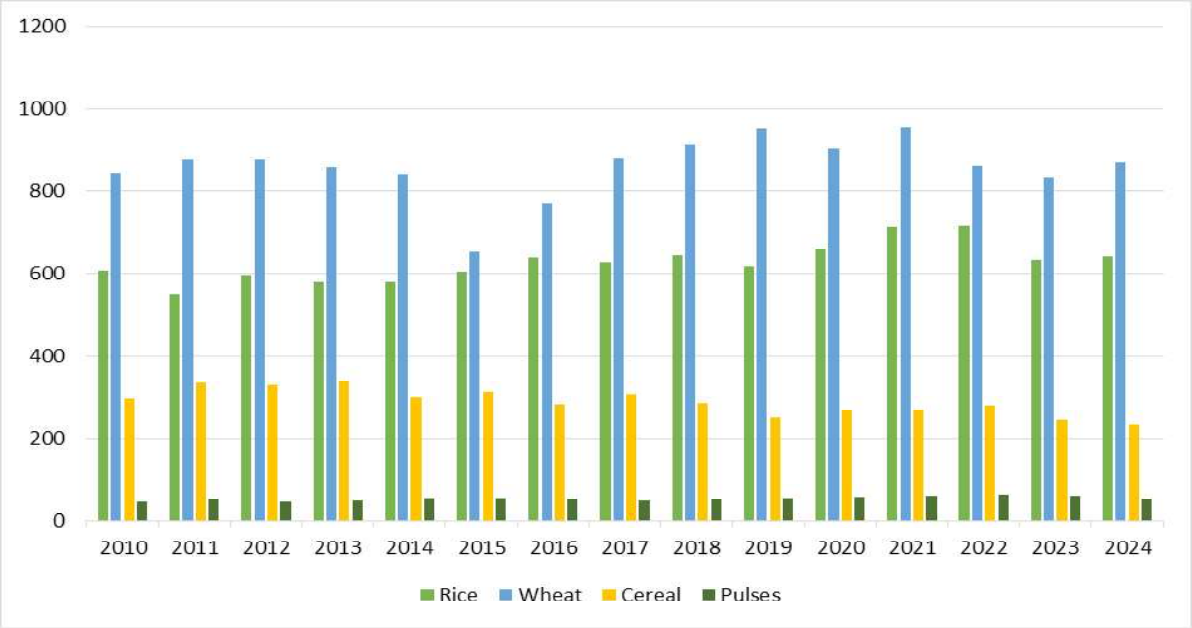
Year	Rice	Growth	Wheat	Growth	Cereal	Growth	Pulses	Growth
2010	608	-	845	-	297	-	46	-
2011	550.4	-9.474	878	3.905	335	11.343	52.1	11.7083
2012	596.8	7.922	878	0.000	331	-1.208	48.1	-6.3265
2013	579.8	-2.391	858.2	-2.255	338.4	2.187	51.3	4.4834
2014	578.6	-0.207	842.4	-1.841	298.9	-11.643	56.5	9.7095
2015	603.7	4.338	654.2	-22.341	313.4	4.868	54.3	-3.893
2016	639.1	5.864	772.4	18.068	282.8	-10.891	51.6	-5.8140
2017	630	-1.424	882	14.190	308.3	9.008	50.1	-2.907
2018	646.7	2.651	915.4	3.787	286.9	-7.354	54.2	2.2140
2019	617.6	-4.500	951.6	3.955	251.7	-13.985	55.3	1.9892
2020	658.4	6.606	904.1	-4.992	265.8	5.305	57.8	4.3825
2021	714.9	8.581	955.3	5.663	270.3	1.693	61.3	6.055
2022	716.1	0.167	863.0	-9.663	281.9	4.291	63.5	3.588
2023	634	-11.46	831.1	-3.696	244.1	-13.00	61.5	-3.149
2024	644	1.578	869.2	4.584	234.5	-3.932	51.8	-15.77

Source: Ministry of Agriculture and Farmers Welfare, Government of India. 2010-2024.

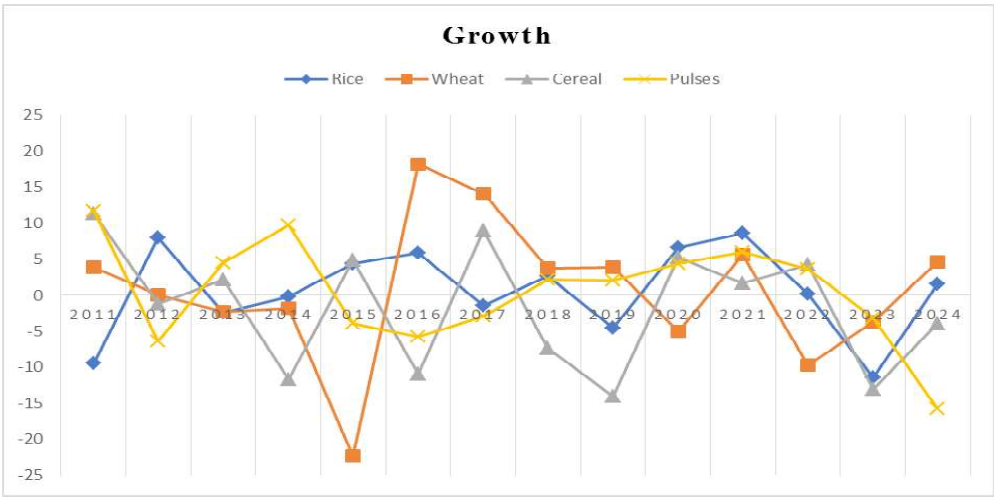
The growth rate is calculated by the authors

The table presents the annual production (in million tons) and growth rates of four key food grain categories—Rice, Wheat, Cereal, and Pulses—from 2010 to 2024. Over these 15 years, food grain production has shown fluctuating trends, reflecting the impact of various agronomic, climatic, and policy factors. Rice production started at 608 million tons in 2010 and peaked at 716.1 million tons in 2022. However, it witnessed major ups and downs, notably declining in 2011 by -9.47%, likely due to unfavourable conditions, followed by a recovery in 2012. After 2022, rice production dropped significantly

by -11.46% in 2023 before slightly recovering by 1.57% in 2024 to reach 644 million tons. Wheat production began at 845 million tons in 2010 and showed steady growth until 2013. A sharp decline occurred in 2015 when it fell by -22.34%, possibly due to climatic adversities or policy changes. However, wheat production rebounded strongly in 2016 and 2017, peaking in 2021 at 955.3 million tons. The following years saw declines, but in 2024, wheat production once again increased by 4.58% to reach 869.2 million tons.



Cereal production, which includes coarse grains, exhibited volatile trends throughout the period. Starting at 297 million tons in 2010, cereals saw growth in some years like 2011 and 2013, but also experienced substantial declines, particularly in 2014 (-11.64%), 2016 (-10.89%), 2019 (-13.98%), and 2023 (-13.00%). In 2024, cereal output dropped again by -3.93%, settling at 234.5 million tons—its lowest during the entire period. Pulses production also showed inconsistency, with both positive and negative growth years. From 46 million tons in 2010, production rose steadily in some years, reaching a peak of 63.5 million tons in 2022. Nevertheless, pulses production experienced a sharp drop of -15.77% in 2024, falling to 51.8 million tons, erasing most of the gains made in previous years. Overall, the data highlights the erratic nature of food grain production in India, underscoring the challenges in achieving stable growth due to dependencies on monsoon patterns, market prices, input costs, and agricultural policy shifts. The recent years, especially 2023 and 2024, have shown a declining trend in almost all categories, signalling the need for renewed focus on sustainable agricultural practices and robust support systems for farmers.



Croppig Intensity

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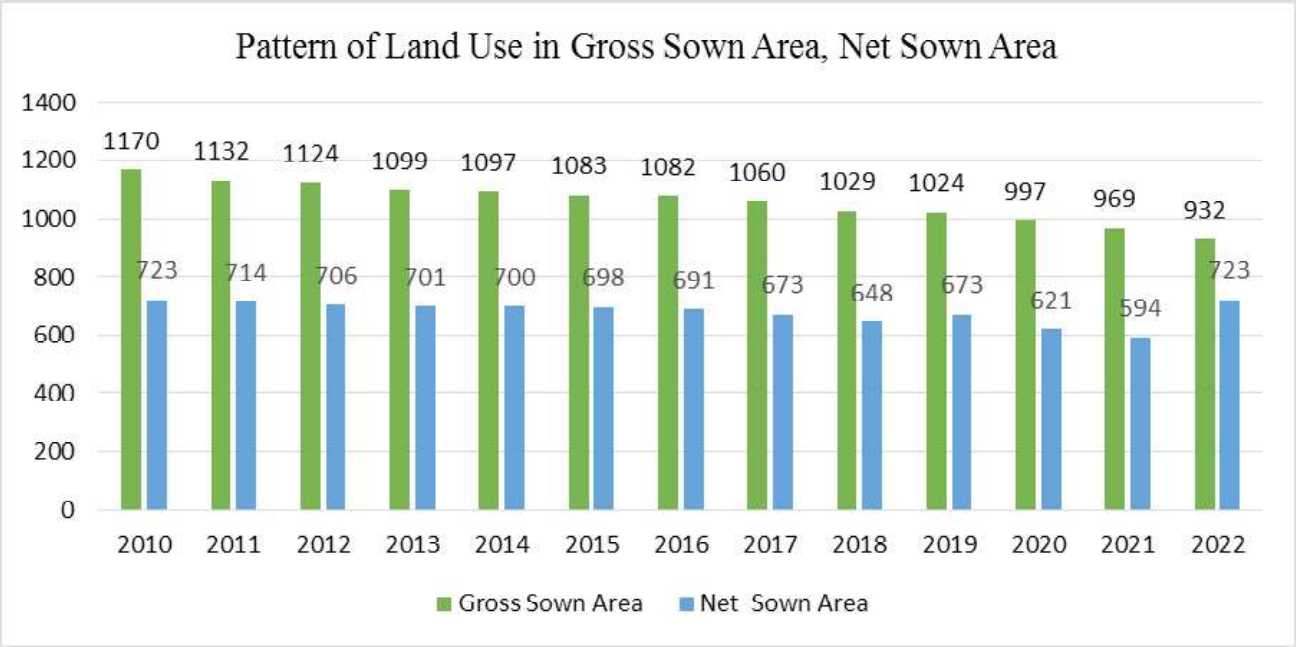
Table 6.1. Pattern of Land Use in Gross Sown Area, Net Sown Area, and Cropping intensity in Uttarakhand (Thousand Hectares)

Year	Gross Sown Area	Net Sown Area	Cropping Intensity
2010	1170	723	161.80%
2011	1132	714	158.48%
2012	1124	706	159.21%
2013	1099	701	156.78%
2014	1097	700	156.71%
2015	1083	698	155.16%
2016	1082	691	156.56%
2017	1060	673	157.48%
2018	1029	648	158.80%
2019	1024	673	162.54%
2020	997	621	160.55%
2021	969	594	163.13%
2022	932	723	128.94%

Source: Ministry of Agriculture and Farmers Welfare, Government of India. 2010 - 2024.

The pattern of land use in Uttarakhand, as reflected in the data from 2010 to 2022, reveals notable trends in gross sown area, net sown area, and crop intensity. In 2010, the gross sown area stood at 1170 thousand hectares, while the net sown area was 723 thousand hectares, resulting in a crop intensity of 161.80%. Over the subsequent years, both gross and net sown areas showed a gradual decline, indicating either shrinking cultivable land, increasing land left fallow, or a shift in land use patterns. By 2020, the gross sown area had decreased to 997 thousand hectares and the net sown area to 621 thousand hectares,

although the crop intensity remained relatively stable at 160.55%, suggesting that farmers were increasingly adopting multi-cropping practices to compensate for the reduction in land under cultivation. In 2021, a further decline was observed with a gross sown area of 969 thousand hectares and a net sown area of 594 thousand hectares, yet crop intensity peaked at 163.13%, the highest in the entire series. This increase may indicate more efficient use of agricultural land or greater dependence on intensive farming techniques.



However, a significant anomaly appears in 2022, where the gross sown area dropped to 932 thousand hectares, but the net sown area unexpectedly rose back to 723 thousand hectares matching the 2010 level. This unusual increase in net sown area led to a sharp decline in crop intensity to 128.94%, the lowest recorded in the given timeframe. This could be the result of a data recording issue or a substantial change in land use or cropping patterns in that year, which warrants further investigation. Overall, the data suggests a general decline in both gross and net sown areas over the years in Uttarakhand, with crop intensity fluctuating based on multiple cropping patterns and possibly climatic and economic factors affecting agricultural practices.

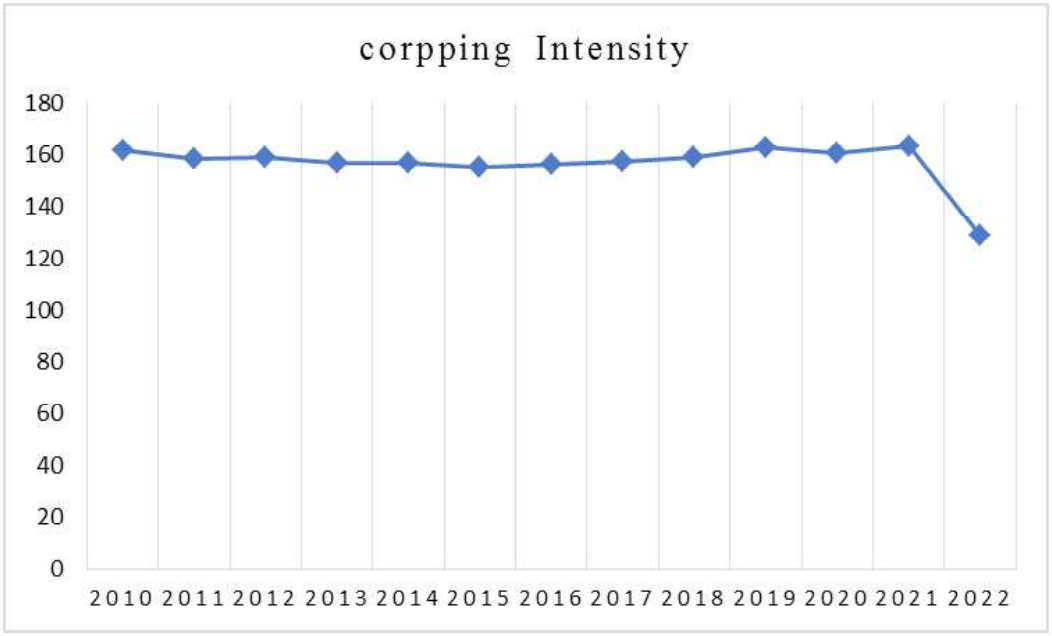


Table 3. Pattern of Land Use in Gross Sown Area, Net Sown Area, in Uttarakhand (Thousand Hectares)

Year	Gross Sown Area	Net Sown Area
2010	1170	723
2011	1132	714
2012	1124	706
2013	1099	701
2014	1097	700
2015	1083	698
2016	1082	691
2017	1060	673
2018	1029	648
2019	1024	673
2020	997	621
2021	969	594
2022	932	723

Source: Ministry of Agriculture and Farmers Welfare, Government of India. 2010 - 2024.

Statistic	Value
Correlation coefficient	0.563912
R^2	0.31
Degree of freedom	11
P value	<0.001

The correlation analysis between net sown area and gross sown area in Uttarakhand reveals a moderate positive linear relationship ($r = 0.564$), indicating that as the net sown area increases, the gross sown area tends to increase as well. The coefficient of determination ($R^2 = 0.31$) suggests that approximately 31% of the variability in gross sown area can be explained by changes in net sown area. The p-value (< 0.001) signifies that this correlation is statistically significant, meaning the observed relationship is unlikely due to random chance. With 11 degrees of freedom, these findings underscore a meaningful association between the two variables, although other factors also contribute to variations in gross sown area.

Conclusion

Based on the research and data analysis, it is clear that agriculture remains a cornerstone of livelihoods in Uttarakhand, with more than 70% of the rural population depending on it. The state's geographical

diversity—comprising both fertile plains and challenging hilly terrains creates significant regional variations in cropping patterns and productivity. Over the period from 2010 to 2024, the production of major food grains such as rice, wheat, cereals, and pulses has shown considerable fluctuations. While rice production peaked at 716.1 thousand tons in 2022, it sharply declined to 634 thousand tons in 2023. Similarly, wheat production saw steady growth up to 2021 but decreased afterward. Pulses, too, demonstrated inconsistent trends, with a notable decline of 15.77% in 2024. These variations highlight the vulnerability of agriculture in the region to factors like rainfall dependency, limited irrigation, and climatic changes. Agricultural intensity, which reflects the extent of land utilization through multiple cropping, remained above 155% for most of the study period, indicating efficient use of cultivable land. However, in 2022, there was a noticeable drop in intensity to 128.94%, suggesting potential issues such as reduced land availability, water scarcity, or changes in land use. The statistical correlation coefficient of 0.56 and an R^2 value of 0.31 indicate a moderate relationship between gross sown ad net sown, implying that other variables like irrigation, soil health, and weather patterns significantly impact yields. Overall, the study concludes that while Uttarakhand's agricultural sector shows signs of resilience, it faces ongoing challenges that need to be addressed. Enhancing irrigation infrastructure, adopting climate-resilient farming practices, and improving accessibility in hilly areas could play a vital role in stabilizing crop production and ensuring sustainable agricultural development in the state.

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Raag Darbari Revisited: State, Satire and Politics

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Abstract: This paper seeks to examine the failures of Nehru and Gandhi's principle through the novel *Raag Darbari*. Initially it focuses on the strategies of Nehru and Gandhi for a new nation and later it compares the incidents from the novel to the real-life incidents that took place in Nehru's regime. It explores the themes of the novel like politics and education through which the state impacts an individual's life. It will interrogate the depiction of the Nehru's grand vision of modern India and finally it concludes with the reasons for its failure at village level.

Keywords: Corruption, Gandhi, Nehru, Education, Panchayat.

Nehru and Gandhi's Concept of New India:

Jawahar Lal Nehru is popularly known as the architect of modern India, who has often been praised as democrat, socialist, humanist, visionary etc. Bipin Chandra argues that "Nehru propagated the ideas of socialism and declared that political freedom would become meaningful only if it led to the economic emancipation of the masses" therefore he planned a "socialist revision of the economic structure of society to end poverty and inequality" (Chandra 298).

As Nehru held the view that the economic strength brings real independence to its citizens and he approved to "rapid industrialization, particularly heavy industries, planning and development of the public sector" (Chandra 221). Nehru thought that this mass industrialization would lead to self-reliance which accordingly will bolster up the spirit of nationalism by self-confidence and self-respect. Nehru stepped beyond the ideals of swaraj by asserting that "he wants to drag even the peasantry from it(village), not to urbanization, but to spread urban cultural facilities to the rural area" (Mukherjee 38). Nehru had envisaged a welfare state through democratic socialism which promised its subject equal opportunity, social justice and putting an end to social and economic disparities erupted by feudalism and capitalism. Nehru has expressed his interest in science in his autobiography he said that "there is something very wonderful about the high achievement of science and modern technology" (492). Furthermore, he had deep faith in fixing social problem by scientific approach because science and technology would help the rapid economic development of the country (Sharma 1293).

Concept of panchayat was part of the national aspiration articulated during the freedom struggle led by Mahatma Gandhi. He had envisaged an idyllic self-governing village in his text 'Village Swaraj' where he prophesized that the country's future lies in the decentralized polity with extensive autonomy to the villages (Gandhi 3). It was a political-economical abstraction fundamentally based upon self-reliance in terms of economy and governance. Dilip Bandyopadhyay stated that it was Gandhi's idea to organize Indian polity "on communitarian principles" where power does not flow in higher to lower hierarchy of institutions, instead proposed the flow from village community to districts and up till Centre (3986). Besides all these idealistic proclamations outcomes were largely different from what they had envisioned.

Shivpalganj as Microcosm of the 'New India'

There has been considerable literature from those days which highlights its contemporary bureaucracy politics and corruption but nothing matches the finesse with which Shukla has imbibed his experiences

of failed political system in the novel *Raag Darbari* (1968). Shukla has employed satire as a major element in criticizing the public administration and institution, by emphasizing on – "patriarchy, nepotism, control, violence, systemic failure, to name a few — as apotheoses of postcolonial literary realism of the emerging nation." (Rath 48)

The novel *Raag Darbari* (melody of the court) reflects the true functioning of Panchayati raj. It reflects upon how "it is steeped in casteism and traditional paternalistic practices" and how certain people "use panchayats to strengthen their end" (Mathur, xi). The novel was written during 1960's and when people were disillusioned with the aspirations of Swaraj from pre-independence days. The novel incorporates the degrading value of the village life during the post-independence era and puts together the hollow notion of the democratic ideals and romantic countryside.

Shivpalganj represents a village of independent India, where development is virtually seen in the form of cooperative, intermediate college, judiciary, block development office, police station etc. which has direct linkage to the town. Shukla has very aptly presented the realist picture of rural development in the post-independence India by depicting the failure of development policies of Nehruvian regime in the form of a novel. Shivpalganj's village council was inflicted with the poor governance characterized by autocratic rule of Vaidya ji. Whether its cooperative, college or village council he had exploited everything as his personal freedom. The novel also highlights upon the question, how all the policies proved useful to a handful of powerful people like Vaidyaji and how politics is manipulated by those of upper caste members. It also delves into the issue of corruption, nepotism, casteism. There was no law and order in the village, Vaidya ji was the supreme authority of the entire village. Educational institutions, cooperative, panchayats (local governance) were the part of first two five-year plan for the transformation of the rural India. Here in the novel all three were manipulated by Vaidya ji with the help of his subordinates.

According to Gandhi, democratic decentralization and devolution of power sought to establish self-governing institution at local level, this decentralization was somewhere necessary to meet the need of a poor and downtrodden. However, in the novel, the village council didn't meet the need of villagers rather it to a handful of goons, who used it to acquire lands donated during 'bhoodan movement'.

Vanashree argues that it is a "document about the difficulties of implementing democratic governance in the rural Hindi Pradesh and also the machinations of corruption in Indian polity" (Vanashree 60). The novel discusses the strategies to win an election through three types of tricks each used in different situations, where all three refers to the unethical methods to win an election. This episode from the novel drags the nonfeasance of Election Commission into question as it is responsible for conducting free and fair elections. Whereas in Mahipalpur trick, the election commissioner compromises with the integrity towards his duty, likewise he himself becomes partner in the crime and election process which is constituting part of democracy also falls victim to corruption by holding it hostage to muscle, money and trickery.

According to Akhil Gupta, the novel depicts the sectarian politics of independent India through the character of Vaidyaji and his men, he pretends to be the follower of Gandhi's ideals. He was a great rhetorician and after every misdeed he readily delivered a Gandian idiom of morality and that's how he clouded his true intent and stood scrupulous in front of others with the use of such trickery to meet his political aims. In-fact this has been the problem of post independent politics that how educated and politically aware individuals have dominated the local politics through power, caste, faction and had exploited the public resources by not letting the deserving recipient gain benefit from it. The description of Shivpalganj is far away from idyllic village where there exists no binary of hero-villain, truth-falsehood, rather everyone in the village appears to be a villain, who are trying to put others into trouble by any means.

M.N. Srinivas in his book *India's village*, takes account of the caste politics prevailing in Indian villages. He explains about the role of predominant caste in politics of a village, how they are central to village politics by means of muscle power, money power and political dominance (qtd. in Dubey 7). In contexts

to *Rag Darbari*, the caste which has been referred to is Brahmin, or the caste which is central to the village politics is Brahmin. Majority of the dominating character appearing throughout the novel are from Brahmin caste. From the novel it turns out that whole novel revolves around these upper caste people. Rest of the characters serves the purpose of ridicule. Mudraraksh stated that Shukla seemed to have adhered to the norms of classical Sanskrit satire, where highborn person cannot be subjected to satire. Satire is only concerned with women, untouchables and physically disable (Madhuresh 102) as evident in novel through the character of Langar.

One of the motives of village council is to eliminate inequality but the villagers seemed to be the adherent Social Darwinism, to which hierarchy was natural. In Shivpalganj itself there was a quarter of village for the untouchables, which was bridged to the other part of the village through the platform of Gandhi erected after the independence which symbolically represented equality among the villagers, but sometimes villagers urinated on the platform which symbolizes the vanishing the spirit of Gandhism. In legendary speech of on the eve of independence, Nehru proclaimed his aim of 'ending poverty and inequality of opportunity' (Tryst with destiny), whereas in novel the constitution is regarded as a poetry whose clause 17 abolishes untouchability and people depend on religion not poetry and that's how constitution and the efforts of Ambedkar, Nehru and Gandhi have been delegitimized by the villagers.

Each institution whether its college, revenue office, police station, judiciary everything is imbued with blatant corruption. Langar's stint at Tehsil for the procurement of a copy reflects of Gandhi's principle of non-violence and satyagraha when he refuses to pay a bribe of five rupees to the copy clerk. As a result of this he had to wait for years to get the copy. Through this episode Shukla has presented the grim reality of the corrupts institutions, which inflicted trouble upon common man during the post-Independence days.

The novel takes on the education and intellectuals as well. In the very beginning of the novel, it appears that the country is lacking behind in terms of doctors and engineers because to become doctor or engineer one has to go to America. This statement brings Nehru's scientific vision into consideration. It was Nehru who had provided dynamics to the educational framework of India by introducing IIT act in 1961, AIIMS act in 1956 and his other contributions were CSIR, TIFR, IISC and many more but still majority of the Indian were lacking the very fundamental education, as the truck driver compares the Indian education system to "Pariah bitch lying on the floor" (Shukla 7). Whereas the villagers held the view that a person pursuing higher studies was an 'average idiot' such perception of villagers towards the education was due to the maladministration of the intermediate college at Shivpalganj. The dilapidated building of the colleges is served every purpose except teaching and was the 'den of louts and layabouts', whereas teachers have given up on teaching and are involved in politics. There seems to be no morality left in the name of college; it was the hub for politics, factionalism, corruption and exploitation.

Due to agitation from the government, universities in those times were the centre of the of dissent against the state (Shah 611). This situation has been incorporated into the framework of *Raag Darbari* through the intermediate college where Khanna master goes cynical about the college administration. The dispute of Khanna master at college to which he gets paid dearly by having to leave the college reflects the powerlessness of intellectuals in the face of strong and corrupt nexus between the criminals, police and politicians. According to Shah, the novel foreshadows over the circumstances which were providing momentum to the upcoming "Sampoorana Kranti" led by Jai Prakash Narayan (qtd. in Dubey, 5). It was the time when intellectual elites and the opposition were asking for accountability for the failure of the employment of government policies. From the ideals of Gandhi and the spirit of independence people had anticipation that they will get rid of the poverty, starvation, inequality and lack of opportunity, but soon people began to realize its inefficiency and got disenchanted from this and after few years Jaiprakash Narayan declared the 'Sampoorna Kranti' which received unprecedented support from the youth throughout country.

Nehru lacked the mobilization across his party or the institution through which he could execute the plans to his party members from the lower cadre. Therefore, he failed to impart his policies to his party

members and also in the novel the senior political leaders and bureaucrats visited Shivpalganj once in a while therefore strict action against Vaidyaji could not be taken earlier. Also, soon after independence, the stalwarts like Gandhi and Patel from the Congress party passed away and Nehru was left alone and soon party weakened and began to lose its dignity among public. Because of such consequences, Nehru had to switch over to bureaucracy to execute his plans. As a consequence of this, Panchayati raj ended up in the hands of bureaucrats and the so called 'village-level social worker', the kingpin of the village like Vaidyaji, which became a cog in the machine as manifested in the novel itself.

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Challenges and Legislative Responses to Regulating Artificial Intelligence in Bihar, India

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Abstract

Artificial intelligence (AI) is moving from research and pilots to routine deployment in Indian markets and public services, raising questions about privacy, accountability, bias, safety, and the capacity of governments to supervise complex systems. This paper analyzes the Bihar context: the state's distinctive constraints, the national legislative instruments that already shape AI governance in Bihar, and the early policy responses emerging at the state level. Bihar's core challenges are structural—low digital access, a pronounced gender digital divide, thin local technical capacity, and uneven administrative digitization. Against this backdrop, Bihar's AI governance is presently driven more by national frameworks than by state-specific AI legislation. The Digital Personal Data Protection Act, 2023 (DPDP Act) provides the most direct legal baseline for many AI systems because AI frequently depends on personal data. The India AI Mission, approved by the Union Cabinet on 7 March 2024, operates as an indirect governance response by building shared compute, datasets, skilling, and indigenous tools for "Safe, Trusted and Ethical AI." Bihar's IT Policy 2024 focuses primarily on investment promotion and incentives, offering enabling conditions but limited AI-specific safeguards. Comparative state experience—especially Tamil Nadu's Safe & Ethical AI Policy—illustrates how sub-national governments can operationalize ethical principles through evaluation and auditability requirements. The paper argues for a phased, capacity-sensitive pathway for Bihar: immediate minimum safeguards through procurement and departmental checklists, mid-term auditability and vendor accountability, and longer-term sectoral guidelines coupled with citizen inclusion and awareness.

Keywords: Artificial Intelligence; Bihar; AI governance; regulation; digital divide; state capacity; data protection; Digital Personal Data Protection Act 2023; IndiaAI Mission; ethical AI; procurement governance

Introduction

AI systems increasingly mediate decisions about people: which messages they see, what services they receive, and how institutions assess risk, eligibility, or performance. In public administration, AI can support fraud detection, grievance triage, predictive maintenance, and citizen communication. In private markets, AI powers credit scoring, recruitment screening, targeted advertising, and automated customer support. These uses can improve efficiency and personalization, but also produce harms: opaque decision-making, discriminatory outcomes, privacy violations, security vulnerabilities, and accountability gaps when human oversight is weak. The regulatory question is therefore not only "how to promote AI," but "how to govern AI so that benefits are distributed fairly and risks are constrained."

Globally, policy responses vary. The European Union's AI Act adopts a risk-based approach with four levels of risk and bans certain "unacceptable risk" uses while imposing extensive requirements on "high-risk" systems. In the United States, federal AI regulation remains fragmented, and a leading governance tool is the voluntary NIST AI Risk Management Framework (AI RMF 1.0), intended to help organizations manage risks and incorporate trustworthiness considerations throughout the AI lifecycle. These contrasting approaches illustrate a spectrum: from legally binding risk-tiered regulation to voluntary risk-management guidance.

India's AI governance is still consolidating. NITI Aayog's National Strategy for Artificial Intelligence (2018) framed an "AI for All" vision and emphasized deploying AI in high-impact sectors like agriculture and health while building supporting research and data ecosystems. Since then, India has pursued a mix of sectoral governance, data protection reforms, and innovation missions rather than a single AI statute. In March 2024, the Union Cabinet approved the IndiaAI Mission to strengthen the national AI ecosystem, including public AI compute infrastructure and "indigenous tools for safe, trusted and ethical AI development & deployment."

Within India's federal system, states vary widely in digital readiness and policy capacity. Some states have articulated AI policies and ethical frameworks. Tamil Nadu's Safe & Ethical AI Policy (2020) explicitly aims to make AI inclusive, free of bias, fair, equitable, ethical, and transparent, and proposes evaluation dimensions such as auditability and privacy. Bihar, by contrast, is exploring AI adoption while confronting foundational constraints in connectivity, capacity, and institutional readiness. This contrast makes Bihar a useful case study for understanding how AI regulation must be adapted to low-capacity, high-need settings within a national legal system.

Objective

This study has four objectives:

1. Identify Bihar-specific challenges to regulating AI, including infrastructure, human capital, institutional readiness, and socio-economic constraints.
2. Map the legislative and policy instruments that shape AI governance in Bihar, focusing on national frameworks (DPDP Act, IndiaAI Mission) and Bihar's state policies (especially the IT Policy 2024).
3. Compare Bihar's position with Indian state initiatives on AI governance to extract practical lessons.
4. Propose a capacity-sensitive, phased governance pathway for Bihar aligned with national law and informed by global best practices.

Methodology

The paper uses qualitative policy analysis and comparative review. Primary sources include the text of the DPDP Act (MeitY), the Government of India press release announcing the IndiaAI Mission (PIB), Bihar IT Policy documents and highlights, and Tamil Nadu's Safe & Ethical AI Policy (official PDF). Secondary sources include PRS Legislative Research's analysis of the DPDP Bill for concise interpretation of penalties and obligations. Contextual evidence for Bihar's digital divide is drawn from a widely cited briefing paper focusing on gender and internet access in Bihar. The analysis compares Bihar with state pioneers (notably Tamil Nadu) and uses international reference frameworks (EU AI Act risk-based approach and the NIST AI RMF) as conceptual benchmarks rather than direct templates.

Result and Discussion

1. Bihar's structural constraints and why they matter for AI regulation

AI regulation cannot be separated from Bihar's broader digital development trajectory. Effective governance requires (a) baseline digital access for citizens, (b) digitized administrative processes that create traceability and audit trails, and (c) skilled personnel and institutions that can specify, procure, evaluate, and monitor AI systems. Bihar faces deficits across these dimensions.

Connectivity and inclusion

A core challenge is the scale of the digital divide. A briefing paper on Bihar's gender digital divide reports that Bihar has the lowest number of internet subscribers at 32.45 per 100 people and the lowest percentage of women using the internet. This matters because AI-enabled governance often assumes digital access to apply, verify, or contest decisions. If access is uneven, AI systems can unintentionally deepen exclusion: citizens without smartphones or stable internet may be unable to upload documents, receive automated updates, or use chatbot-based information channels. For women in particular, limited access can amplify unequal outcomes when services shift "digital-first." Therefore, regulating AI in

Bihar must include "inclusion by design": assisted access points (e.g., common service centers), multilingual support, and offline alternatives.

Institutional readiness

Bihar's administrative digitization is improving, but uneven. Many governance processes still rely on paper or fragmented data systems, limiting the quality and interoperability of datasets required for AI. When data is incomplete or biased, AI systems can output confident but incorrect recommendations. This is particularly risky in contexts such as eligibility targeting, predictive policing, or health triage, where mistakes harm vulnerable populations. In low-capacity settings, the problem is compounded by limited monitoring: if departments cannot track performance, error patterns and bias can persist unnoticed.

Human capital and ecosystem thinness

Bihar's local AI ecosystem is thin relative to technology hubs. When a state lacks trained data scientists, cybersecurity experts, and AI auditors, it becomes dependent on external vendors. Vendor dependence creates governance risks: black-box procurement, limited negotiating power to demand documentation or audit access, and weak ability to challenge accuracy claims. A practical consequence is that regulation must travel through procurement and contract design: Bihar can impose accountability obligations on vendors even when in-house technical capacity is limited.

National legislative baseline: DPDP Act 2023 and AI in Bihar

The DPDP Act, 2023 is the most important enforceable legal instrument shaping AI governance in Bihar because many AI systems rely on personal data. The Act sets obligations for data fiduciaries and establishes the Data Protection Board of India for enforcement. The law requires that consent requests be presented in clear and plain language and provide the option to access the request in English or any language in the Eighth Schedule. This language-access requirement is relevant for Bihar because consent notices that are not understandable in practice weaken meaningful consent, especially where digital literacy is uneven.

For AI deployments, the DPDP framework shapes governance in three ways. First, it constrains data collection and model training: personal data used to train or improve AI systems must be processed lawfully, with consent or another permitted basis, and for specified purposes. Second, it constrains deployment: AI services that profile or make decisions about individuals typically require ongoing data processing, which must align with minimization and security obligations. Third, it creates deterrence through penalties and enforcement: PRS Legislative Research highlights that the schedule specifies penalties up to ₹ 250 crore for failure to take reasonable security safeguards and up to ₹ 200 crore for specific children-related obligations, among others. These penalties incentivize organizations to invest in security and compliance—important in Bihar, where digital fraud and data misuse risks can be high as connectivity expands.

Yet, DPDP is not a complete AI governance solution. Many harms—algorithmic discrimination, unsafe autonomy in critical systems, manipulation via synthetic media—are only partially addressed by data protection. DPDP reduces privacy and breach risk but does not, by itself, guarantee fairness or safety. Bihar must therefore treat DPDP as a baseline and add operational safeguards through administrative instruments: departmental guidelines, audit requirements for high-risk uses, and robust grievance mechanisms.

India AI Mission (2024): Capacity-building as an Indirect Governance Response

The IndiaAI Mission, approved by the Cabinet on 7 March 2024, is not a regulatory statute, but it functions as a governance response by building common infrastructure and "Safe, Trusted and Ethical AI" tools. The PIB press release describes pillars including public AI compute (10,000+ GPUs), investment in indigenous foundational models, startup financing, and indigenous tools for safe and ethical AI development and deployment. For Bihar, this matters because regulation often fails where capacity is low: standards without tooling, skills, or infrastructure are difficult to enforce. Mission-mode capacity-building can close that gap.

Three implications are especially relevant to Bihar. First, compute democratization can help Bihar's universities and public agencies experiment with AI without purchasing expensive local infrastructure, allowing learning-by-doing and building local competence. Second, responsible AI toolkits—if made accessible and standardized—can become default requirements in Bihar's government AI procurement (for example, bias testing, documentation templates, and model cards). Third, IndiaAI's skilling emphasis can support Bihar's talent pipeline and reduce dependence on external vendors. Capacity-building thus acts as an "enabler of governance": it makes basic oversight feasible by providing common resources and skills.

Bihar's State Policy Response: IT Policy 2024 as an Enabling, not Protective, Framework

Bihar's IT Policy 2024 is primarily an investment and industry policy designed to attract IT/ITeS/ESDM units and generate jobs, including provisions for additional incentives for units established outside the Patna and Danapur municipal areas. From an AI governance perspective, such a policy is necessary but insufficient. It can expand the state's technology footprint, which indirectly improves governance capacity, but it does not set AI-specific safeguards or institutional mechanisms for responsible AI deployment in public services.

This gap is not unusual: many governments initially treat AI as a growth and modernization tool before confronting governance risks. However, as Bihar adopts AI in citizen-facing services, a purely enabling policy can leave departments without guidance on consent, data sharing, vendor accountability, fairness testing, and grievance redressal. Bihar does not necessarily need a complex AI statute immediately. A more feasible approach is to issue administrative instruments—rules, circulars, and procurement standards—that operationalize DPDP compliance and add targeted safeguards (human oversight in high-stakes decisions, transparency, and audit access). Such instruments are faster to implement, easier to adapt, and more realistic for Bihar's current capacity.

Lessons from State Pioneers: Tamil Nadu's Ethical Evaluation Model

Tamil Nadu's Safe & Ethical AI Policy (2020) demonstrates how a state can articulate ethical principles and operationalize evaluation. The policy emphasizes that AI can be biased or misused and argues for a state-level framework guiding policymakers. It aims to make AI inclusive, safe, ethical, and transparent, and it discusses evaluation dimensions such as privacy/data protection and auditability of decisions. For Bihar, the main lesson is not that it should replicate every mechanism immediately, but that governance can be made practical through checklists, documentation, and explicit evaluation criteria.

Bihar can adapt this in a simplified form. For any AI system used by the state in a high-impact area—welfare targeting, education outcomes, health screening support, or surveillance—Bihar can require a short "AI Impact Note" and a "Data Protection Compliance Note." The AI Impact Note should cover: purpose and intended benefit; data sources and quality issues; risk of bias or exclusion; human oversight steps; explainability and audit trail; grievance redressal; and monitoring plan. The Data Protection Compliance Note should map DPDP obligations to concrete controls (consent flows, data retention, security measures, breach notification readiness). Even a lightweight template can raise governance quality by forcing departments and vendors to articulate risks and mitigation.

International Frameworks as Reference Points for Bihar's Risk-based Governance

Bihar can borrow conceptual guidance from international frameworks without adopting their full legal architecture. The EU AI Act's risk tiering offers a simple heuristic: focus the strongest oversight on high-risk uses and prohibit clearly unacceptable uses. The European Commission's policy page explains the risk-based approach and four risk levels. Bihar can apply a similar triage: (a) minimal-risk uses (chatbots for general information) can be allowed with transparency; (b) high-risk uses (eligibility decisions, surveillance) require documentation, testing, and human oversight; and (c) unacceptable uses (for example, systems designed to manipulate vulnerable groups) should be prohibited in government deployment, even if private use is hard to police initially.

The NIST AI RMF provides a practical lifecycle governance model. NIST describes AI RMF as intended for voluntary use to help manage risks and incorporate trustworthiness into design, development, use, and evaluation. Bihar can translate this into a "govern–map–measure–manage" workflow for public-sector AI: define governance roles and accountability; map system context and stakeholders; measure performance and bias; and manage risks through mitigation and monitoring. Even if Bihar cannot execute sophisticated audits, it can insist that vendors follow such workflows and provide evidence.

A Phased, Capacity-sensitive Governance Pathway for Bihar

Given Bihar's constraints, an effective strategy should be phased.

Phase 1 (0–12 months): Minimum safeguards for public-sector AI. Bihar should establish a small State AI Governance Cell within the IT Department or a dedicated e-governance body. The cell should publish a "Minimum Responsible AI Standard" for all state projects. The standard should require DPDP-aligned data governance, reasonable security safeguards, vendor documentation, human oversight for high-stakes decisions, transparency to citizens when they interact with AI, and accessible grievance redressal. It should also require an "AI Impact Note" and "Data Protection Compliance Note" for any new AI procurement.

Phase 2 (12–24 months): Procurement reform and auditability. Bihar should update procurement templates and service-level agreements to ensure vendors provide documentation, allow audits, support incident reporting, and disclose limitations. Contracts should define who is accountable when an AI system errs and require periodic performance reporting. Bihar can partner with local institutions and national agencies to conduct independent evaluations for sensitive projects. The goal is to avoid black-box dependence and create enforceable accountability through contracts.

Phase 3 (24–36 months): Sectoral guidelines and citizen inclusion. Bihar should develop short sectoral guidelines for priority domains—education, health, agriculture, and policing/civic administration—aligned with national regulators and with consultation from civil society. Citizen awareness must be strengthened so people understand data rights under the DPDP Act and know how to file complaints. Bihar should also invest in assisted digital service centers and multilingual communication to ensure that AI-enabled services do not exclude non-digital users, especially women and rural citizens.

Across all phases, Bihar should treat capacity-building as part of governance. The IndiaAI Mission's compute and responsible-AI tooling can support Bihar's institutional learning, and Bihar's IT policy incentives can be aligned with governance goals by rewarding firms that demonstrate responsible AI practices.

Conclusion

Regulating AI in Bihar is primarily a capacity and inclusion challenge, not merely a legislative gap. Bihar's low internet penetration and deep digital divides create a risk that AI systems will widen inequality unless designed with assisted access, multilingual support, and robust grievance mechanisms. National frameworks already shape Bihar's AI governance: the DPDP Act, 2023 provides enforceable privacy and security obligations, while penalties incentivize strong compliance practices. The IndiaAI Mission provides mission-mode infrastructure and "Safe, Trusted and Ethical AI" tools that can make responsible deployment feasible even in lower-capacity settings. Bihar's IT Policy 2024 builds enabling conditions for digital industry but does not yet provide AI-specific guardrails, making administrative governance instruments (procurement standards, impact notes, audit access) the most realistic near-term response.

Comparative experience—especially Tamil Nadu's structured ethical AI policy—shows that sub-national governments can operationalize fairness, transparency, and audit ability through practical evaluation criteria. For Bihar, the most feasible pathway is phased: implement minimum safeguards immediately, strengthen auditability and vendor accountability next, and then issue sectoral guidelines alongside citizen inclusion measures. International frameworks offer useful reference points: the EU AI Act highlights risk-tiering priorities, and the NIST AI RMF provides lifecycle risk-management workflows Bihar can adapt via checklists and contractual requirements.

Policy success also depends on measurement: Bihar should publish annual transparency reports listing AI systems used by departments, purposes, datasets, vendors, and complaint statistics. Even a simple public register improves accountability and helps researchers identify harms early. Finally, Bihar should coordinate with district administrations, since most citizen interaction happens locally, and district-level training is essential across rural and urban.

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Energy Harvesting Interface Circuits for Autonomous Wearable Environmental Monitoring Systems: A Comprehensive Analysis of CMOS-Based Power Management and Multi-Modal Transduction

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Abstract

The evolution of wearable technology from simple activity trackers to sophisticated biomedical and environmental monitoring platforms has necessitated a transition toward self-sustained energy architectures. Traditional battery-reliant systems face significant limitations regarding operational longevity, user comfort, and environmental sustainability. This report provides an exhaustive investigation into the state-of-the-art energy harvesting interface circuits designed to power wearable environmental sensors. By leveraging ambient energy sources—including thermal gradients, mechanical vibrations, and photovoltaic radiation—these interface circuits aim to achieve energy neutrality. The analysis focuses on the technical intricacies of Complementary Metal-Oxide-Semiconductor (CMOS) power management units (PMUs), specifically addressing ultra-low-power Maximum Power Point Tracking (MPPT) algorithms, low-voltage cold-start mechanisms, and high-efficiency regulation topologies. Key advancements, such as one-dimensional digital MPPT for switched-capacitor charge pumps and synchronized switch harvesting on inductor (SSHI) techniques, are evaluated for their efficacy in sustaining sensors for carbon dioxide, humidity, and ultraviolet exposure. Through a rigorous synthesis of empirical data and second-order insights, this study elucidates the causal relationships between circuit parameters and system-level autonomy, offering a roadmap for the next generation of battery-free, eco-friendly wearable electronics.

Keywords: Energy Harvesting; CMOS Interface Circuits; Wearable Environmental Sensors; Power Management Unit (PMU); Maximum Power Point Tracking (MPPT); Self-Powered Systems; Ultra-Low Power (ULP); Thermoelectric Generators; Piezoelectric Energy Harvesting; Triboelectric Nanogenerators.

Introduction

The global wearable electronics market, valued at approximately 70–80 billion in 2023 and projected to reach 138.5 billion by 2029, is undergoing a profound transformation.[1] This growth is driven by the increasing demand for individualized healthcare and real-time environmental monitoring, shifting the paradigm from hospital-centric to person-centric systems. Central to this evolution is the development of Wireless Sensor Networks (WSNs) and Internet of Things (IoT) nodes capable of monitoring physiological signals (ECG, PPG, sweat biomarkers) and environmental parameters (temperature, humidity, CO_2) without the constraints of traditional power sources.

The primary bottleneck for the widespread adoption of these ubiquitous devices remains the reliance on conventional chemical batteries. Lithium-ion and disposable batteries possess finite lifespans, require frequent maintenance or recharging, and present substantial environmental hazards due to toxic substances. Furthermore, the rigid form factor of batteries often limits the flexibility and wearability of

modern devices. Energy harvesting (EH) technologies offer a promising solution by locally converting wasted ambient energy—such as human body heat, biomechanical motion, and indoor light—into usable electricity.

An energy harvesting supply system comprises two fundamental elements: the energy harvesting device (transducer) and the power management electronic circuit (interface circuit). While the transducer is responsible for energy conversion, the interface circuit must maximize power extraction, provide voltage rectification, and optimize distribution to ensure the sensor node operates reliably under fluctuating environmental conditions. The design of these circuits is exceptionally challenging due to the ultra-low and intermittent nature of ambient energy. For example, a thermoelectric generator (TEG) harvesting energy from skin may provide a voltage well below 100 mV, necessitating sophisticated "cold-start" architectures and impedance-matching algorithms to initiate and maintain operation.

Recent research has focused on integrating these harvesters with biodegradable materials and soft electronics to create "wear-and-forget" systems. Innovations in CMOS technology, ranging from 180 nm to advanced 22 nm processes, have enabled the realization of PMUs with quiescent currents in the sub-microwatt range. This report explores the mechanisms through which these interface circuits reconcile the mismatch between irregular ambient energy and the stringent power demands of environmental sensors, providing a technical baseline for achieving true energy autonomy.

Strategic Objectives for Energy-Autonomous Sensing

The transition toward energy-autonomous wearable systems is guided by a set of functional and technical objectives designed to ensure that the device can operate indefinitely without external intervention. The overarching goal is the achievement of energy neutrality, where the average power harvested (P_{avg_h}) is equal to or greater than the average power consumed (P_{avg_c}) over a given operational cycle.

A primary objective in interface design is the minimization of the "startup threshold." Since wearable harvesters often begin in a zero-energy state, the circuit must be capable of bootstrapping itself using extremely low input voltages. Research has pushed this boundary to as low as 35 mV to 170 mV, enabling the system to "wake up" even in low-gradient thermal or dimly lit environments. Following startup, the objective shifts to maximum power extraction. This requires the implementation of Maximum Power Point Tracking (MPPT) to dynamically match the interface's input impedance with the harvester's source impedance, which fluctuates according to environmental variables like temperature difference (ΔT) or vibration frequency.

Furthermore, the interface must provide high-quality voltage regulation to protect sensitive analog sensing front-ends from ripples and transients. The design objective for Low-Dropout (LDO) regulators in this context is to achieve superior load and line regulation while maintaining a quiescent current (I_Q) that does not negate the energy gains of the harvester. Finally, system-level objectives include the miniaturization of the entire PMU, often through "output-capacitor-less" (OCL) topologies and the reduction of bulky off-chip components like inductors, to maintain the comfort and aesthetic requirements of wearable garments.

Technical Execution and Design Synthesis Framework

The synthesis of energy harvesting interface circuits requires a sophisticated multi-step methodology that bridges the gap between material science and electronic engineering. The process begins with the characterization of the energy source and the specific power budget of the target environmental sensors.

Power Budget and Transduction Modality Selection

The design of a PMU is inextricably linked to the power consumption profile of the sensors it supports. Modern environmental sensors for wearables utilize various sensing films and transduction mechanisms, each with distinct electrical requirements.

Sensor Component	Transduction Mechanism	Power Requirement	Operational Mode
Humidity Sensor	Organic (PEDOT:PSS)	10 µW	Continuous / Duty-cycled
CO_2 Sensor	Organic (EB-PANI)	5 µW	Continuous / Duty-cycled
NO_x Sensor	Graphene Nanoplatelet	160 µW	Integrated 3-in-1
UV Index Meter	Photodiode / Analog	~100 µW	Activity-coupled
Temperature	Thermistor / CMOS	82–241 µW	Always-on / Duty-cycled
MCU / SoC	CMOS Logic	0.5–216 µW	Sleep / Active
BLE / WiFi	RF Transceiver	25 µW – 200 mW	Burst transmission

The significant difference between the microwatt sensing power and the milliwatt transmission power necessitates a duty-cycling strategy. The methodology for system design involves modeling the energy buffer (supercapacitor or thin-film battery) and calculating the required "charge-to-discharge" ratio. For instance, an indoor photovoltaic energy harvesting module (IPEHPM) was designed to produce a 3.6–4.2 V output capable of providing a 100 mA pulse current for 600 ms, sufficient for a low-power CO_2 sensor measuring every 150 seconds.

CMOS Process and Simulation Environments

The implementation of these circuits typically utilizes standard Complementary Metal-Oxide-Semiconductor (CMOS) processes, with 180 nm and 65 nm nodes being the most prevalent for their balance of analog performance and cost. Designers utilize CAD tools such as Cadence Virtuoso for layout and Spectre or LTspice for simulation to verify robustness against Process, Voltage, and Temperature (PVT) variations.

The simulation methodology often involves:

1. **Macro-model Development**: Creating equivalent electrical circuits for the harvesters (e.g., a voltage source with series resistance for TEGs or a current source with parallel capacitance for PEHs).
2. **Sub-threshold Modeling**: Biasing analog building blocks (comparators, error amplifiers) in the sub-threshold region to minimize power consumption, where the drain current (I_D) is exponentially related to the gate-to-source voltage (V_{GS}).
3. **Post-Layout Verification**: Accounting for parasitic capacitances and fabrication mismatches, which can significantly reduce efficiency. For example, a TEG interface that showed 36% efficiency in post-layout simulation was measured at 20% in fabrication due to such mismatches.

Maximum Power Point Tracking Logic Synthesis

The logic for MPPT varies based on the complexity the power budget allows. For ultra-low-power TEG harvesting, a "One-Dimensional" (1D) MPPT algorithm is increasingly preferred. This methodology involves identifying a single parameter, such as the input voltage (*Vs*) of a switched-capacitor charge pump, to calibrate the system. The 1D approach relies on the observation that the product of the number of stages (*N*) and the stage capacitance (*C*) should remain constant for MPPT. This simplifies the Finite State Machine (FSM) control logic, reducing the I_Q of the tracker itself.

In contrast, more robust systems employ 2D or 3D algorithms that sweep frequency (*f*), *N*, and *C*. A typical 2D (N, f) algorithm methodology involves:

- Setting *N* to its maximum to ensure the target output voltage (V_{PP_TGT}) is reachable even at low input.

- Measuring the peak output voltage (V_{PP_past}).
- Iteratively decreasing N and re-measuring V_{PP_now}.
- When V_{PP_now} falls below V_{PP_past}, the previous N is identified as the optimum for the current open-circuit voltage (V_{OC}).

Empirical Data Analysis and Performance Benchmarking

A critical component of evaluating energy harvesting interface circuits is the comparative analysis of their efficiency and extraction capabilities across different transduction modalities.

Comparison of Photovoltaic Efficiency and Power Density

Solar cells remain the most efficient ambient source for wearables, particularly in outdoor environments. Recent breakthroughs in Perovskite Solar Cells (PSCs) have pushed efficiency limits toward 26%, while flexible silicon cells can now be rolled over 360° with PCEs exceeding 24%.

Solar Cell Type	Efficiency (PCE)	Advantages	Challenges
Silicon (SSC)	>24%	Mature technology, high stability	Rigid, high-cost flexible variants
Perovskite (PSC)	24.5%–26.1%	Extremely high efficiency, thin-film	Environmental stability, toxicity
Organic (OSC)	19.06%	Lightweight, flexible, low-cost	Lower PCE than PSC
Dye-Sensitized (DSSC)	~8.8% (Indoors)	Works well in low-light/indoor	Lower peak efficiency

For indoor applications, such as a self-powered CO_2 sensor, a 240 cm² DSSC module can generate enough power under 400 lux to maintain a 3.2 μW system load. The data indicates that the power density of indoor PV is typically in the range of tens of microwatts per cm², necessitating large harvesting areas or highly duty-cycled sensor operation.

Piezoelectric Extraction and Rectification Performance

The rectification of AC signals from piezoelectric (PEH) and triboelectric (TENG) harvesters is marred by the threshold voltage (V_{TH}) of the diodes. Interface circuits that utilize active diodes (AD) and SSHI techniques demonstrate significantly better performance.

Circuit Topology	Power Extraction Gain	Efficiency	Key Advantage
Standard FBR	1.0x (Baseline)	20%–40%	Simple, no control logic [18]
Active Bridge (AD)	~2.0x	40%–60%	Low conduction loss
P-SSHI (Parallel)	6.7x	80%–83%	Overcomes internal capacitance
S-SSHI (Series)	High	Variable	Optimized for weak coupling

The Parallel SSHI circuit flips the harvester voltage, allowing the transducer to bypass its internal capacitive loading. This results in a massive "flipping efficiency" (often >80%), which directly correlates

to the harvested power. For example, a self-powered P-SSHI active rectifier fabricated in 0.18 μm CMOS produced 44.4 μW of power, a nearly seven-fold improvement over traditional rectifiers.

Thermoelectric Interface Benchmarking

Thermal harvesting relies on the Seebeck effect. The interface challenge is the low V_{OC} and the high output impedance of flexible TEGs.

Design Parameter	Value / Metric	Source
Startup Voltage	170 mV	[6]
Output Power Capacity	500 μW	[6]
MPPT Accuracy	98% (for 30–100 Ω source)	[6]
Conversion Topology	Dual-branch charge pump	[6]
Quiescent Current	950 nA (in 22 nm FD-SOI)	[12]

The benchmark for fully integrated TEG interfaces is currently around 500 μW of output power. This capacity is sufficient to sustain real-time sensing and even GHz-range wireless data transmission if operated in duty-cycle mode.

Result Evaluation and Insight-Driven Discussion

The empirical results suggest several second-order insights into the causal relationships between circuit architecture and wearable autonomy. One of the most significant trends is the shift from "component-level" to "system-level" optimization.

The Impact of Quiescent Current on Energy Neutrality

In an energy-harvesting environment, the I_Q of the PMU is a parasitic load that acts continuously, whereas the sensor and radio are intermittent. The relationship between battery life (L) and can be inferred as:

$$L \propto \frac{E_{buffer}}{P_{leakage} + I_Q \cdot V_{DD} + P_{avg_active}}$$

Data shows that as CMOS technology scales (e.g., to 22 nm FD-SOI), designers can implement Real-Time Clock (RTC) architectures that perform workload self-monitoring. By embedding temperature and voltage sensors within the RTC itself, the PMU can dynamically switch between High Power (HP), Low Power (LP), and Ultra-Low Power (ULP) modes, achieving a quiescent current as low as 950 nA. This "self-aware" power management ensures that the I_Q scales with the available harvested energy, preventing system collapse during periods of low environmental input.

Cold-Start and the Oscillator Choice

The methodology for starting a system from a depleted energy state (cold-start) remains a critical design hurdle. The data suggests a distinct advantage for LC-tank oscillators over traditional Ring Oscillators for ultra-low voltage harvesting. While Ring Oscillators are easier to integrate, their amplitude is limited by the supply rails. In contrast, LC-tank oscillators can provide an output swing that exceeds the supply, allowing for higher gate-drive voltages in the subsequent charge pump stages. This enables a lower startup voltage (170 mV) which is essential for TEGs operating at minimal ΔT.

Regulation and the OCL-LDO Advantage

For environmental sensors like organic CO_2 or humidity detectors, the signal-to-noise ratio (SNR) is often low, requiring a highly stable supply voltage. Standard LDOs use external micro-farad capacitors for stability, which increases the device's size and weight—undesirable for wearables.

The evaluation of output-capacitor-less (OCL) LDOs shows that they can achieve comparable regulation performance through advanced feedback strategies. For instance, a sub-threshold CMOS-based slew-rate enhancement (SRE) circuit can detect output voltage spikes and temporarily boost current to counteract fluctuations. Measured results for an OCL-LDO in 0.18 μm CMOS showed a load regulation of 7.6 μV/mA and a power supply rejection (PSR) of -72.4 dB at 1 kHz.[13] This level of precision is achieved with only nA-level quiescent currents, demonstrating that "capacitor-less" does not necessarily mean "performance-less" in the low-power regime.

Integration of Self-Powered Sensing and Feedback

A novel trend in wearable design is the "No Sensors" philosophy, where the harvester itself serves as the sensor. In "Hapt-Aids," the energy harvested from biomechanical activity or sun exposure is stored in a capacitor. Once the voltage reaches a preset threshold, it triggers a haptic notification (vibration).

This design implies a causal relationship between the activity intensity and the frequency of the notification, eliminating the need for a separate sensing unit, an ADC, or firmware. This "analog-only" design paradigm reduces cost and complexity, though it trades off the fine-grained data analysis capabilities of digital systems. For environmental monitoring, such as UV exposure, this represents a "minimalist" approach to personal safety.

Challenges in Material-Circuit Co-Design

The integration of CMOS circuits with flexible, often biodegradable, substrates introduces significant reliability challenges. Accelerated weathering tests demonstrate that factors like UV radiation, humidity, and mechanical strain can degrade both the harvester and the interface circuitry over time.

Furthermore, the "transient" nature of some wearable components—designed to dissolve in the environment after use—requires the interface circuit to be optimized for a specific, finite operational window.[3] Data analysis from these biodegradable platforms indicates that power densities of 100–220 μW·cm{ ² are achievable, which is sufficient for multi-modal sensing, provided the circuit employs harvest-aware scheduling.

Nuanced Conclusions and Strategic Recommendations

The investigation into energy harvesting interface circuits for wearable environmental sensors reveals that while the hardware for harvesting ambient energy is maturing, the "intelligence" of the interface circuit is the primary determinant of system autonomy. The achievement of energy neutrality is not merely a function of the harvester's efficiency but a result of a highly optimized PMU that minimizes , manages cold-start hurdles, and accurately tracks the maximum power point.

Strategic recommendations for the development of future systems include:

1. **Prioritizing 1D MPPT for μW Scales**: For low-power TEG and PV applications, the reduction in control logic complexity offered by 1D MPPT outweighs the marginal efficiency gains of more complex 3D algorithms.
2. **Adopting OCL-LDO Topologies**: To meet the miniaturization requirements of e-skin and textile-integrated wearables, designers should move toward capacitor-less regulation with integrated slew-rate enhancement.
3. **Hybridization and Multi-Source Integration**: Given the intermittent nature of any single source, combining solar and mechanical energy (e.g., TENG-PV hybrids) offers a more reliable power profile for continuous monitoring.
4. **Leveraging Advanced CMOS Clocks**: Utilizing gate-leakage-based timers and low-voltage oscillators in advanced nodes (22 nm FD-SOI) can extend the "sleep" duration and reduce the overall energy consumption of the sensing node.

In conclusion, the synergy between ultra-low-power CMOS design and novel transduction materials is paving the way for a new generation of self-sustained wearable sensors. These devices, capable of monitoring the environment and human health without the burden of batteries, represent a significant step toward a sustainable and ubiquitous Internet of Things. Future efforts must focus on improving the environmental durability of these integrated systems and exploring the potential of AI-driven, harvest-aware power management to further optimize energy utilization in unpredictable real-world scenarios.

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An Examination Of The Startup Ecosystem

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Abstract

The research indicates that ecosystems play a crucial role in the development of startups. Prior to the launch of the Startup India initiative in 2016, startups encountered numerous obstacles related to documentation and other formalities. However, following its introduction, there was a significant increase in the number of startups. Initially, only a few states offered a supportive ecosystem for startups, but with the government's focus and the introduction of various policies and programs, the situation for startups has improved. To enhance the vibrancy of the startup ecosystem, it is essential to improve the components that constitute it, such as infrastructure, regulatory frameworks, funding and finance, technical personnel, mentors, advisors, and access to both local and global markets. Since 2014, significant advancements have been achieved in every aspect, from the establishment of the Startup India Hub to the launch of the mobile application and portal. Startups are granted a three-year tax exemption, a reduction in patent fees, and expedited patent processing. Additionally, tax exemptions on capital gains are designed to enhance investment from investors, addressing the funding requirements of startups. A fund corpus of Rs. 10,000 crore was established, along with numerous other initiatives and programs aimed at ensuring the success of Startup India. Consequently, the startup ecosystem has evolved over the years, offering opportunities for growth and facilitating the entry of new startups.

Keywords: Entrepreneurship, Finance, Startup

Introduction

Startup companies are newly established entities, initiated with a novel concept or idea. They are associated with innovative products or processes intended for the broader market. It is important to distinguish startups from small businesses, with the primary difference being the element of innovation. Essentially, a startup is a new venture that is in its early operational phase, beginning to expand, and is usually funded by an individual or a small group of individuals. Startups represent a scalable business model that leverages technology and innovation, where the founders create a product or service that they anticipate will have market demand.

The term "Startup" encompasses various meanings – it refers to individuals, especially young and dynamic individuals, who come together to establish their own company (startup) with the aim of generating value for both customers and themselves. The term startup has become synonymous with growth, entrepreneurial characteristics, vision, and a forward-thinking approach.[1]

Purpose of the Study

- To examine the Startup Ecosystem in India and the transformations that have taken place over time.

Research Methodology

This Research is based on Secondary Data collected from different sources, To gather data related to Startup basics- Government Reports like- Startup Outlook Report 2019 Innoven Capital, States Startup Ranking Framework- 2019, ORF- Occasional Paper 2019 on the background of Startup, States' Startup Ranking 2018, Thornton_ startups_ report.

Review of Literature

a) Gulatiand Sharma (2013) talked about entrepreneurship in Indian scenario. Purpose/ Objectives: the study was to enlighten the scenario of Entrepreneurship in Independent India. Design/ Methods: Research was based on the secondary sources – government sites, journals, magazines, etc. Findings/ Conclusion: Results concluded that Indian society was risk averse, people usually seeks secure and long term employment such as- government job, social attitudes, lack of capital, inadequate physical infrastructure and lack of government support were major factors of hindrance.

b) Hidalgo (2014): studied the startup ecosystem in the Republic of Ireland and Spain. Purpose/ Objectives: The aim was to find what makes a startup successful is evaluated. Design/ Methods: In the study analysis of secondary data available in the literature accompanied by semi-structured interviews with a group of founders were carried out Ireland and Spain. Statistical Approach: Tabulation of data was done by frequencies and percentages. Findings/ Conclusion: findings suggested that it does not matter what country the startup is based on, the success or failure depends on the founding partners, their business experience and the relations within the founding team.

c) Chandiok (2016): studied- India the world's fastest growing Startup Ecosystem: A Study. Purpose/ Objectives: the study was to study the awareness about startup in the light of recent changes in Industry. Design/ Methods: Primary data was collected using Random Sampling method 145 respondents were chosen randomly from Delhi& NCR. Statistical Approach: Data was analyzed using graphs, tabulation of frequencies and percentages.

   Findings/Conclusion: findings of research paper was that tax exemption on incubation and seed funding is critical for Startup India. It's a major concern of entrepreneurs and easier exit clause for startups is critical to the success of the initiative- it provides protection to the risk taking businessperson who is concerned about what happens when the business fails.

d) Kaushik(2017): studied relationship between HRM strategies and Entrepreneurial success for startup entrepreneurs in the Jaipur district of Rajasthan. Purpose/ Objectives: the study was to identify the role and significance of HR in the startups of Jaipur district of Rajasthan. Design/ Methods: Random Sampling method was used to collect the data. Jaipur city was selected and randomly 40 startups from Jaipur were selected and from that 5 respondents were selected for the study. Statistical Approach : Data collected was analyzed with the help of computer aided software like correlation coefficient and other statistical techniques i.e., Mean, standard deviation, The mean was used as " average" that should be representative distribution of the values was obtained with the help of mean. Ms- Excel was used to do a variety of calculations and to handle the data consistently. The reliability of the items was tested with the help of Cronbach alpha co-efficient. The reliability test was conducted using Cronbach alpha coefficient to find out the consistency of the statements used for measuring the values of the employees towards their job. Findings/ Conclusion: findings of the study explicitly inferred that there was significant positive relation between the effective HR policies and practices and the level of performance of the startup, hence it was concluded that HR practices, if perceived appropriate, increase the performance of the startup.

Government Policy and Regulatory Framework:

In India government has realized the importance of startup, in the development of economy. Both Central and State government are putting their efforts to make startup India a success.

Key Steps taken by Government are as follows:

Scrapping Angel Tax for registered Startups: To solve the problem of Startups and investors, Union finance minister Nirmala Sitharaman made an announcement on August 2019- those provisions of Sec.56 of Income Tax Act, which is commonly called "Angel Tax", shall not be applicable to a startup, registered with Department for Promotion of Industry and Internal Trade. As we know Angel investments commonly known as seed capital, are the main source of finance for startups and angel tax is acting as barrier to the investments that angel investors make for startups, this will help startups to raise more funds.

- Simplification of process of assessment of Startups: Circular No. 16/2019 dated 7th August, 2019 provides for the assessment of startups that are recognized by Department for Promotion of Industry and Internal trade (DPIIT) a simplified procedure.
- Tax Rebate on Profits of Startups: The startups that are incorporated after April1,2016 are eligible of getting a 100% tax rebate on profit for a period of 3 years in a block of 7 years provided that annual turnover does not exceed Rs25 crore in any financial year. During the initial years of operation startups face a major problem of working capital requirement needs, that helps in meeting those needs.
- Faster exit for Startups: Ministry of Corporate Affairs notifies startups as "Fast track firms" by allowing winding up of operation of startups within 90 days which is 180 days for companies. For winding up procedure, firm hires an insolvency professional, who will look for all the procedures of liquidating its assets and paying off its creditors within the period of 6 months of filling an application.

Infrastructure Support and Incubators:

We have heard term incubator very often, even some consider it similar to accelerator, but both these terms have basic difference in them.

- Incubator: or business incubators are the institutions that helps startups to develop their business especially during their initial stages by providing technological facilities and advices, initial growth funds, Co-working spaces, Lab facilities, Mentoring and advisory support, network and linkages. Speeding up of early- stage growth and success of startups is geared by incubators.
- Accelerator: A business accelerator is a program for developing companies, or startups that have crossed the earliest stage of getting established by providing them access to mentorship, investors and other support that help them to become stable, self-sufficient. Startup that have entered into "adolescence" means they can stand on their own but needs business accelerator for their guidance and peer support to gain strength. An accelerator program can last from two to six months. The companies that are at initial stage use incubator instead of accelerator for support.

State Wise list of Incubator and Accelerator in India

State	Incubat	Acceler
Andhra Pradesh	19	1
Arunachal Pradesh	0	0
Assam	5	0
Bihar	8	0
Chandigarh	3	0
Chhattisgarh	8	0
Delhi	54	31
	7	1
	31	3
	17	10
	2	0

State	Incubat	Accelera
Jammu and Kashmir	3	0
Jharkhand	5	0
Karnataka	62	30
Kerala	28	1
Madhya Pradesh	25	0
Maharashtra	55	30
Manipur	0	0
Meghalaya	0	0
Mizoram	0	0
Nagaland	1	0
Orissa	22	0
Punjab	11	0
Rajastha n	26	1
Sikkim	0	0
Tamil Nadu	70	2
Telanga na	45	7
Tripura	1	0
Uttar Pradesh	39	7
Uttarakha nd	4	0
West Bengal	11	
Total	568	

Funding and finance:

A. Ideati on/ Pre- Seed Stage	B. Validatio n/ Seed Stage	C. Early Traction/ Series A Stage	D. Scaling/ Series B & above Stage
a) Boot- strappi ng b) Family c) Busin ess plan	a) Incubators b) Governme nt loan scheme c) Angel Investor d) Crow d Fundi ng	a) Venture Capital fund b) Bank /NBFCs c) Venture Debt Fund d) TReDs	a) Ventu re Capit al Fund b) Private Equity/ Investme nt Firms

Funding in simple terms means money needed by firm to start from idea of business to run a business. Funding, basically a financial investment in the company for office spaces, developing a product or service, inventory, manufacturing, expansion, sales and marketing. Usually, startups go for self- funding or boot strapping at initial stages, when startups are just starting their business. However self – funding is just not sufficient as they grow so many other options are explored - to raise the funds.

Startup finance needs at various stages of operation: Various source of funding are available to startups but what needs to keep in mind is the stage at which startup is currently operating. Now we will see at various stages which source of finance is best.

Mentors, Advisors and Support System:

Mentorship is considered as important part in startup ecosystem. A Startup mentor is one – who possesses the experience and knowledge you seek to acquire. Mentors have gone through many failures and successes and they are able to share their experiences and knowledge they gained. With Government initiatives, it has created a pool of professional and experienced mentors on the online hub for the benefit of Startups, there are 594 mentors registered on Startup India site. Several groups – Bhartatiya Yuva Shakti Trust (BYST) and The Indus Entrepreneurs (TiE), also working together to boost the spirit of entrepreneurship.

Local And Global Markets: In India we have noticed, the share of consumer market is larger with increasing consumer disposable income. If we see, agriculture sector, Defence Sector and social sector-government has done major procurement in these sectors. By enabling Startups participation in public tenders their demand is enhanced. To simplify the process of public procurement: for the same Government e-marketplace(GeM) has been launched by government.

Government Policy: In recent years, the NarendraModi led Government of India, has been focusing more on a wide universe of emerging startups. Government has recognized the importance of innovative startups and women entrepreneurship in country's growth and prosperity, so government is bringing new programs and opportunities to help the startups to innovate and nurture. Some of them are : Make In India – was launched in September 2014, with the aim to transform India into a global design and manufacturing centre, Digital India – is an electronically accessible service, which was launched basically to modernize the India economy from paper based system to online media, STEP- Support to training and employment programme for women – aim is to educate and train women who don't have access to formal skill education, in rural sector, Startup India –launched in 2016, with the aim of providing an environment to startups in which they can innovate and evolve without obstacles.

Conclusion

Startups are important for economic growth of a nation. One of main advantage of startup is that it create job opportunities for youth. India with growing population size needs 10 million jobs a year and as per global data it is startups, not large organization that create new job in any country. Startups are no doubt center of Innovation and has brought latest technologies like Internet of Things, Artificial Intelligence, Robotics, etc. and are a great way to enhance employment creation in economy. Role of startups is important to our society to develop our nation, it's a need of hour to develop an entrepreneurship culture in our country for more startups.

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Ecological Memory and the Poetics of Landscape in Shubhangi Swarup's *Latitudes of Longing*

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Abstract

The present study will examine the intricate relationship between ecological memory and the poetics of landscape in the novel Latitudes of Longing by Shubhangi Swarup. Keeping the novel under the lens of eco-criticism, the present study examines how landscapes in the narrative functions not merely as physical settings but as repositories of memory, emotion, and historical consciousness. The novel traverses diverse geographies—from the Andaman Islands to the Himalayas—-constructing a layered narrative in which human and non-human experiences are deeply interconnected. The paper argues that Swarup's poetic prose redefines landscape as an active agent that shapes and preserves ecological memory. Therefore, challenging anthropocentric modes of storytelling. By analysing the novel's narrative structure and symbolic use of space, the study highlights how ecological memory operates as an important link between past and present, personal and collective histories. Ultimately, the present research paper positions *Latitudes of Longing* as a vital contribution to contemporary Indian eco-fiction, offering an understanding of the relationship between nature, memory, and identity in the Anthropocene.

Keywords: Eco-criticism; Ecological Memory; Landscape; Indian Fiction; Anthropocene; Spatial Narrative; Nature and Identity

Introduction

In contemporary literary discourse, the relationship between environment and narrative has gained increasing critical attention, particularly in the context of intensifying ecological crises and the conceptual framework of the Anthropocene. Climate change, biodiversity loss, and environmental degradation have not only altered physical landscapes but have also reshaped cultural, ethical, and intellectual paradigms, prompting a reassessment of the human relationship with the natural world (Crutzen, 2002). Within this context, literature has emerged as a crucial medium for exploring how human experiences are deeply intertwined with ecological systems, offering nuanced insights into the intersections of memory, identity, and environment. As Lawrence Buell suggests, environmental literature has the capacity to reconfigure human perception by foregrounding the ethical and imaginative dimensions of ecological engagement (Buell, 2005). Eco-fiction, as a significant strand within contemporary literary studies, seeks to move beyond anthropocentric modes of representation by emphasizing the agency of nature and the interconnectedness of all living systems. Rather than depicting the environment as a passive backdrop, eco-fiction reinvents it as an active and dynamic presence that shapes human histories and experiences. As Ursula K. Heise argues, modern environmental narratives attempt to capture the global scale and complexity of ecological processes, thereby challenging traditional notions of space, time, and subjectivity (Heise, 2016). This shift reflects a broader movement within the environmental humanities that seeks to integrate ecological awareness with cultural and literary analysis.

In this context, Latitudes of Longing (2018) by Shubhangi Swarup exemplifies a distinctive and innovative engagement with ecological themes. The novel presents a narrative that traverses diverse geographies—-from the Andaman Islands to the Karakoram mountains——while simultaneously moving across different temporal and emotional registers. Structured into four interconnected sections,

each rooted in a specific landscape, the text weaves together stories that are unified by a shared exploration of longing, displacement, and ecological consciousness (Swarup, 2018). The narrative repeatedly foregrounds the sensory and affective dimensions of landscape, suggesting that space is not merely inhabited but deeply felt and remembered. As Swarup evocatively writes, landscapes in the novel seem to "hold within them the sediment of time," preserving traces of both human and non-human histories (Swarup, 2018). Unlike conventional narratives that treat setting as a static or decorative element, Swarup transforms landscape into a dynamic and participatory force that actively shapes the emotional and existential trajectories of her characters. The Andaman Islands, for instance, are depicted not only as a site of natural beauty but also as a space marked by geological upheaval and historical memory, where "the earth remembers even when people forget" (Swarup, 2018). Similarly, the Himalayan landscapes in the novel are rendered as living entities that influence human perception and experience, blurring the boundaries between subject and environment. These representations align with eco-critical perspectives that emphasise the agency of the natural world and its capacity to shape human consciousness (Glotfelty, 1996).

The novel's engagement with memory further reinforces this dynamic relationship between humans and their environments. Drawing on the concept of collective memory as theorized by Maurice Halbwachs, it can be argued that *Latitudes of Longing* constructs landscapes as repositories of memory, where personal, cultural, and ecological histories intersect (Halbwachs, 1992). The recurring motif of longing in the novel is closely tied to this spatial memory, as characters experience a deep emotional connection to places that transcend temporal boundaries. In this sense, ecological memory operates not only as a thematic concern but also as a narrative strategy that links disparate stories and geographies. Moreover, Swarup's lyrical and poetic prose contributes to what may be described as a "poetics of landscape," in which language itself becomes a medium for expressing ecological linkage. The novel's descriptive passages evoke the textures, sounds, and movements of the natural world, creating an immersive experience that encourages readers to engage with the environment on both sensory and intellectual levels. This aesthetic approach aligns with eco-critical arguments that highlight the role of literary form in shaping environmental awareness and ethical engagement (Buell, 2005).

Notably, the novel also reflects the broader concerns of the Anthropocene by highlighting the entanglement of human and non-human histories. The shifting landscapes, geological transformations, and ecological processes depicted in the narrative reinforce the extent to which human existence is embedded within larger environmental systems. As Crutzen (2002) suggests, the Anthropocene compels a rethinking of the relationship between human activity and planetary processes, a perspective that is vividly reflected in Swarup's narrative. This paper argues that *Latitudes of Longing* constructs a poetics of landscape in which ecological memory serves as a central organizing principle. By redefining landscape as a site of memory—where histories, emotions, and ecological processes converge—the novel challenges anthropocentric modes of representation and offers an alternative vision of relational existence. Through a close analysis of the novel's spatial and narrative strategies, this study seeks to demonstrate how ecological memory functions as a bridge between past and present, human and non-human, and local and global contexts. In doing so, it highlights the novel's significant contribution to contemporary eco-critical discourse and its relevance in understanding the cultural dimensions of the Anthropocene.

Theoretical Framework: Eco-criticism, Memory, and Space

Eco-criticism provides a foundational framework for examining the relationship between literature and the natural environment, particularly in the context of contemporary ecological concerns. As Cheryll Glotfelty defines, eco-criticism is "the study of the relationship between literature and the physical environment" (Glotfelty, 1996). This approach seeks not only to analyze representations of nature but also to interrogate the cultural and ideological assumptions that shape human interactions with the non-human world. In recent decades, eco-critical scholarship has increasingly highlighted the ethical dimension of environmental representation, highlighting the need to move beyond anthropocentric perspectives and recognize the agency of ecological systems (Buell, 2005). Building on this foundation,

contemporary eco-criticism has engaged closely with the concept of the Anthropocene, a term popularised by Paul Crutzen to describe a geological epoch in which human activity has become a dominant force shaping the Earth's ecosystems (Crutzen, 2002). The Anthropocene framework foregrounds the interconnectedness of human and natural histories, challenging traditional distinctions between culture and nature. As Dipesh Chakrabarty argues, this perspective compels a rethinking of historical and literary analysis by situating human narratives within broader planetary processes (Chakrabarty, 2009). In literary studies, this has led to a growing interest in texts that explore the entanglement of ecological, social, and temporal dimensions.

The concept of memory further enriches eco-critical analysis, particularly through its extension into ecological memory. Maurice Halbwachs's theory of collective memory emphasises that memory is socially constructed and embedded within shared cultural frameworks (Halbwachs, 1992). In the context of environmental humanities, this idea has been expanded to consider how landscapes themselves function as repositories of memory, preserving traces of both human and non-human histories. Scholars such as Pierre Nora have highlighted the significance of "sites of memory" (lieux de mémoire), which can be extended to natural environments that carry historical and emotional significance (Nora, 1989). Thus, ecological memory emerges as a key concept for understanding how environmental experiences are encoded within literary narratives. Spatial theory provides an additional critical lens for analysing the role of landscape in literature. Henri Lefebvre conceptualises space as socially produced, shaped by cultural practices, power relations, and symbolic meanings (Lefebvre, 1991). This perspective shifts attention from space as a neutral backdrop to space as an active and dynamic element in the construction of meaning. Similarly, Yi-Fu Tuan emphasizes the experiential dimension of place, arguing that human attachment to landscapes is shaped by memory, emotion, and perception (Tuan, 1977). These insights are particularly relevant for literary analysis, where landscapes often function as sites of identity formation and emotional resonance.

Taken together, eco-criticism, memory studies, and spatial theory offer a comprehensive framework for analyzing Latitudes of Longing by Shubhangi Swarup. The novel's stress on interdependence landscapes, layered temporalities, and affective experiences reflects the convergence of these theoretical perspectives. By presenting landscapes as dynamic entities that store and transmit memory, Swarup's narrative challenges anthropocentric modes of representation and foregrounds the relational nature of existence. This integrated framework thus enables a deeper understanding of how ecological memory and spatial representation function within the novel to articulate a broader vision of environmental consciousness in the Anthropocene.

Landscape as a Repository of Memory

In the literary work under consideration, the landscape serves not only as a physical setting but as a repository of memory, preserving layers of ecological, historical, and emotional experience. Shubhangi Swarup constructs her narrative through geographically distinct yet thematically interconnected spaces, where each landscape carries traces of past events and lived realities. The novel repeatedly suggests that the natural world retains memory in ways that transcend human recollection, as reflected in moments where the earth itself appears to "remember" histories that have been forgotten or erased (Swarup, 2018). This conception challenges conventional narrative practices by positioning landscape as an active archive rather than a passive backdrop. The Andaman Islands, which form a significant part of the novel's setting, exemplify this idea of landscape as memory-bearing. These islands are depicted as spaces marked by geological transformations, colonial histories, and ecological continuity. The narrative evokes the layered temporality of the islands, where "time settles like sediment," suggesting that the environment accumulates and preserves memory across generations (Swarup, 2018). Such representations align with eco-critical perspectives that emphasize the materiality of landscape as a site where cultural and environmental histories intersect (Glotfelty, 1996).

This understanding of landscape can also be linked to Maurice Halbwachs's concept of collective memory, which posits that memory is embedded within social and spatial frameworks (Halbwachs,

1992). In *Latitudes of Longing*, however, this framework is extended beyond the human realm to include ecological memory, wherein landscapes themselves become carriers of both human and non-human histories. The natural environment thus functions as a medium through which memory is stored, transmitted, and reactivated within the narrative. Furthermore, the novel's landscapes operate as what Pierre Nora describes as "sites of memory" (lieux de mémoire), spaces that hold symbolic and historical significance (Nora, 1989). In Swarup's narrative, mountains, oceans, and islands serve as such sites, embodying not only physical geography but also emotional and historical resonance. These spaces evoke a sense of continuity between past and present, suggesting that memory is not confined to human consciousness but is dispersed across the natural world. The Himalayan landscapes depicted in the novel further reinforce this idea by presenting nature as a living entity that shapes perception and identity. The vastness and permanence of the mountains contrast with the transience of human life, highlighting the temporal depth of ecological memory. As the narrative moves across different terrains, it reveals how landscapes influence the characters' emotional and psychological states, thereby reinforcing the interconnectedness of memory, place, and identity (Swarup, 2018).

Also, the language of the novel helps explain how landscape and memory are connected. Through rich imagery and sensory detail, Swarup evokes the textures, sounds, and rhythms of the natural world, creating an immersive experience that foregrounds the material presence of landscape. This stylistic approach aligns with eco-critical arguments that emphasize the role of literary form in shaping environmental awareness and engagement (Buell, 2005). By presenting landscape as a repository of memory, *Latitudes of Longing* challenges anthropocentric modes of storytelling and redefines the boundaries of narrative space. It suggests that memory is not solely a human faculty but a shared process that encompasses both human and non-human worlds. In doing so, the novel offers a compelling vision of ecological interconnectedness, where landscapes acts as living archives that sustain and transmit memory across time.

Poetics of Landscape and Narrative Form

In Latitudes of Longing, the representation of landscape is inseparable from the novel's distinctive narrative form and poetic language. Shubhangi Swarup employs a lyrical and evocative style that transforms natural environments into expressive, almost sentient entities, thereby creating what may be described as a "poetics of landscape." Rather than presenting nature through purely descriptive or realist conventions, the novel imbues landscapes with symbolic, emotional, and aesthetic significance, allowing them to participate actively in the unfolding of the narrative (Swarup, 2018). This poetic engagement with landscape is evident in the novel's richly textured descriptions, where natural elements such as oceans, mountains, and forests are rendered through sensory detail and metaphorical language. The prose often dissolves the boundary between the human observer and the environment, suggesting an intimate and reciprocal relationship between the two. For instance, landscapes in the novel are frequently depicted as responsive and dynamic, reflecting the emotional states of the characters while simultaneously shaping their perceptions and experiences (Swarup, 2018). This interplay between inner and outer worlds reinforces the idea that landscape is not merely external to human consciousness but deeply intertwined with it.

The novel's narrative structure further contributes to this poetics of landscape. Composed of four interconnected yet distinct sections, each rooted in a different geographical setting, the text resists linear progression and instead adopts a fragmented and non-linear form. This structural fragmentation mirrors the dispersed and layered nature of memory, as well as the interconnectedness of ecological systems. As Mikhail Bakhtin suggests, polyphonic narratives allow multiple voices and perspectives to coexist, creating a more complex and dialogic representation of reality (Bakhtin, 1981). In Swarup's novel, this multiplicity of perspectives extends beyond human characters to include the voices and presences of landscapes themselves.

Moreover, the novel's shifting narrative perspectives and temporal fluidity reflect the difficulty of representing ecological experience within conventional narrative frameworks. The transitions between

different locations and time periods emphasize the continuity of environmental processes, suggesting that landscapes exist beyond the constraints of human temporality. This aligns with Ursula K. Heise's argument that environmental narratives often require innovative forms to capture the global and interconnected nature of ecological systems (Heise, 2016). The poetic dimension of the novel is also closely linked to its engagement with ecological memory. Through its use of imagery and symbolism, the text evokes the persistence of memory within the natural world, where landscapes serve as carriers of historical and emotional traces. The repetition of motifs such as water, migration, and geological transformation reinforces the idea of continuity and change, highlighting the dynamic nature of ecological processes (Swarup, 2018). This aesthetic strategy not only enhances the sensory richness of the narrative but also deepens its thematic exploration of memory and interconnectedness.

Moreover, Swarup's writing focuses less on humans and more on the importance of the non- human. By attributing movement, emotion, and voice to landscapes, the novel challenges anthropocentric modes of representation and invites readers to perceive nature as an active participant in the narrative. This approach resonates with eco-critical perspectives that emphasize the need to develop new narrative forms capable of representing the complexity of ecological relationships (Buell, 2005). In this way, the poetics of landscape in *Latitudes of Longing* is not merely a stylistic feature but a fundamental aspect of the novel's narrative strategy. The interplay between poetic language and fragmented structure enables the text to articulate a vision of ecological interconnectedness that transcends traditional literary boundaries. By reimagining landscape as both an aesthetic and narrative force, Swarup writes a text that not only represents the environment but also embodies its rhythms, textures, and changes.

Ecological Interconnectedness and Identity

In Latitudes of Longing, identity is not constructed as an autonomous or purely human-centered phenomenon; rather, it emerges through a dynamic relationship between individuals and the environments they inhabit. Shubhangi Swarup presents identity as fluid, relational, and deeply embedded within ecological systems, thereby challenging traditional notions of selfhood that privilege human agency over environmental influence. The novel repeatedly illustrates how characters are shaped by their interaction with landscapes, suggesting that identity is co-constituted through ecological interconnectedness (Swarup, 2018). This interconnectedness is evident in the way the narrative dissolves boundaries between human and non-human worlds. Characters in the novel experience a profound sense of belonging to their environments, where physical spaces influence not only their actions but also their perceptions, memories, and emotional states. For instance, the shifting landscapes of the Andaman Islands and the Himalayas are not merely external settings but integral to the formation of the characters' identities, as they respond to and are transformed by their surroundings (Swarup, 2018). This reflects an eco-critical understanding of identity as a process that extends beyond the individual to include the broader ecological context.

The novel's emphasis on relational identity aligns with Timothy Morton's concept of ecological interconnectedness, which challenges the separation between humans and nature by emphasizing the entanglement of all life forms within complex ecological networks (Morton, 2010). In *Latitudes of Longing*, this entanglement is depicted through recurring motifs of migration, geological transformation, and environmental continuity, which highlight the fluid and interconnected nature of existence. The characters' identities are thus shaped not only by personal experiences but also by larger environmental processes that operate across time and space.

Moreover, the novel foregrounds the role of memory in mediating the relationship between identity and environment. As landscapes function as repositories of ecological memory, they also serve as sites where identities are formed and reconfigured. This resonates with Maurice Halbwachs's notion of collective memory, which suggests that identity is shaped by shared experiences embedded within social and spatial frameworks (Halbwachs, 1992). In Swarup's narrative, however, this framework is expanded to include non-human elements, thereby redefining identity as a product of both cultural and ecological memory. Additionally, the novel challenges anthropocentric assumptions by attributing agency to the

natural world. Landscapes are depicted as active participants in the narrative, influencing human behavior and shaping the course of events. This decentering of human subjectivity aligns with eco-critical perspectives that call for a rethinking of the human-nature relationship, emphasizing the need to recognize the agency of non-human entities (Buell, 2005). By presenting nature as a co-creator of identity, the novel disrupts hierarchical distinctions between humans and the environment.

The theme of interdependences is further reinforced through the novel's narrative structure, which links disparate characters and locations across different temporal and spatial contexts. These connections suggest that identity is not confined to a single place or moment but is continuously evolving through interactions with multiple environments. The movement between different landscapes underscores the fluidity of identity and highlights the ways in which ecological processes transcend geographical boundaries (Swarup, 2018). Furthermore, the novel engages with the ethical implications of ecological interconnectedness by emphasizing the responsibility of humans toward the environment. By illustrating the impact of human actions on natural systems, Swarup underscores the need for a more sustainable and harmonious relationship with the non-human world. This ethical dimension reflects broader concerns within the Anthropocene discourse, which calls for a re-evaluation of human responsibility in shaping planetary futures (Morton, 2010).

So, *Latitudes of Longing* suggests that the identity is formed through the constant connection between people and nature. The novel's emphasis on interconnectedness challenges conventional understandings of selfhood and offers a more holistic vision of existence, where identity is inseparable from the natural world. Through its exploration of ecological relationships, the text contributes to contemporary eco-critical debates and provides a compelling framework for rethinking identity in the context of environmental change.

Conclusion

Latitudes of Longing offers a new way of understanding how landscape, memory, and identity are connected by focusing on the relationship between the human beings and their surroundings. Shubhangi Swarup moves beyond conventional narrative frameworks that treat environment as a passive setting and instead constructs a literary space in which landscape functions as an active agent, shaping both individual experience and collective consciousness. Through its layered narrative structure and poetic language, the novel articulates a vision of ecological existence that is relational, dynamic, and deeply embedded in the materiality of the natural world (Swarup, 2018). This study has demonstrated that ecological memory operates as a central organizing principle in the novel, transforming landscapes into repositories of historical, emotional, and environmental experience. By drawing on the theoretical insights of Maurice Halbwachs and Pierre Nora, it becomes evident that Swarup extends the concept of memory beyond human frameworks to include ecological processes, thereby redefining landscape as a living archive of both human and non-human histories (Halbwachs, 1992; Nora, 1989). This reconceptualization challenges anthropocentric assumptions and foregrounds the role of the environment in shaping cultural and narrative memory.

Besides, the novel's poetics of landscape, characterized by its lyrical prose and fragmented narrative form, enables it to capture the complexity of ecological experience. The interplay between spatial representation and narrative structure reflects what Ursula K. Heise identifies as the need for innovative literary forms capable of representing global ecological interconnectedness (Heise, 2016). Swarup's use of multiple geographies and temporalities thus reinforces the idea that ecological processes transcend human boundaries, linking disparate spaces and experiences into a cohesive yet fluid narrative. The analysis has also highlighted the novel's engagement with identity as an ecological construct. By depicting characters whose identities are shaped through their interaction with landscapes, Swarup aligns with eco-critical perspectives that emphasize the relational nature of existence. As Timothy Morton suggests, ecological thought necessitates an understanding of the self as entangled within broader environmental networks (Morton, 2010). In *Latitudes of Longing*, this entanglement is vividly portrayed through the

continuous interaction between human lives and natural environments, thereby challenging the separation between subject and space.

Pertinently, the novel's engagement with the Anthropocene highlights the ethical implications of ecological interdependence. By highlighting the impact of human activity on natural systems and the persistence of environmental memory, Swarup's narrative calls for a re-evaluation of human responsibility for the nature. This aligns with broader eco-critical concerns that emphasize the need for sustainable and ethically grounded approaches to environmental issues (Buell, 2005). In conclusion, *Latitudes of Longing* represents a significant contribution to contemporary eco-fiction by reimagining the role of landscape within literary narratives. Through its integration of ecological memory, spatial representation, and poetic form, the novel offers a nuanced and innovative exploration of the relationship between humans and the environment. It invites readers to reconsider landscape not as a static backdrop but as a dynamic and living presence that shapes memory, identity, and existence itself. In doing so, Swarup's work contributes to ongoing debates within the environmental humanities and provides a compelling framework for understanding literature's role in addressing the challenges of the Anthropocene.

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Understanding the Digital Divide in Rural India: A Multidimensional Sociological Review

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Abstract

The digital gap has become a major problem in modern society, especially in developing nations like India, where there are still large differences between rural and urban populations. This review paper offers a thorough sociological analysis of the digital divide in rural India, looking at its conceptual development, structural aspects, and socioeconomic ramifications. The study highlights the term's evolution from a straightforward access-based idea to a multi-layered framework comprising access, skills, and outcomes. It follows the term's roots from early policy usage to its theoretical development by scholars like *Jan van Dijk* and *Eszter Hargittai.* In order to show how digital inequality is intricately entwined with current class, caste, gender, and geographic patterns, the article also examines the three levels of the digital divide: first-level (access), second-level (skills and usage), and third-level (outcomes). The report draws on empirical data from sources including the Telecom Regulatory Authority of India and the *National Sample Survey* Office to demonstrate ongoing disparities in digital access and usage in rural areas. Additionally, it looks at how the digital divide affects social engagement, work, education, and governance, especially in remote and geographically difficult areas like the Himalayan belt.The results imply that the digital divide is a structural and sociological phenomenon that perpetuates already-existing disparities rather than just a technology problem. In order to promote meaningful digital inclusion, the paper's conclusion emphasises the necessity of inclusive, context-sensitive policies that address socioeconomic hurdles, digital literacy, and infrastructure shortages. In order to provide a theoretical framework for comprehending how digital disparities are perpetuated and maintained, the study also places the digital gap within more general sociological theories of social stratification, cultural capital, and the network society. The results imply that the digital divide is a structural and sociological phenomenon that perpetuates already-existing disparities and generates new kinds of exclusion rather than just a technology problem. In order to guarantee genuine and long-lasting digital inclusion, the study concludes by highlighting the necessity of inclusive, context-sensitive policies that address not only infrastructure shortages but also digital literacy, sociocultural barriers, and fair access to digital opportunities.

Keywords: Digital Divide; Rural India; Digital Inequality; Information and Communication Technologies (ICTs); Social Stratification; Digital Literacy; Rural–Urban Disparity; Socioeconomic Inequality; E-governance; Digital Inclusion; Caste and Gender Inequality; Network Society

1. Introduction

What is the digital divide? The most general definition is the difference between people and groups who have the availability of information and communication technologies, or ICTs, and those who do not, which is known as the "digital divide." This gap between both urban and rural settings is especially

noticeable in India. Even while programs like Digital India have expedited digitalization, rural populations still encounter obstacles when trying to use digital resources.

The term "*digital divide*" was initially utilized in an official publication by the US Department of Commerce's National Telecommunications and Information Administration in the mid-1990s, according to an undisclosed American source (*NTIA, 1999*). [For further information on the term's starting point, see *Gunkel (2003).]*

According to *Gunkel* (*2003*), the term's strong duality makes it extremely ambiguous. Van *Dijk* (*2003*, *2005*) has cautioned against this metaphor's several drawbacks. The metaphor first depicts a straightforward division between two distinct groups with a wide space between them. Second, it implies that closing the gap will be challenging. The idea that the gap is about absolute disparities, that is, between those involved and those left out, might correspond to a third misconception.

The expression "*second-level divide*" was first used by *Hargittai*, who defined it as disparities in people's digital knowledge and information and communication technology (ICT) usage, resulting in unequal advantages from internet connectivity (*Hargittai*, *2002*).

The phrase "*deepening divide*" was coined by *Van Dijk* (*2005*). The deepening divide refers to the increasing inequality in digital skills, usage, and outcomes, where differences between social groups widen despite broader access to information and communication technologies (Van Dijk, 2005). The India Inequality Report 2002 claims that digital gaps tend to perpetuate current social strata and are closely related to economic inequalities.

The extent of this gap is demonstrated by real-world evidence. Only over 14.9% of rural families had internet connectivity, compared to approximately 42% in metropolitan areas, according to the National Sample Survey Office (NSS 75th Round, 2017–18). Even while more recent data from the Telecom Regulatory Authority of India (2023) indicates progress, rural internet access still trails well behind metropolitan areas, suggesting that structural inequality is still present.

The digital divide is restricted in rural and mountainous regions like the Himalayan belt and portions of Uttarakhand due to infrastructure issues like inadequate connectivity, electrical scarcity, and challenging topography. Although adoption is still unequal, the Ministry of Electronics and Information Technology has recognized these shortcomings and launched initiatives like BharatNet to enhance rural connectivity. Therefore, the digital divide needs to be viewed as a sociological phenomenon with roots in structural inequality rather than just a technological disparity.

2. The Three Levels of Digital Divide: A Sociological Perspective on the Digital Divide

Sociologically speaking, the digital gap is a multifaceted, evolving phenomenon that causes inequality rather than a one-dimensional issue. It is a reflection of larger systems of social classification, availability, and control. According to academics like *Jan van Dijk* (*2005*) and *Eszter Hargittai* (*2002*), the digital divide is changing on several levels, going beyond simple access to encompass skills, usage, and results.

2.1. First-Level Digital Divide: Inequality of Access

The disparity in accessibility to digital devices like computers, cellphones, internet connectivity, and basic infrastructure like energy and connectivity to networks is known as the first-level digital divide. The physical and tangible accessibility of information and communication technologies (ICTs) is its main focus. Sociologically speaking, structural elements like class, income, and location have a significant impact on this degree of division. Higher-income groups are more likely to have access to digital gadgets and reliable internet connections, while economically disadvantaged groups, particularly those living in rural areas, frequently lack these necessities. Geographical location is also important because urban areas typically have stronger digital infrastructure than rural and distant places, where connectivity is sometimes inadequate or inconsistent. Because unequal execution of digital infrastructure initiatives may increase geographic disparities, state policies and development agendas also influence access. According to *Jan van Dijk (2005)*, access is only the first stage of digital inequality, and since deeper kinds of unequal treatment continue after this point, merely granting technology access does not guarantee inclusion in the digital age.

Major equipment obstacles, such as inadequate connections and a lack of digital facilities, exist in rural India. Rural families have significantly less internet connectivity than urban families, according to *the National Sample Survey Office (2019).*

2.2. Second-Level Digital Divide: Inequality of Skills and Usage

Eszter Hargittai (2002) coined the term "*second-level digital divide*," which moves the emphasis from simply having the availability of technology to the variations in people's usage of it and their proficiency with it. It emphasises how differences in digital literacy, informational navigation skills, and the ability to critically assess online content cause people to not gain equally, even when they have access to the internet. This gap also includes variations in the uses of technology, such as for economic, educational, or just recreational objectives. Sociologically speaking, these distinctions are influenced by things like social assets, historical exposure, educational background, and linguistic ability.

For example, while marginalised populations may have restricted or passive usage habits, people with higher levels of education and social privilege are more likely to use the internet for constructive objectives like online learning, accessing government services, or career prospects. According to empirical research conducted in India, caste, class, and education have a substantial impact on digital abilities and usage, which exacerbates already-existing social disparities (*Vaidehi et al., 2021*). The second-level split is an essential component in comprehending the larger digital divide because, as *Hargittai (2002*) highlights, digital inequality does not go away with access; rather, it continues and grows more complex at the level of skills and usage.

2.3. Third-Level Digital Divide: Inequality of Outcomes

The disparities in the results and advantages that people receive from using digital technology are referred to as the third-level digital divide. This level looks at how well people are able to convert digital use into concrete benefits like academic success, job prospects, access to government services, and general social mobility, going beyond access and skills. This factor is important from a sociological standpoint because it shows that, even in cases when people have equivalent internet access and digital proficiency, the outcomes of their use can vary greatly because of underlying structural disparities.

People from more affluent socioeconomic origins, for example, are better able to use digital technology for social networking, professional progression, and knowledge acquisition, which results in cumulative advantages. On the other hand, marginalised groups might continue to be restricted to less productive or basic usage, which would lead to fewer socioeconomic advancements. This uneven distribution of results shows how, rather than eradicating current class, caste, and gender hierarchies, digital technology might strengthen them. This dynamic leads to what *Jan van Dijk (2005*) refers to as the *"deepening divide,"* in which inequalities worsen over time as those who gain more from digital technology continue to progress while others fall further behind.

3. The Digital Divide's Expanding and Changing Nature

The digital gap is a dynamic, constantly changing phenomenon that frequently gets more complicated and intense over time. According to *Jan van Dijk (2005*), disparities in access to digital technology often lead to disparities in digital skills and usage. Because of these skill gaps, some people are able to benefit economically, socially, and educationally from technology, while others receive very little. A cycle of cumulative disadvantage is created by this process, whereby marginalised populations continue to lag while those who are already privileged continue to develop. As a result, the digital divide widens over time, strengthening already-existing social inequality categories like gender, caste, and class.

Because of disparities in abilities and results, the gap between advantaged and disadvantaged groups does not necessarily close even when total access to digital technologies rises; rather, it frequently expands.

4. Connect with Sociological Theories

Logically, the digital divide can be comprehended using more comprehensive sociological theories that describe societal trends in exclusions and disparity. From the standpoint of social stratification, the distribution of digital access and usage isn't accidental; rather, it closely resembles the current class,

caste, and gender hierarchies. While marginalised groups continue to be disadvantaged, members of economically and socially privileged groups are more likely to have better access to digital technology and the skills necessary to use it successfully. Additionally, *Pierre Bourdieu's* concept of *cultural capital* explains why some people can benefit from digital technologies more than others. Higher levels of education, exposure, and cultural resources provide people with more digital competencies, which allow them to use technology more effectively and meaningfully.

On the other hand, people with low cultural capital might find it difficult to use digital platforms, which would perpetuate inequality. Furthermore, *Manuel Castells'* concept of the *"network society"* emphasizes how opportunities and power are becoming more concentrated among those with strong connections to digital networks in the modern information era. Those who are shut out of these networks experience social and economic marginalization in addition to technological disadvantage. Therefore, rather than being just a technological gap, the digital divide must be seen as a mirror of larger patterns of inequality because it is intricately entwined with current social institutions.

5. Consequences of the Digital Divide in Rural India

The digital divide has a significant and multifaceted impact on many facets of social, economic, and cultural life in rural India. One of the biggest effects is educational inequality, where rural children are severely disadvantaged by a lack of digital devices, inadequate internet connectivity, and restricted access to online learning resources. During the COVID-19 epidemic, when schooling switched online and many rural students were unable to participate successfully, this disparity became very apparent. Due to their frequent exclusion from digital job markets, online entrepreneurship, and skill development possibilities, people in rural areas are also economically marginalised, which limits their ability to generate revenue.

Furthermore, because many public services are becoming more digital, the digital divide makes it harder for people to access government services and assistance programs. Rural communities that lack internet connectivity or have low digital literacy find it difficult to take advantage of e-governance projects, which leads to their exclusion from critical services. Sociologically speaking, the gap exacerbates already-existing class, caste, and gender-based societal injustices. Women and members of lower castes are among the marginalised groups that frequently have limited access to digital technologies, which exacerbates their social exclusion. For example, because of sociocultural constraints and economic dependence, women in rural areas are less likely to own cell phones or access the internet.

The digital divide also has an impact on social participation and empowerment because people without access to the internet are shut out of online venues that promote civic engagement, communication, and awareness. This restricts their capacity to acquire information, express concerns, and take part in democratic processes. According to *Jan van Dijk (2005*), these disparities tend to grow over time, resulting in a "*deepening divide*" as already disadvantaged groups fall further behind. As a result, the digital divide in rural India is a structural issue that impedes equitable development and sustains larger patterns of inequality rather than merely being a technical one.

6. Challenges and Policy Interventions

Through the development of digital infrastructure, encouragement of e-governance, and improvement of digital literacy, government initiatives in India, especially the Digital India program, have significantly contributed to efforts to close the digital divide. While initiatives like BharatNet strive to give rural communities access to high-speed internet, digital literacy campaigns try to teach people the fundamentals of technology. Effective implementation is still hampered by a number of structural issues, though. The unequal development of infrastructure is a significant problem because many rural and isolated areas continue to have inadequate connectivity and inconsistent electricity. Furthermore, there is a dearth of vernacular and localised digital content, which restricts accessibility for people who are not fluent in dominant languages like English.

The capacity of rural populations to interact meaningfully with digital technologies is further limited by low levels of digital literacy. Digital adoption is also significantly hampered by sociocultural impediments, such as reluctance to technical change and gender norms. Even if new initiatives like community-based training programs and rural digital hubs show progress, they frequently fall short of adequately addressing the underlying problems of socioeconomic disparity. Because of this, policy interventions continue to have uneven effects, and the digital gap continues to be a structural issue that calls for more inclusive and context-sensitive solutions.

7. Conclusion

The examination of the digital divide in rural India makes it abundantly evident that it is a deeply ingrained sociological problem influenced by structural injustices rather than only a technological disparity. Even while government programs like Digital India and BharatNet have made it easier for people to access digital technology in recent years, there are still large differences between rural and urban areas as well as across various social categories. The study emphasises that there are several levels of digital inequality, including outcomes, skills, and access, all of which reinforce one another and contribute to a cycle of cumulative disadvantage.

Socioeconomic variables like class, caste, gender, education, and geography are strongly associated with the divide's continued existence. In rural locations, marginalised communities—especially women and lower socioeconomic groups—continue to encounter obstacles not just in gaining access to digital technologies but also in making efficient use of them and reaping their benefits. According to *Jan van Dijk (2005*), this leads to a "deepening divide," in which disparities grow over time despite improved access. According *to Eszter Hargittai (2002*), disparities in digital capabilities also exacerbate unequal results.

Therefore, a comprehensive strategy that goes beyond infrastructure development is needed to close the digital gap. Enhancing digital literacy, encouraging inclusive access, removing sociocultural barriers, and guaranteeing the fair distribution of digital advantages must be the main goals of policy. Digital technologies can only become tools of empowerment rather than instruments of exclusion through such multifaceted and socially based interventions, ultimately promoting inclusive and sustainable development in rural India.

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A Comparative Study of Psychological Well-Being of Working Women and Homemakers

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Abstract

The objective if the study is to compare the psychological well-being of working women and homemakers. The study is conducted on 120 women out of them 60 were working women and 60 were homemakers. Psychological Well-Being Scale by Ryff was taken as a standardised tool for the study. Independent samples t-tests revealed that working women scored significantly higher on Psychological Well-being. The findings suggest that employment status influences specific dimensions of well-being, reflecting changing gender roles in modern society.

Introduction

Women's roles in society have undergone substantial transformation in recent decades due to education, economic participation, and changing gender norms. Traditionally, women were primarily associated with domestic responsibilities; however, increasing workforce participation has expanded opportunities for autonomy, financial independence, and social engagement. These role differences may influence women's psychological well-being.

Psychological well-being refers to optimal psychological functioning and positive mental health. According to the multidimensional model proposed by Carol Ryff, well-being includes autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. These dimensions reflect individuals' ability to function effectively and experience life satisfaction.

Employment status can influence psychological well-being in multiple ways. Working women may experience financial independence, social interaction, and a sense of competence and achievement, which enhance self-esteem and life satisfaction. Employment may also increase autonomy and environmental mastery. Conversely, working women may experience role overload due to balancing occupational and domestic responsibilities.

Homemakers, while contributing significantly to family functioning, may experience limited social recognition, financial dependence, and restricted opportunities for personal growth, potentially affecting psychological well-being. However, homemaking may also provide emotional fulfilment and family cohesion. Therefore, empirical comparison of well-being between working women and homemakers is necessary to understand how changing gender roles relate to psychological health.

In India, socio-cultural transitions and urbanisation have increased women's workforce participation, yet traditional expectations persist. Understanding differences in well-being between working women and homemakers is important for gender-sensitive mental health and social policies. The present study compared psychological well-being between working women and homemakers using Ryff's Psychological Well-Being Scale.

Objectives

1. To assess psychological well-being among working women.
2. To assess psychological well-being among homemakers.
3. To compare psychological well-being between working women and homemakers.

Hypothesis

H1: Working women will report significantly higher psychological well-being than homemakers.

Review of Literature

A comparative study by Nathawat and Mathur examined mental health among working women and housewives in India. Findings indicated that working women reported higher self-esteem, autonomy, and life satisfaction compared to homemakers. Employment provided social interaction and a sense of achievement, contributing to psychological well-being.

A review by Barnett and Hyde analysed the relationship between women's employment and psychological well-being. The review concluded that employment is generally associated with better mental health, particularly when work conditions are supportive. Role accumulation theory suggests that multiple roles (worker, spouse, parent) enhance well-being through increased resources, social networks, and identity.

Both reviews indicate that employment is associated with higher psychological well-being among women due to increased autonomy, social engagement, and self-efficacy. These findings support the present comparative study examining well-being differences between working women and homemakers.

Sample

The sample consisted of 120 adult women:

- Working women: 60
- Homemakers: 60

Participants were selected using purposive sampling from urban areas.

Inclusion criteria:

- Age 25–50 years
- Married
- Minimum secondary education

Working women were employed in professions such as teaching, clerical work, and services. Homemakers were not engaged in paid employment.

Tool Used

Psychological Well-Being Scale: Developed by Carol Ryff, this scale measures six dimensions: autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. Higher scores indicate greater psychological well-being.

Procedure of Data Collection

Participants were approached in community and workplace settings. The purpose of the study was explained and confidentiality assured. Participation was voluntary.

The Psychological Well-Being Scale was administered individually. Participants completed the questionnaire in approximately 20 minutes.

Scores were calculated according to manual instructions. Independent samples t-test was applied to compare psychological well-being between working women and homemakers.

Results

Table 1

Comparison of Psychological Well-Being between Working Women and Homemakers

Group	N	Mean	SD	t	p
Working Women	60	186.42	17.85	2.76	<0.01
Homemakers	60	176.18	18.64		

Interpretation:

Working women scored significantly higher on psychological well-being than homemakers ($t = 2.76$, $p < 0.01$). Hypothesis supported.

Discussion

The present study compared psychological well-being between working women and homemakers. Results indicated that working women reported significantly higher psychological well-being than homemakers. These findings suggest that employment status influences women's psychological functioning and life satisfaction.

Higher well-being among working women may be explained by increased autonomy, financial independence, and social interaction associated with employment. Work environments provide opportunities for achievement, competence development, and social recognition, enhancing self-esteem and purpose in life. These factors correspond to Ryff's dimensions of environmental mastery, autonomy, and personal growth.

Homemakers, although contributing significantly to family functioning, may experience limited opportunities for personal development and external recognition. Restricted social networks and financial dependence may reduce perceived autonomy and self-efficacy, influencing well-being scores.

The findings support role accumulation theory, which proposes that multiple social roles enhance psychological resources and well-being. Employment adds an additional role that provides identity, social support, and competence reinforcement. In the Indian socio-cultural context, women's employment is increasingly associated with empowerment and psychological growth.

However, it is important to note that well-being among women is influenced by multiple factors such as work conditions, marital support, and socio-economic status. Employment alone does not guarantee well-being; rather, meaningful and supportive work environments are essential.

Overall, the study confirms that working women experience higher psychological well-being than homemakers, reflecting changing gender roles in modern society.

Implications

Psychological Implications

- Employment opportunities may enhance women's psychological well-being.
- Counselling programs for homemakers can focus on self-efficacy and personal growth.
- Women's mental health interventions should consider role identity.

Social Implications

- Recognition of homemakers' contributions may improve well-being.
- Policies supporting women's employment can enhance empowerment.
- Gender role flexibility promotes psychological health.

Policy Implications

- Skill development and employment programs for women should be expanded.
- Community programs for homemakers' social engagement may improve well-being.
- Work–family balance policies support women's mental health.

Conclusion

The study demonstrated that working women exhibit significantly higher psychological well-being than homemakers. Employment status appears to enhance autonomy, personal growth, and life satisfaction, reflecting evolving gender roles in contemporary society. The findings highlight the importance of socio-economic empowerment and social participation in promoting women's psychological well-being.

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A Comparative Study of Sleep Quality of Rural and Urban College Students

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Abstract

The objective of the present study is to compare the sleep quality of rural and urban college students in Bhilwara district, Rajasthan. A sample of 200 college students, comprising 100 from rural areas and 100 from urban areas, was randomly selected for the present study. The Sleep Quality Scale, developed by Chol Shin (2019), was used as a tool in the study. The test possesses high reliability and validity. The independent group t-test was used to assess the significance of the difference in mean scores on sleep quality between rural and urban college students. The results indicate a significant difference in sleep quality between rural and urban college students. Furthermore, the mean scores suggest that Rural college students have somewhat better sleep quality in comparison to urban college students. The study underscores the psychological consequences of lifestyle changes in contemporary youth populations. The results suggest that taking good quality sleep is beneficial for the health of young individuals.

Introduction

Sleep is a fundamental biological and psychological process essential for cognitive functioning, emotional regulation, physical health, and overall well-being. Adequate sleep quality contributes to memory consolidation, attention, learning efficiency, and mental health stability. Conversely, poor sleep quality is associated with fatigue, impaired academic performance, anxiety, depression, and reduced psychological functioning. Among young adults, especially college students, sleep disturbances have become increasingly prevalent due to lifestyle changes, academic demands, and digital media exposure.

Sleep quality refers to subjective satisfaction with sleep experience, including sleep duration, latency, disturbances, and daytime functioning. College students often experience irregular sleep schedules, late-night study habits, technology use, and social activities that disrupt circadian rhythms. Environmental and socio-cultural factors also influence sleep patterns.

Rural–urban differences in lifestyle may significantly affect sleep quality. Urban students are more exposed to electronic devices, nightlife, academic competition, and environmental noise, which may impair sleep. Rural environments generally provide quieter surroundings, less digital exposure, and more structured daily routines, potentially supporting better sleep quality. However, rural students may face different stressors, such as commuting or limited facilities. Comparative examination of sleep quality across rural and urban students is therefore important.

In Rajasthan, rapid urbanisation and changing youth lifestyles have altered sleep behaviours among college students. Understanding rural–urban differences in sleep quality can inform health promotion and student well-being programs. The present study compared sleep quality between rural and urban college students in Bhilwara district.

Objectives

1. To assess sleep quality among rural college students.
2. To assess sleep quality among urban college students.
3. To compare sleep quality between rural and urban college students.

Hypothesis

H1: There will be a significant difference in sleep quality between rural and urban college students.

Review of Literature

A comparative study by Gradisar, Gardner, and Dohnt examined sleep patterns in adolescents across environmental contexts. Findings indicated that urban youth experienced shorter sleep duration and poorer sleep quality due to electronic media use and irregular schedules. Environmental noise and lifestyle factors were identified as contributors to sleep disturbance.

A cross-cultural review by Hale and Troxel investigated socio-environmental determinants of sleep. The review concluded that urban residence is associated with poorer sleep quality compared to rural settings due to light pollution, technology exposure, and social demands. Rural environments were linked to earlier bedtimes and more stable sleep routines.

Both reviews suggest that environmental and lifestyle factors associated with urban living negatively influence sleep quality, whereas rural contexts may support healthier sleep patterns. These findings provide theoretical support for the present rural–urban comparison.

Sample

The sample consisted of 200 college students from Bhilwara district, Rajasthan:

- Rural students: 100
- Urban students: 100

Participants were selected randomly from degree colleges.

Inclusion criteria:

- Age 18–23 years
- Enrolled in an undergraduate college
- No diagnosed sleep disorder

Both male and female students were included.

Tool Used

Sleep Quality Scale (SQS): Developed by Chol Shin (2019), the Sleep Quality Scale measures subjective sleep quality across domains such as sleep duration, disturbances, latency, and daytime dysfunction. Higher scores indicate poorer sleep quality. The scale demonstrates high reliability and validity.

Procedure of Data Collection

Permission was obtained from college authorities in rural and urban areas of Bhilwara district. Participants were informed about the purpose of the study, and confidentiality was assured. Participation was voluntary.

The Sleep Quality Scale was administered in classroom settings. Students completed the questionnaire in approximately 15 minutes.

Scores were calculated according to scale guidelines. An independent samples t-test was applied to compare sleep quality between rural and urban students.

Results

Table 1: Comparison of Sleep Quality between Rural and Urban College Students

Group	*N*	*Mean*	*SD*	*t*	*P value*
Rural Students	100	38.42	6.85	3.12	<0.01
Urban Students	100	41.27	7.14		

Interpretation:

A significant difference was found between rural and urban college students' sleep quality ($t = 3.12$, $p < 0.01$). Urban students had higher scores, indicating poorer sleep quality, while rural students showed better sleep quality. Hypothesis supported.

Discussion

The present study compared sleep quality between rural and urban college students in Bhilwara district. Results indicated a significant difference, with rural students demonstrating better sleep quality than urban students. These findings suggest that environmental and lifestyle factors associated with urban living may adversely affect sleep among college students.

Urban students likely experience greater exposure to digital devices, late-night academic and social activities, and environmental noise, which disrupt circadian rhythms and sleep continuity. Screen exposure before bedtime is known to delay sleep onset and reduce sleep quality. Academic competition and urban stressors may further contribute to sleep disturbances.

In contrast, rural environments typically involve quieter surroundings, less exposure to nightlife and electronic media, and more consistent daily routines. These factors may support earlier sleep schedules and better sleep continuity, explaining lower sleep disturbance scores among rural students.

The findings align with prior research indicating poorer sleep quality among urban youth compared to rural populations. In the context of modernisation and technology-driven lifestyles, urban college students may be particularly vulnerable to sleep disruption. Poor sleep quality can negatively affect cognitive performance, emotional regulation, and mental health in young adults.

Overall, the study highlights the impact of socio-environmental context on sleep behaviour and emphasises the importance of sleep health promotion among college students, particularly in urban settings.

Implications

Health Implications

- Sleep education programs should be implemented in colleges.
- Urban students should be encouraged to reduce nighttime digital use.
- Sleep hygiene awareness can improve student health.

Educational Implications

- Colleges should address the links between sleep and academic performance.
- Counselling services can provide sleep management guidance.
- Academic schedules should consider student sleep patterns.

Social Implications

- Urban lifestyle factors influencing sleep should be addressed.
- Youth awareness about healthy sleep habits is essential.
- Public health initiatives should promote sleep health.

Conclusion

The study demonstrated significant rural–urban differences in sleep quality among college students, with rural students showing better sleep quality than urban students. The findings highlight the influence of lifestyle and environmental factors on sleep behaviour in contemporary youth populations and underscore the need for sleep health promotion among urban college students.

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Impact of the Digital India Programme on Educational and Employment Opportunities among Urban and Rural Youth: A Sociological Study of Western Uttar Pradesh

Shivam Rana and Dr. Amit Malik

Abstract

The Digital India Programme has emerged as one of the most significant government-led initiatives aimed at promoting digital infrastructure, e-governance, and digital inclusion in India. The present paper examines the impact of digitalisation on educational and employment opportunities among youth in urban and rural areas of Western Uttar Pradesh. The study is grounded in a sociological understanding of digital inequality and focuses on youth as a key demographic category within the processes of technological transformation. Using a mixed-method approach, data were collected from youth respondents across urban and rural settings. The study highlights significant differences in digital access, digital literacy, and utilisation of digital platforms for education and employment. Findings from the field survey of 800 respondents reveal that 80.8 per cent of respondents owned smartphones, while only 11.8 per cent had access to laptops and 2.8 per cent used desktop computers. Urban youth demonstrated significantly higher access to digital infrastructure compared to rural youth. The study further found that 70.8 per cent of respondents used digital technologies for educational purposes, while 31 per cent actively used digital platforms for employment-related activities. Urban youth were found to have greater access to stable internet connectivity, digital devices, and online learning resources, whereas rural youth faced infrastructural and economic barriers. The study found that 88 per cent of urban respondents owned smartphones, compared to lower ownership levels among rural respondents. Poor internet connectivity was identified as a major challenge by 29.5 per cent of respondents, particularly in rural areas. The study also reveals that despite the expansion of digital technologies, structural inequalities related to education, income, and location continue to shape digital opportunities. The paper concludes that digitalisation alone cannot ensure social inclusion unless accompanied by improvements in infrastructure, digital literacy, and institutional support.

Introduction

The rapid expansion of digital technologies has transformed communication, education, governance, and economic activities across contemporary societies. In India, this transformation accelerated after the launch of the Digital India Programme in 2015, which aimed to promote digital infrastructure, expand internet accessibility, and improve governance through digital platforms. Youth constitute one of the most active sections of society in adopting digital technologies and engaging with online platforms.

Digitalisation has created new possibilities in the fields of education and employment. Online learning platforms, digital skill development programmes, and internet-based employment opportunities have expanded access to information and services. However, sociological studies suggest that access to digital technologies remains uneven across different social groups. Factors such as education, income, geographical location, and infrastructural availability continue to shape digital participation.

This paper examines how digitalisation influences educational and employment opportunities among youth in urban and rural areas of Western Uttar Pradesh. The study focuses on differences in access, digital literacy, and utilisation of digital resources across social settings.

Research Methodology

The study adopts a descriptive and analytical research design. A mixed-method approach was used to collect both quantitative and qualitative data. The study area included urban and rural locations in Western Uttar Pradesh.A purposive sampling method was adopted. Youth respondents belonging to the age group of 18–35 years were selected from urban and rural settings. Data were collected through structured questionnaires and semi-structured interviews. Information related to digital access, educational use of technology, employment-related digital activities, and perceptions of digitalisation was collected. Quantitative data were analysed using percentages and comparative analysis, while qualitative responses were interpreted through thematic analysis.

Empirical Profile of Respondents

The study was conducted among 800 youth respondents from urban and rural areas of Western Uttar Pradesh. The largest proportion of respondents belonged to the age group of 18–25 years. Male respondents constituted 56.5 percent of the sample, while female respondents represented a substantial proportion of the respondents. Most respondents had completed secondary or higher secondary education, and a large number were students. The income profile revealed that most respondents belonged to middle-income households.

Digitalisation and Educational Opportunities

Digital technologies have significantly impacted educational practices among youth. Online learning platforms, digital classrooms, and educational applications have increased access to learning materials. The field data indicate that 70.8 per cent of respondents used digital technologies for educational purposes. Educational information constituted 29.8 per cent of the most commonly accessed online information categories among respondents. Urban youth reported greater use of online educational platforms due to better internet connectivity and device availability.

Rural youth, however, faced barriers such as unstable internet connectivity, lack of digital devices, and limited digital literacy. Many respondents from rural areas depended primarily on smartphones for educational access, which restricted participation in advanced online learning activities.

The study also found that educational background influenced digital engagement. Youth with higher educational attainment were more likely to utilise digital resources for skill development and competitive examination preparation.

Digitalisation and Employment Opportunities

Digital technologies have expanded employment-related opportunities through online job portals, digital entrepreneurship, and skill development platforms. Urban youth demonstrated higher participation in online job searches, digital freelancing, and professional networking platforms.

In contrast, rural youth reported limited awareness of online employment opportunities and faced infrastructural limitations. Only 31 per cent of respondents reported using digital platforms for employment-related activities, and respondents with higher educational qualifications were more likely to utilise online employment opportunities. Many respondents used digital platforms primarily for entertainment rather than employment-related activities.

The findings indicate that digitalisation creates opportunities unevenly, benefiting socially and economically advantaged groups more effectively.

Rural–Urban Differences in Digital Engagement

The study highlights significant rural–urban disparities in digital access and usage. Survey findings showed that urban respondents possessed comparatively better internet connectivity and greater access to smartphones and digital services. Rural respondents reported greater problems related to weak connectivity and lack of digital skills. Urban youth generally possessed better internet connectivity, multiple digital devices, and greater exposure to digital services. Rural youth often depended on shared devices and inconsistent mobile internet services.

Differences were also observed in patterns of digital usage. Urban respondents used digital platforms for education, employment, and governance-related activities more frequently, whereas rural respondents reported comparatively limited functional usage.

These findings support sociological arguments that digital inequality reflects broader structural inequalities within society.

Conclusion

The study demonstrates that the Digital India Programme has expanded digital access and created new educational and employment opportunities for youth. However, the benefits of digitalisation remain unevenly distributed across urban and rural settings.

Urban youth experience greater advantages due to better infrastructure, educational exposure, and digital literacy. Rural youth continue to face barriers related to connectivity, affordability, and limited institutional support. The findings suggest that digital inclusion requires more than technological expansion; it requires social and infrastructural support mechanisms that address structural inequalities.

For digital initiatives to contribute effectively to social development, policies must focus on improving rural digital infrastructure, promoting digital literacy, and ensuring equitable access to educational and employment-related digital resources.

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Factors Affecting Volatility in Indian Stock Market: An Analysis

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Abstract

This paper aims to provide an overview about main reasons responsible for unpredictability in the performance of stock market of India and the measures taken by government and financial regulatory bodies to control these factors. The stock market provides for mobilization and allocation of savings in an efficient manner. Due to globalization, stock markets play an important role in the development of economies. Various factors increase the level of risk and uncertainty faced by the stock markets due to which stock markets often experience fluctuations. Therefore, measurement of volatility of the stock market returns becomes necessary to decrease this uncertainty. Simply put, volatility is the extent to which the price of the security or asset changes with returns. It measures the level of risk associated with the price fluctuations of a security. Standard deviation of annual returns over a period of time is calculated in order to estimate volatility. Higher the volatility, higher is the risk in security and vice versa. There are number of factors which cause volatility in stock market like rate of inflation, economic crisis, social and political factors, changes in economic policy, economic indicators etc. To control the impact caused by these factors various steps are taken like margin trading, preopen sessions, price bands, circuit breakers etc.

Keywords: Volatility, Stock Market, Circuit Breaker, Price Band, Security

1. Introduction

Stock market acts as a long term lubricant in the economic growth process, thus an important measure for measuring a country's economic strength and development. The stock market serves as a channel through which savings are mobilized and efficiently allocated to achieve economic growth. Due to economic globalization the role of stock markets in the development of economies underwent a major change as development of stock market is the integral part of the process of globalization. Many observations from researchers suggest that major source for raising finance for Indian companies is Indian stock markets.[1]

Now the function of stock exchanges is not limited to trading of securities but they are considered an important source of capital formation, improving resource allocation and enhancing possibilities economic growth in long run. They also help in disciplining the management of the company. Therefore, the overall progress and growth of the country and economy depends upon the success and performance of the stock market.

For this reason understanding the reasons for instability in stock market has been a matter of apprehension to policy makers and financial analysts. They are concerned for identifying the main determinants of volatility and spillover effects. There are many factors which affect stock prices directly or indirectly like interest rate, money supply, dividends, GDP etc. Due to economic globalization, the stock market often experiences fluctuations due to worldwide economic crunch. The normal operations of the stock market hamper due to these fluctuations as it increases the level of risk and uncertainty faced by the stock markets.[2]

In order to decrease this uncertainty, it becomes important to measure the volatility of the stock market returns. And to measure the volatility accurately it becomes important to have knowledge about this concept. Volatility has become one of the most discussed issues in both financial and economic research. It is one of the most important features of stock market which impacts the investment decisions

of investors both individual and institutional. Volatility in simple words refers to degree of fluctuation in security's price or asset's price for the given set of returns. It measures the level of risk associated with the price fluctuations of a security. By calculating the standard deviation of annual returns over a period of time volatility can be estimated. Volatility of stock market is influenced by a large number of factors.[3]

In this paper the main factors responsible for volatility in Indian stock market and the steps taken to control these factors have been discussed.

2. Literature Review

Chun, D., et, al. (2023) examined the various economic and financial factors leading to changes in volatility of in terms of a cross-country perspective. Extensive ranges of studies were reviewed in order to collect a set of variables for prediction. It was found that only few variables contained important predictive information. It was also discovered that movements of Chinese stock market significantly predicted volatility of US stock market.

Engelhardt, N. et.al. (2021) investigated the effect of trust on volatility of global stock market during COVID-19 pandemic. For the study sample of 47 stock markets was taken and it was found that in high trust countries the volatility is significantly low. Therefore, the trust in both the fellow citizens and government of the countries were considered of great importance.

Nesrine, Hamad et al. (2019) identified the manner in which fluctuations in stock market prices were impacted by the volatility in foreign exchange rate. The GARCH model was used for the analysis. The study covered two countries which belonged to MENA zone. Time period covered was 2002-2017. The study revealed that the main variables which impacted stock market in Tunisia were volatility in oil price, gold price and exchange rate. Whereas the main variables which effected stock market in Turkey in the mentioned time period were interest rate volatility, gold price volatility and exchange rate volatility.

Zubair and Aladejare (2017) investigated the relationship between fluctuations in Nigerian stock exchange (NSE) and exchange rate volatility using GARCH model. The data used in the study was obtained from Bank of Nigeria's Statistical Bulletin for the period 1980-2016. The study also included variables like GDP, interest rate, nominal exchange rate etc. It was concluded on the basis of study that the relationship between exchange rate volatility and stock market was very weak, but it was observed that other macroeconomic variables like inflation and GDP affected stock market. Weak volatility transmission pointed towards the increased utilization of hedging instruments by the firms listed on NSE.[4]

Onasanya, Olanrewaju et al.(2012) examined the impact of various macro economic variables on movement of stock market. The variables used in the study included exchange rate, external debt, inflation rate etc. The time series annual data from 1985 to 2008 was used for the study. The various tests used for the study were Augmented Dickey Fuller Test, causality analysis, variance decomposition multivariate co integration test and vector error correction. It was found that there existed a long run relationship between the macro-economic variables used in the study and average stock prices. All macro –economic variables were insignificant but only External debt was significantly related to average stock price.

Average share price and External debt were found to granger cause in pairs while an independent causality existed between the chosen macro –economic variable and average share price. This revealed that for the selected macro-economic variables average share price was not the leading indicator.[5]

Olowe (2007) examined the dynamic equilibrium relationship between a group of macroeconomic variables and the Nigerian Stock Exchange index, using Johansen's (1991) vector error correction model

The various variables used in the study included supply of money, industrial production index, oil prices, rates of treasury bill, consumer price index etc. It was found that there existed a co integrating relation between selected macroeconomic variables. Moreover the co integration relationship was also found to be consistent with previous studies, unlike the signs of some of the variables, which were contradictory with previous studies.

Varadharajan P & Vikkraman P (2011) inspected the influence of budget on unpredictability in the returns of stock market. The study was conducted on major four and the time period covered was ten years i.e., 2002 to 2011.The key objective of the study was to provide knowledge to the investors about volatility, so that they could invest vigilantly.

Khan A. A & Zia A (2019) investigated the impact of declaration of mergers of SBI and its associate banks on volatility of returns of stocks of SBI.

The GARCH model was used for the study and the time period covered was 300 days (event window). Secondary data from reliable sources was used for the study. The results of the study confirmed that mergers and acquisitions were responsible for an increase in volatility in stock returns and that too in different ways.

Andrade & Sheriff (2018) investigated the behaviour of Indian stock market for short duration. The investigation revealed that the Indian stock market is highly volatile in short run and the same pattern of behaviour was shown by both BSE and NSE, two of the major stock exchanges of India.

Kaur (2004) examined the nature and characteristics of volatility in Indian stock market. The study revealed that during the starting two months of the year the volatility was comparatively high due to occurrence of the most significant economic event of the year i.e., presentation of union budget. The month of December was found to provide good prospect to investors by providing higher returns that too with lower volatility. On the other hand, it was revealed that the months of March and September were not so favourable for the investments. It was also found that Wednesday was a good day for investment as the returns on this day were comparatively high without high volatility.

Joshi (2013) emphasised that investors should be aware of the factors which impact stock market. In this study several factors which were responsible for creating movement in Indian stock market were revealed. These factors included GDP growth rate, inflation, political stability, flow of FIIs, liquidity and interest rates.

Kothari (2016) examined the perception of investors to identify factors affecting volatility in Indian stock market. The primary data was used for the study and the models used for the analysis included factor analysis and multiple regression model. It was revealed in the study that high degree of volatility was exhibited by the Indian stock market. It was found that stock market volatility was impacted by external factors the most followed by the stock market factors and company specific factors.[6]

3. Objectives Of The Study

1. To study the causes of volatility in Indian Stock Market.
2. To study the various aspects of Indian Stock Market in detail.
3. To study the measures have been adopted to control volatility.

4. Research Methodology

Research Type: Descriptive study: It is defined as research method which research method explains and describes the attributes of the population or the phenomenon that is being studied.

Data Collection: Secondary data from various published sources like journals, books, websites etc.

5. Causes of Volatility in Indian Stock Market

"Volatility is basically a function of uncertainty." Say's John Bollinger. It can be measured with the help of standard deviation and variance. Higher the volatility, higher is the risk in security and vice versa. There are number of factors which cause volatility in stock market like rate of inflation, economic crisis, social and political factors, changes in economic policy, economic indicators etc.[7]

Main factors which influence volatility in Indian stock market are:

a. Government Policies: Government makes various policies to improve the economic conditions. These policies impact the economy and businesses directly or indirectly. Any change in these policies can be beneficial for the business or may affect it in a negative way. Due to which there is always a

possibility of stock market being affected. For example, decrease in corporate taxes leads to increase in profits of the industry which will further lead to increase in stock prices.

b. Monetary Policy of RBI: Any change by RBI in monetary policy also impacts the stock market. Change in the monetary policy leads to increase or decrease in liquidity in banks. If with the change in policy the liquidity of banks increases, it leads to decrease in lending rates. Decreased lending rates lead to credit expansion. With the availability of credit at cheaper rates, investors increase their investment in stock market. Therefore, the stock prices start increasing and vice versa.

c. Exchange Rates: Exchange rate is the price of currency of a country in terms of currency of another country. In simple words we can say it is the relative price of a currency in terms of currency of some another country. This rate is also known as forex rate. It is not static. It keeps on changing. When the Indian rupee hardens with reference to other currencies, companies involved in overseas trade or operations are greatly affected as Indian goods become costly in foreign markets. Therefore, there is a downfall in demand of Indian goods in foreign countries. This leads to decrease in revenue from exports further resulting into decrease in stock prices of such companies.

   Alternatively, softening of rupee in relation to other currencies ends in opposite effect, in this, the stock price of exporters increases while, that of importer falls.

d. Inflation: inflation means increase in the prices of goods and services over a period of time. High rate of inflation in the economy acts as a discouraging factor for investors, which leads to fall in investments and also affects long term economic growth adversely. Due to fall in investments various firms which are listed on stock exchanges, postpone their investments and also delay their production leading to adverse growth of economy. Moreover, the value of savings also gets adversely affected by the decrease in value of money. The shares of luxurious companies also suffer as people are not interested to invest in them. Therefore, an individual's ability to invest and purchasing power both are affected by inflation. Past studies indicate that low inflation and valuations have negative correlation. The reason behind this correlation is that low inflation drives high multiples and high inflation propels low multiples.

e. Latest Information on Stock Prices: information is one of the most critical factors which affect the movement of prices of stocks as value of stock is based on the information provided by the market. As soon as the information is updated, the share prices get adjusted. Share prices move up and down as per the market interpretations regarding the impact of the information on firm's future earnings ability.

f. Psychological Issues: human behavior also affects the share prices greatly. Voracity is one of the attributes which will result in rise in stock prices more than they should. Any form of latest information can bring out a hysterical market causing a raise in share prices, and may make investors ignore logical valuation, preferring to purchase the stock so that they are not left behind. Similarly fear in the mind of investors can lead to decrease in the prices of stocks as investors rush to sell off the shares as soon as possible to avoid the losses.

g. Foreign Institutional Investors (FIIs) and Domestic Institutional Investors (DIIs): Both FIIs and DIIs have a significant role in the capital structure of the company. Consequently, their activities highly influence the stock market. Their entry and exit in the stock market leads to change in the stock prices.[8]

h. Natural Disasters: natural disasters also impact the stock prices to a great extent as it directly affects the capacity of people to spend the money. As the consumption level of people reduces it leads to decrease in the level of sales and revenue which hampers the performance of the company and ultimately the prices of the stocks fall.

6. Steps To Control Volatility

a. Price band and Circuit Breakers: It is a financial regulatory instrument used to make sure that there is no extreme price movement in the stock market. It is used to prevent stock market crashes. Circuit breakers are generally a pre-defined value in percentage terms. As soon as the price of a stock or index crosses this pre-defined range the circuit breaker is triggered. When the circuit breaker is triggered the trading in the stock market is halted and is resumed after a certain period of time depending upon the situation.[9]

Majority stocks listed on NSE and BSE have an upper and lower price bands which have been categorised into five types:

1. Stocks with no price band
2. Stocks with 20% price band
3. Stocks with 10% price band
4. Stocks with 5% price band
5. Stocks with 2% price band

Similarly, there are market wide price bands which are implemented through circuit breaker system. Movement of SENSEX and NIFTY triggers the market wide circuit breakers. These are applicable at three stages of index movement.[10]

Price band	Time	Trading Halted for
10%	Before 1:00 P.M. Between 1:00 P.M. and 2:30 P.M. After 2:30 P.M.	1 hour 30 minutes No trading halt
15%	Before 1:00 P.M. Between 1:00 P.M. and 2:00 P.M. After 2:00 P.M.	2 hours 1 hour For remaining day
20%	Any time	For remaining day

b) Pre-open Session: In India trading in stock markets starts at 9:15 AM and ends at 3:30PM. But the market opens between 9:00AM-9:15AM. This is known as pre-open market session. It began in India in 2010. This 15-minutesession prior to the actual market opening was introduced with the aim of stabilising volatility and extraordinary movements in the market due to major events and announcements that comes overnight.[11]

This pre-open market session has been divided into three sub sections:

c):

Session	Timings	Tasks undertaken
Order entry session	9:00 AM -9:08 AM	Placing an order Modify and cancel orders
Order matching session	9:08 AM- 9:12 AM	Order confirmation and matching Calculating the opening price for normal session
Buffer session	9:12 AM- 9:15 AM	Facilitates transition from pre open to regular market session

d) Margin trading: It is a facility which provides the opportunity to investors to purchase the shares or securities they can't afford by just paying the marginal amount. The marginal amount paid can be in the form of cash or in shares. The broker finances the margin trading transactions. The balance amount can be settled later. One makes profit from the transaction when the profit earned is more than the margin, else one bear a loss.[12]

6. Conclusion and Suggestion

As stock market allows for investment across multiple entities one can easily mitigate risk by investing in different stocks in stock markets. Investors can easily mitigate the risk by pooling their small investments into a large bucket. Now-a-days stock market proves to be a most suitable avenue for investment by the investors as it offers various options to investors to invest in professionally managed portfolios that too at a low cost. The review of literature has brought to light that there are number of factors which impact the stock market volatility like rate of inflation, economic crisis, social and political factors, changes in economic policy, economic indicators etc. In this research I have identified the various factors which influence the Indian stock market. Besides identifying the factors, different steps which are used to control the volatility have also been discussed.

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Agro-Based Industries in Saran District Bihar: An Overview

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Abstract

Saran is one of the important districts of the state and it plays crucial role in GDP of the state. In spite of resources and scope for agricultural development, district's agricultural productivity is low.

Agro-based industries in Bihar's Saran district (headquartered in Chhapra) present a paradox: heavy reliance on agriculture coupled with minimal value addition. While the region holds immense potential for sugar, grain, and horticulture processing, progress is stymied by fragmented landholdings, underdeveloped supply chains, and historical agrarian crises.

This article is based on Saran district. It is one of the districts in Bihar. Agriculture gives growth sustainability as this district produces crops. People of the district are engaged in agriculture business. This article highlights the existing agricultural condition and it also emphasizes giving a glimpse of major crop of the district.

Keywords: Agricultural agricultural products, agro based industry, economic geography

Introduction

Agriculture and industry are immanent parts of country development. Without developing these sectors, no country can attain growth. As these sectors have a mutual relationship with development. Agriculture is the backbone of the industrial sector which support the industrial sector providing raw material as input, industrial output is also used to expand agriculture activities.[1]

The region's socio-economic development depends upon the income of the people and country economic development depends on development of industries. Industries help to rapid economic growth, employment, foreign exchange, agriculture development narrowing down the economic disparity between rural and urban areas. Agro based industry is a multibillion dollar industry, it has enormous potential for value addition in agriculture products, generating jobs both on agriculture and industry sector & raising the region's standard of living through income diversification. Also create gainful employment for both skilled and unskilled labour in rural and urban areas. It uses huge numbers of manpower and varieties of resources are abundant. Agro based industry means any activity involved in cultivation, under controlled conditions of agriculture and horticulture crops, including floriculture and cultivation of vegetables and post- harvest operation on all fruits and vegetables. These industries converts the raw material of agriculture into finished goods to meet the needs of consumable products. This accelerates the growth and development of an economy, thus reducing poverty and unemployment. Agro based industry are easy to build and generate adequate income for the rural population and for their investment. These industries facilitate effective and efficient use of agriculture resources.

A part from this, this also facilitates and industrial culture in rural areas. Those industries obtain raw material from agriculture called agro based industry. These industries have played a vital role in Indian economy because these have 46% share in all industry and it provides if 50% share of overall employment.[2]

Concept of agro based industry

Agro based industry is broad concept. It includes all manufacturing & processing activity and services which dependent on agriculture protection .agro based industry gives inputs to agriculture. The National council of applied economic research (1965)defined, "the agro based industries use agricultural raw materials for their industrial needs including seeds, fertilizer ,implements, plant protective chemicals etc. including not only items, but also repair and servicing of farm implements and machinery".

UNIDO (United Nations industrial development organization) defined, "agro industry as those industries which use raw materials from agriculture is main material from which manufactured goods are produced on a commercial scale". According to R. P. Kachru (2010), agro based industry convert agriculture raw material into final products and increase the value added. According to the International Standard Industrial Classification (ISIC) agro based industry consists of:

1. Food and beverage industry
2. Tobacco products
3. Paper and wood products
4. Textiles, footwear and apparel industry
5. Leather products and
6. Rubber products

A general definition of agro based industry indicates the agro based industry is a part of manufacture which converts to agriculture raw material into final goods by processing method. They convert forestry, fisheries, fruits and vegetable product also. These industry direct and indirect dependent or agriculture. Those industry support agriculture like that pump set, fertilizer, pesticides includes in agro based industry.[3]

Significance of the Study

Behind the reason of this study to understand the relation of geographical condition and agro- based industry. These industry generate employment and income which reduces unemployment and poverty which leads to growth and development. These motivate to rural people for establishment of industries. This study helps to decision making of an industrialist. These industries reduce inequality of income.

Review of Literature

Kaur and Dhami (2013) conducted a study on export performance of agro base industries in Punjab:A special reference to rice industry. The main objective of this study is to analyse what is the export performance of rice industry in Punjab state during 1996- 97 to 2009-10. Result of this study showed that export performance of rice has been impressive in terms of compound growth rate of rice exports.

Paramasivan and pasupathi (2016) revealed a study on performance of agro based industry in India. This study explained production growth rate and export value of agro based manufacturing industries. This study concluded that by establishment of agro based industries, impact of income level of rural population was significant.

Csrietal (2020) discussed a study on history of agro based industries. Study explain many aspects of a agro based industry about India.

Kumari Sunita (2020) elaborated problems and prospects of agro -based industries in Saran district: A geographical analysis. It was found various geographical and economical factors that influenced to the development of agro based industry in Saran district.[4]

The main objective of this paper was to find out various problems of agro based industry in district and give a valuable suggestion.

Research Methodology

Agro based industry namely food processing, textile, horticulture, animal husbandry, wood based industries have been included in this study.

This study is based on secondary data.

The required secondary data are collected from district MSME reports, research paper, Bihar agriculture contingency plan for district Saran etc.

Study Area

The present area of study is Saran District, is an important district of the state of Bihar, Located in Southern part of newly created Saran Commissionary of North Bihar and headquarter of the saran division is at Chapra, Geographically it lies between 25.360 to 26.130 north latitudes and 84.24 to 85.15

east longitudes. The district of saran is a part of the Ganga – Ghaghara doab has a different physiography: although there are a number of tals, Ox-Bow lakes and deserted Channels of river, particularly along the Ghaghara and in the eastern parts1 and this area is known Bhanger soil region. The length of the study area is 122 KM from the river Gandak in the east of sonpur sub-division. Its width varies from 65 KM in the east and 44 KM in the west. It extends over an area of 2641 sq. Kms, and contain a population of 3,943,098 persons, according the census 2011.

This part is divided in to three division according to their physiography.[5]

(a) The palin :- The alluvial plain along the big rivers Ganga, Gandak and Ghaghara, which are subjected to seasonal inundation and area of flood prone.

(b) The upland land :- This area of the district is far away from the rivers and free from threat of flood in rainy season and this area is densely populated. This area is locally known 'CHAWRS' cover large areas in the south and south east of the district.

(c) The daira land :- This area have unique feature, which is situated in the beds of the great rivers and they are also called is an interesting example of soil formation. The levels of diara which is so for nothing but a heap of sand, then gradually raises as the water lying stagnant spreads thin large of clay and silt over the sand and this deposit silt deepens at every high flood until at the last diara rises above the flood level, a high fertile soil and produce 'BHADAI' crops and highest production of 'RAVI' Crops.[6]

Agro based Industries in Saran District

Agriculture is the main activity of Saran district. Agricultural products include paddy, wheat, sugar cane, potato and maize.

Agro-based industries in Saran district primarily revolve around food processing (rice, wheat, and maize), dairy, and small-scale manufacturing. Historically, the region relied heavily on sugarcane and sugar factories (such as the Marhaura Sugar Mill), though large-scale processing has seen a decline. Today, the sector is dominated by local MSMEs and emerging processing hubs.[7]

Key agro-based industrial segments in Saran include:

- Rice & Flour Milling: Numerous small-to-medium rice hullers and flour mills operate across the district to process local paddy and wheat harvests.
- Dairy & Animal Feed: Supported by a significant livestock population, the area features local milk chilling centers, dairy product manufacturers, and cattle/poultry feed producers.
- Food Processing & Packaging: There is an active presence of units processing spices, pulses, and bakery products, alongside packaging.
- Agro-inputs & Vermicompost: Several local enterprises focus on organic farming inputs, including vermicompost suppliers and fertilizer retailers.[8]

Registered industrial units	5895
Registered medium & large units	Nil
Total industrial units	5895
No. of industrial areas	Nil
Type of industries	Agro based, woolen, silk and artificial thread based clothes, readymade garments & embroidery, wood/ wooden based furniture, paper & paper products, leather based, chemical/ chemical based, rubber, plastic & petro based, mineral based, metal based, engineering units, electrical machinery & transport equipments, repairing & servicing.

NIC CODE NO.	TYPE OF INDUSTRY	NUMBER OF UNITS	INVESTMENT (Lakh Rs.)	EMPLOYMENT
20	Agro based	2358	1414	6258
22	Soda water			
23	Cotton textile			
24.	Woolen, silk & artificial Thread based clothes.	8	32	56
25.	Jute & jute based			
26.	Ready-made garments & embroidery	28	146	112
27.	Wood/wooden based furniture	345	427.88	1020
28.	Paper & Paper products	48	50.00	144
29.	Leather based	200	100	600
31.	Chemical/Chemical based	56	60.60	150
30.	Rubber, Plastic & petro based	7		21
32.	Mineral based (NON METALIC)	65	90.68	180
33.	Metal based (Steel Fab.)	564	448.46	1540
35.	Engineering units	200	400	604
36.	Electrical machinery and transport equipment	265	325.75	600
97.	Repairing & servicing	521	130.25	1359
01.	Others	1230	410	2508
	Kachori Making			

Source: DIC SARAN

Conclusion and suggestion

Agro based industry has a very important role in perspective of overall development in state and district. Development of agro based industry increases agriculture production and also reduce unemployment and hunger problem. Saran district is known as agriculture based district. In district agro based industry includes food and beverage, tobacco, furniture, textile, leather dairy, edible oil, bakery, and cattle feed. The geographical factors like rainfall, human resources, raw material, forest, livestock, connectivity of market these factors play a vital role to establishment of agro based industry in district Saran.

As we know that saran is agricultural area, where mostly people engaged in primary work, only few percentage of people evolved in secondary and teritary work. But due to some reason this area also suffered from many problems toward agriculture. Agriculture in this district is the gamble due to rain fall.

Sometime the precipitation is very low it causes drought situation as well as some time it became too much is also caused for heavy flood. So it is major challenging situation for farmers about their good production. The situation of production fully depends of percentage of rainfall in the study area.

There are some factors which is responsible for agrian challenges towards study area.

1. Small and fragmented land holdings.
2. Seeds.
3. Manures; fertilizers and Biocides.
4. Irrigation.
5. Lack of Mechanization.
6. Soil erosion.
7. Agricultural Marketing.
8. Inadequate storage facilities.
9. Inadequate transport.
10. Scarcity of capital.

These 10 factor is major challenges in the progress of study area. We should try to improve and metalised these situation by proper planning for satisfactory development of agriculture.

Suggestion

1. Government should implemented more schemes towards agricultural field.
2. The project of agricultural development should be transparent.
3. It is necessary to aware the facilities and schemes which is launched by government.
4. Bank should have to coperative for farmers and their functioning for crop related activates.
5. There should be proper storage facilities of crops after harvesting.
6. We should try to planting more tree for conservation of soil erosion and its related problems.
7. Government should set up agro-based industries which provide job as well proper livelihood for local people of study area.
8. Government should be focused on three main resources of study area are forest, land and water resources.
9. It is also very necessary to focus on education of each and every people for better development in agriculture as well as another aspects of life.
10. Agriculture is backbone of study area, so it needs skillfull training in agricultural method.

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Job Satisfaction of Employees in Public and Private Sector Banks in Bihar: A Comparative Study

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Abstract

In a dynamic environment today, consumer loyalty is the secret to success in every industry. The organizations, which concentrate in large measure on consumer loyalty, struggle to satisfy their internal consumers i.e. their staff, their services. They are driven by conditions of employment, health and safety policies, growth and development, etc. Workforce of any bank is responsible to extent its productivity and profitability. Efficient human resource management and maintaining higher job satisfaction level in banks determine not only the performance of the bank but also affect the growth and performance of the entire economy. So, for the success of banking, it is very important to manage human resource effectively and to find whether its employees are satisfied or not. Only if they are satisfied, they will work with commitment and project a positive image of the organization.

The main aim of this paper is to explore the factors affecting the quality of work life (QWL) and how these factors influence the performance and work life of employees in public and private sector banks in Bihar, India.

The quality of work life is assessed through dimensions that impact employees' daily work experiences and relationships at work. QWL can be evaluated using eight important dimensions that help in balancing work and life effectively.

Key Words: Public and Private Banks, Bihar, job satisfaction, employee growth, job security, job stability

Introduction

Human life has become very complex and completed in now-a-days. Employee satisfaction refers to a collection of positive and/or negative feelings that an individual hold toward his or her job. Job satisfaction is one of the most popular and widely researched topics in the field of organizational psychology defines job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences.[1]

Organizations are always searching for new ways and methods to tackle the challenges of today's fast-paced business world. Since people spend a lot of time and energy at work, it's important for them to feel satisfied with their work life. In today's workforce, the pressure of time is a major issue, with more workers juggling heavy home responsibilities and high job expectations. A conflict between family and work roles can be detrimental to both employees and employers. Research on the relationship between work and family has been ongoing since the 1960s.[2]

Job satisfaction has been researched as a result of various individual and workplace factors.

Recently, the Indian banking sector has seen significant changes and investments. This study aims to assess the banking careers and measure employee satisfaction levels.

Job satisfaction in banking is influenced by what individuals value the most.

Public sector banks, like SBI, offer unmatched job security and a better work-life balance. In contrast, private banks provide higher starting salaries and quicker promotions but require long hours and aggressive sales targets. Compared to banking sectors in other countries, the Indian banking sector

operates effectively; however, it also highlights various challenges faced by the sector. The banking industry touches all parts of society and is essential for the country's economic development. The productivity and performance of banks heavily rely on the performance of their employees, as nationalized banks are service-based organizations.[3]

With rapid technological changes, manpower has become a critical element for national growth and well-being.

It is promising for our nation that the banking sector is growing due to continuous improvement and expansion of its workforce. Labor is the main beneficiary and key contributor to the growth and success of any organization.

The Indian Banking Sector has begun employing both men and women because the success and performance of banks depend on employee performance, which is in turn influenced by their job satisfaction with the organization.

Employee satisfaction is affected by the work environment, personal productivity, motivation, encouragement, reward systems, and mental support from the organization; otherwise, it can lead to absenteeism, fatigue, accidents, and poor performance. Nowadays, managing quality of work life has become a significant challenge for every organization. Success cannot be achieved solely through new technology; organizations need a strong workforce and manpower as well. The concept of Quality of Work Life was introduced in the late 1960s and has now become an important parameter for organizational performance.[4]

Key Differences between Public Sector (SBI) and Private Sector (e.g., HDFC, ICICI) Banks

Feature	Public Sector (SBI)	Private Sector (e.g., HDFC, ICICI)
Job Security	**High:** Permanent employment with guaranteed protections.	**Moderate:** Performance-based; subject to market pressures.
Work-Life Balance	**High:** Fixed working hours; better leave policies.	**Low:** Demanding hours; strict weekend/evening expectations.
Compensation	**Moderate:** Standardized pay scales with fixed increments.	**High:** Competitive, performance-linked pay and bonuses.
Career Growth	**Slow & Structured:** Dependent on seniority and internal exams.	**Fast-Tracked:** Merit-based, faster promotions for top performers.
Work Environment	**Process-Driven:** Bureaucratic, larger workloads, and transfers.	**Target-Driven:** High-pressure sales environment, but modern tech.

Why Public Sector (SBI) Employees are Satisfied

- Security & Benefits: Employees report high satisfaction with job security and retirement plans. State Bank of India (SBI) is generally rated well for its stability.
- Work-Life Balance: Staff generally enjoy fixed banking hours and lower pressure to work late.
- Challenges: Bureaucracy and frequent transfers across India can be major drawbacks.

Why Private Sector Employees are Satisfied

- Salary & Growth: Compensation is often higher. Those who thrive under pressure and hit targets find rewards and fast career advancement.
- Environment: Better technological infrastructure and faster customer service processes.
- Challenges: Employees often report stress over strict quotas, lack of job security during restructuring, and intense work schedules.

Employee Reviews & Ratings

- State Bank of India (SBI): Maintains an average employee rating of roughly (3.4) out of (5) stars across platforms like Glassdoor SBI Reviews.
- Private Competitors: Private banks often score similarly overall, but reviews are polarized—higher ratings for learning opportunities but lower scores for work-life balance.

If you prefer stability and a relaxed schedule over high pay, the public sector is a better fit. If you are target-oriented, comfortable with high pressure, and want rapid career growth, the private sector excels.[5]

Job Satisfaction among Bank Employees in Bihar

Job satisfaction among bank employees in Bihar reveals a distinct contrast between sectors. Public sector employees generally report higher overall satisfaction due to stronger job security and better work-life balance, while private sector employees experience higher occupational stress but greater career growth and monetary incentives.[6]

Regional studies—including areas like Patna, Muzaffarpur, and Nalanda—highlight these specific sector dynamics:

Public Sector Banks (e.g., SBI, UCO, Central Bank of India)

- High Security & Balance: Workers express higher contentment regarding job stability, fixed working hours, and superior work-life balance.
- Lower Occupational Stress: Employees generally experience fewer targets and less psychological pressure compared to their private counterparts.
- Pain Points: Many cite frustration with rigid promotion intervals and institutional stagnation.

Private Sector Banks (e.g., ICICI, HDFC, Axis)

- Growth & Incentives: Employees are highly motivated by monetary benefits, performance recognition systems, and clear career development opportunities.
- High Stress & Workload: Staff often suffer from higher occupational stress due to aggressive sales targets, which negatively impacts work-life balance.
- Security Concerns: The lack of long-term job security remains a primary concern among private bank employees.

Contextual Demographics in Bihar

- Gender Disparities: Female bank workers, particularly in lower-tier rural branches, often report lower job satisfaction than their male counterparts, typically attributed to less social security and lower compensation levels in those specific roles.
- Rural vs. Urban Preferences: While urban populations heavily favor the responsiveness and digital efficiency of private banks, rural demographics in Bihar still heavily value the trust and stability offered by public sector banks.

Overview of State Bank of India (SBI), Patna

The State Bank of India (SBI) stands as India's largest and one of the most prominent public sector banks, with an extensive national presence and a rich legacy of over 200 years. Established in 1806 as the Bank of Calcutta and subsequently rebranded as the State Bank of India in 1955, the institution has evolved to become the backbone of India's banking system.

The Patna Circle of SBI is an important regional office that serves both urban and semi-urban communities in Bihar, Jharkhand, and parts of Eastern India.

SBI's structure is based on a hierarchical model, which is typical for public sector banks, ensuring clear authority, responsibilities, and accountability.

Recently, however, there has been a noticeable move towards more flexible and employee-focused policies to encourage independence and innovation among workers. The Patna Circle has embraced these changes while still maintaining the traditional values of stability and order.

The Patna Circle is no exception, adapting these changes while retaining the traditional ethos of stability and order.

The work culture at SBI, Patna, is shaped by this juxtaposition of bureaucracy and modernisation. While the bank is known for its stability, job security, and structured processes, employees often experience the pressures of a target-driven environment, which impacts overall job satisfaction. Although the traditional, conservative approach prevails in many areas, there is an ongoing effort to move towards a more performance-driven and result-oriented work culture. This shift is particularly evident in newer initiatives focusing on improving efficiency, embracing technology, and streamlining services.[7]

Research Methodology

This observational study used a descriptive study design. A thorough review of the literature was carried out earlier than deciding on the topic of take a look at. In this take a look at, we focused on understanding the dimensions affect high quality of operational existence this is working in the direction of improvement of organizations most precious assets (employees) to gain competitive advantage within the market. Simple random sampling approach was followed for the observation of Quality of working life of employees of financial institutions. Facts have been collected from 5 public sector banks like as State Bank of India, UCO Bank, United Bank of India, Bank of India and Punjab National Bank. Similarly, one hundred and ten financial institution managers have been decided from six non-public banks like ICICI bank, HDFC bank, Yes bank, Axis bank, Indus lnd bank, Kotak Mahindra bank. The sampling method changed to purposive with a view to selecting the best MFI employees for the current trust. Data were collected handiest from public sector -male and female bank employees and private quarter-male and female employees. The take a little bit on be restrained to a 5 decided on public quarter banks and six private banks in 3 districts like like Nalanda, Patna, Muzaffarpur in the state of Bihar. The period to analyze the number one fact would be the months from January 2018 to May 2018. The descriptive statistics like mean and SD & inferential statistics like 't' test and ANOVA were used to examine the differences between public and private sector bank employees. Primary source was the main tools used to collect data. The structured questionnaire developed by Jain (1982) was the main sources of collecting primary data. The questions were distributed with the aim to facilitate the respondents to recognize the forms of variables contributing to enrich the satisfaction of bank employees.[8]

Research Results & Discussion

It shows Mean, SD, 't'-test and Summary of ANOVA.

Table 1
SHOWS SIGNIFICANCE OF DIFFERENCE OF THE MEAN SCORES OF PUBLIC AND PRIVATE SECTOR BANK MANAGERS ON EIGHT DIMENSIONS OF QWL

Sl.No.	Name of the Dimensions	Public Sector Bank Managers N=140		Private Sector Bank Managers N=110		't' value	Level of Significance
		Mean	SD	Mean	SD		
1.	D1	1.51	0.502	1.46	0.501	0.793	NS
2.	D2	1.71	0.453	1.65	0.478	1.010	NS
3.	D3	1.43	0.497	1.52	0.502	1.409	NS
4.	D4	1.46	0.501	1.49	0.502	0.417	NS
5.	D5	1.39	0.489	1.53	0.502	2.248**	S
6.	D6	1.31	0.463	1.33	0.471	0.339	NS
7.	D7	1.51	0.502	1.59	0.494	1.207	NS
8.	D8	1.55	0.499	1.63	0.486	1.229	NS

P<0.05; **P<0.01; ***P<0.001; S-Significance; NS- Not significance; D1=Adequate income and fair compensation; D2=Safe and healthy working conditions; D3=Immediate opportunities to develop human capacities; D4=Opportunity for continued growth and security; D5=Social integration in the work organization; D6=Constitutionalism in the work organization; D7=Work and total life space; D8=Social relevance of working life

Table 2
SHOWS SIGNIFICANCE OF DIFFERENCE OF THE MEAN SCORES OF PUBLIC SECTOR MALE AND PUBLIC SECTOR FEMALE BANK MANAGERS ON EIGHT DIMENSIONS OF QWL

Sl. No.	Name of the dimensions	Public sector male bank managers N=104		Public sector female bank managers N=36		't' value	Level of significance
		Mean	SD	Mean	SD		
1	D1	1.55	0.500	1.42	0.5	1.359	NS
2	D2	1.72	0.451	1.69	0.467	0.304	NS
3	D3	1.39	0.491	1.53	0.506	1.395	NS
4	D4	1.49	0.502	1.39	0.494	1.049	NS
5	D5	1.35	0.478	1.5	0.507	1.638	NS
6	D6	1.31	0.464	1.31	0.467	0.024	NS
7	D7	1.51	0.502	1.53	0.506	0.187	NS
8	D8	1.49	0.502	1.72	0.454	2.444*	S

P<0.05; **P<0.01; ***P<0.001; S-Significance; NS- Not significance

Table 3
SHOWS SIGNIFICANCE OF DIFFERENCE OF THE MEAN SCORES OF PUBLIC SECTOR MALE AND PRIVATE SECTOR MALE BANK MANAGERS ON EIGHT DIMENSIONS OF QWL

Sl. No.	Name of the dimensions	Public sector male bank managers N=104		Private sector male bank managers N=70		't' Value	Level of significance
		Mean	SD	Mean	SD		
1.	D1	1.55	0.500	1.43	0.498	1.548	NS
2.	D2	1.72	0.451	1.64	0.483	1.092	NS
3.	D3	1.39	0.491	1.54	0.502	1.941	NS
4.	D4	1.49	0.502	1.51	0.503	0.308	NS
5.	D5	1.35	0.478	1.59	0.496	3.192**	S
6.	D6	1.31	0.464	1.36	0.483	0.679	NS
7.	D7	1.51	0.502	1.61	0.490	1.361	NS
8.	D8	1.49	0.502	1.63	0.487	1.802	NS
*P<0.05; **P<0.01; ***P<0.001; S-Significance; NS- Not significance							

Table 4
SHOWS SIGNIFICANCE OF DIFFERENCE OF THE MEAN SCORES OF PUBLIC SECTOR MALE AND PRIVATE SECTOR FEMALE BANK MANAGERS ON EIGHT DIMENSIONS OF QWL

Sl. No.	Name of the dimensions	Public sector male bank managers N=104		Private sector female bank managers N=40		't' value	Level of significance
		Mean	SD	Mean	SD		
1.	D1	1.55	0.500	1.53	0.506	0.247	NS
2.	D2	1.72	0.451	1.68	0.474	0.543	NS
3.	D3	1.39	0.491	1.48	0.506	0.877	NS
4.	D4	1.49	0.502	1.45	0.504	0.432	NS
5.	D5	1.35	0.478	1.43	0.501	0.875	NS
6.	D6	1.31	0.464	1.28	0.452	0.381	NS
7.	D7	1.51	0.502	1.55	0.504	0.432	NS
8.	D8	1.49	0.502	1.63	0.490	1.450	NS
*P<0.05; **P<0.01; ***P<0.001; S-Significance; NS- Not significance							

Table 5
SHOWING THE SUMMARY OF ANOVA FOR FOUR GROUPS OF BANK MANAGERS I.E PUBLIC SECTOR MALE, PUBLIC SECTOR FEMALE, PRIVATE SECTOR MALE AND PRIVATE SECTOR FEMALE BANK MANAGERS

Sl. No.	Name of the dimensions	Source of variation	Sum of squares (SS)	df	Mean square (MS)	F	Level of significance
1.	D1	Between Groups	0.857	3	0.286	1.140	NS
		Within Groups	61.627	246	0.251		
		Total	62.484	249			
2.	D2	Between Groups	0.265	3	0.088	0.407	NS
		Within Groups	53.399	246	0.217		
		Total	53.664	249			
3.	D3	Between Groups	1.089	3	0.363	1.460	NS
		Within Groups	61.155	246	0.249		
		Total	62.244	249			
4.	D4	Between Groups	0.424	3	0.141	0.562	NS
		Within Groups	61.932	246	0.252		
		Total	62.356	249			
5.	D5	Between Groups	2.525	3	0.842	3.491*	S
		Within Groups	59.299	246	0.241		
		Total	61.824	249			
6.	D6	Between Groups	0.197	3	0.066	0.300	NS
		Within Groups	53.839	246	0.219		
		Total	54.036	249			
7.	D7	Between Groups	0.476	3	0.159	0.635	NS
		Within Groups	61.448	246	0.250		
		Total	61.924	249			
8.	D8	Between Groups	1.806	3	0.602	2.512	NS
		Within Groups	58.930	246	0.240		
		Total	60.736	249			

*P<0.05; **P<0.01; ***P<0.001; S-Significance; NS- Not significance

The main goal of this study was to look into how bank employees view the quality of their work life. The findings show that there are eight key areas of work life quality that stand out more than others. The results from the 't' test on work life quality (Tables 1-4) indicate that managers from public sector banks differ significantly from those in private banks (both male and female) only in the area of 'social integration in the work organization'. Additionally, public sector male and female bank managers showed a significant difference in the 'social relevance of working life'. This suggests that since work and careers are usually pursued within social organizations, personal relationships become a crucial part of work life quality. Factors such as freedom from bias, mobility, and openness in interactions are included in this. Regarding the social relevance of working life, it means that employees view their organization as being socially responsible in areas like products, marketing, and hiring practices. Social relevance reflects the social responsibility of any organization. Every organization should act ethically and provide a code of ethics to ensure fair treatment without discrimination in the workplace. Codes of conduct help promote ethical behavior in areas such as financial transparency. Organizations also have a responsibility to maintain a clean environment and to prevent actions that could harm it or involve bribery.

According to Table 5, there are significant differences in social integration among four groups of bank managers: public sector males, public sector females, private sector males, and private sector females.[9]

Social integration refers to how engaged individuals are in social interactions, roles, and activities. It is vital for understanding social networks and influences factors like social support, community bonding, and social resources.

The results suggest that social integration at work has two main aspects that affect health differently: the level of social integration and its significance compared to general social connections outside of work.

Employees who feel more connected at work generally face less psychological stress and fewer health issues, even when considering their personal lives and other demographic factors. This study links the concept of social integration to the banking sector and highlights how it impacts employees' health based on their work environment.10

Conclusion

The study highlighted eight key areas based on "t" tests and "ANOVA," which include fair pay, safe working conditions, and opportunities for skill development, chances for growth and job security, social integration at work, following organizational rules, work-life balance, and the significance of work in life.

These eight areas were used to evaluate the quality of work life (QWL) for bank employees. The research showed significant differences in two aspects of QWL: social integration at work and the relevance of work to life, with values of 2.248 and 3.491, respectively, impacting bank employees' work experiences. Therefore, improving the quality of work life for bank employees is essential since they are vital to strengthening the economy. Enhancing their work life can help create a sense of belonging, which is crucial for the organization. This, in turn, can motivate employees to engage more in their roles. This research will assist in fostering career growth for employees, building better relationships among colleagues, creating a modern work culture, ensuring good working conditions, and boosting job satisfaction both at work and at home.

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Climate Change and Environmental Responsibility in India: A Sociological Perspective

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Abstract

Climate change has emerged as one of the most critical global challenges of the twenty-first century, influencing not only the natural environment but also the social, economic, cultural, and political structures of society. In India, the effects of climate change are visible through rising temperatures, irregular rainfall, pollution, water scarcity, floods, droughts, deforestation, and increasing public health crises. These environmental transformations have deeply affected social life, particularly marginalized communities, rural populations, and the youth. From a sociological perspective, climate change is not merely an ecological issue; it is fundamentally connected with patterns of industrialization, urbanization, consumerism, inequality, and governance. The article examines climate change and environmental responsibility in India through sociological analysis by exploring pollution, urban expansion, public awareness, government policies, youth psychology, sustainability, and collective responsibility. It also discusses the transition from Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) and highlights the role of global cooperation in reducing environmental degradation and international tensions. The article argues that environmental responsibility cannot be achieved by governments alone; rather, it requires collective social participation, ethical accountability, and intergenerational responsibility. Drawing upon the thoughts of sociologists and environmental thinkers such as Ulrich Beck, Anthony Giddens, Ramachandra Guha, and Vandana Shiva, the article emphasizes that climate justice and environmental sustainability are inseparable from social justice and human survival.

Keywords: Climate Change; Environmental Responsibility; Sustainability; Urbanization; Sociological Perspective

Introduction

Climate change is no longer a distant environmental concern; it has become an immediate social reality affecting every sphere of human life. Rising global temperatures, melting glaciers, air pollution, deforestation, irregular weather patterns, and ecological degradation are threatening the balance between nature and society. India, being one of the world's most populous and rapidly developing countries, faces serious environmental challenges due to industrialization, urbanization, excessive consumption, and unsustainable developmental practices.

From a sociological perspective, climate change is not merely a scientific or environmental issue. It is deeply connected with social inequality, patterns of development, political structures, human behavior, and cultural practices. Environmental problems affect all people, but their impact is not equally distributed. Poor communities, farmers, women, laborers, and marginalized populations often suffer the most severe consequences despite contributing the least to environmental destruction. Therefore, climate change must be understood as both an environmental and a social crisis.

The COVID-19 pandemic of 2020 and 2021 also demonstrated humanity's complex relationship with nature. During global lockdowns, reduced industrial activities and transportation temporarily improved air quality, cleaned rivers, and reduced pollution levels across many countries. Nature appeared to heal

itself when human intervention slowed down. This period served as a warning that continuous exploitation of nature can lead to devastating consequences for human civilization. At the same time, it also revealed the possibility of ecological recovery through collective action and responsible behavior.

Environmental responsibility thus becomes a shared obligation. Nature does not discriminate between rich and poor, caste or religion, nationality or gender. Polluted air, contaminated water, and rising temperatures affect all sections of society. Therefore, solutions to climate change require cooperation beyond social divisions and political boundaries. Governments, institutions, communities, and individuals must collectively work toward sustainable development and environmental justice.

Historical and Sociological Background of Climate Change

Climate change has evolved alongside the growth of industrial civilization. The Industrial Revolution brought technological advancement and economic development, but it also accelerated the exploitation of natural resources. Factories, fossil fuels, mining, and urban expansion transformed the relationship between humans and nature. Sociologists argue that modernity and capitalism have contributed significantly to ecological degradation.

Indian environmental historian Ramachandra Guha emphasized that environmental crises in developing countries are closely linked with social inequality and resource exploitation. Vandana Shiva, another prominent Indian environmental thinker, criticized the model of uncontrolled globalization and consumerism that destroys ecological balance and marginalizes local communities.

The sociological understanding of climate change highlights the interconnectedness between social systems and ecological systems. Environmental destruction is often rooted in unequal access to resources, unsustainable patterns of consumption, and developmental policies that prioritize profit over ecological balance.

Pollution and Urbanization in India

Pollution is one of the most visible manifestations of climate change in India. Rapid industrialization and urbanization have significantly increased air, water, and soil pollution. Cities such as Delhi, Mumbai, Kolkata, and Patna frequently experience dangerous levels of air pollution caused by vehicle emissions, industrial smoke, construction activities, and burning of waste.

Urbanization has transformed Indian society economically and socially. While cities provide employment opportunities and modern infrastructure, they also contribute to ecological imbalance. Expanding urban settlements often destroy forests, wetlands, and agricultural land. The excessive use of concrete structures reduces green cover and increases urban heat islands, making cities hotter and less sustainable.

Sociologically, urbanization has encouraged consumer culture and materialistic lifestyles. Increased consumption of energy, plastics, automobiles, and electronic goods contributes to environmental degradation. The aspiration for economic growth often overshadows environmental concerns. The capitalist model of development encourages overproduction and overconsumption, placing immense pressure on natural resources.

Moreover, pollution disproportionately affects poor communities living in slums and industrial areas. Lack of access to clean water, sanitation, and healthcare increases their vulnerability to environmental diseases. Thus, environmental degradation reflects broader social inequalities within Indian society.

Government Policies and Environmental Governance

The Indian government has introduced several policies and programs to address climate change and environmental degradation. The National Action Plan on Climate Change (NAPCC), launched in 2008, focuses on renewable energy, water conservation, sustainable agriculture, and ecological sustainability. India has also promoted solar energy through the International Solar Alliance and invested in green technologies.

In recent years, initiatives such as Swachh Bharat Abhiyan, the National Clean Air Programme (NCAP), electric vehicle promotion, afforestation campaigns, and river-cleaning projects have aimed to improve environmental conditions. India's commitment under the Paris Climate Agreement demonstrates its role in global climate governance.

However, sociological analysis suggests that policy implementation often faces challenges due to corruption, lack of public participation, weak enforcement mechanisms, and developmental pressures. Environmental laws sometimes remain ineffective because economic growth is prioritized over ecological sustainability.

Environmental responsibility must therefore be divided into two major dimensions: the responsibility of governments and the responsibility of citizens.

The role of governments includes policy formulation, environmental regulation, investment in renewable energy, climate diplomacy, and sustainable infrastructure development. National governments must cooperate with global institutions to address transnational environmental issues. Since climate change is a global problem, international collaboration is essential. Agreements such as the Paris Agreement, COP summits, and SDGs encourage nations to work collectively for climate justice.

At the same time, citizens also bear moral and social responsibility. Individuals must adopt environmentally responsible lifestyles by reducing waste, conserving water, minimizing plastic use, planting trees, and supporting sustainable practices. Social responsibility toward future generations is essential for long-term ecological survival.

Public Awareness and Environmental Consciousness in India

Public awareness regarding climate change in India has increased significantly over the last decade. Educational institutions, media platforms, civil society organizations, and environmental movements have played an important role in spreading awareness. Campaigns related to plastic reduction, water conservation, sustainable living, and renewable energy have encouraged public participation.

Social movements such as the Chipko Movement historically demonstrated the importance of community participation in environmental protection. Contemporary environmental activism by students and youth groups reflects growing concern about ecological sustainability.

However, environmental awareness remains uneven across social classes and regions. Rural communities often possess traditional ecological knowledge and sustainable lifestyles, but they may lack access to scientific information and institutional support. Urban populations may be aware of climate issues yet continue environmentally harmful consumption patterns.

Sociologically, environmental consciousness is shaped by education, culture, class position, and media exposure. Environmental responsibility cannot be achieved only through laws; it requires cultural transformation and collective ethical awareness.

Climate Change and the Youth: Social and Psychological Impact

Climate change has deeply affected today's youth socially and psychologically. Young people face uncertainty regarding employment, health, migration, natural disasters, food security, and future survival. Increasing environmental crises have created anxiety, stress, fear, and emotional insecurity among younger generations.

The concept of "eco-anxiety" has emerged globally to describe psychological distress caused by climate change. Many young people feel helpless when witnessing environmental destruction, rising pollution, and government inaction. Frequent floods, heatwaves, droughts, and pandemics intensify fears about the future.

In India, climate-related migration and unemployment also affect youth identity and aspirations. Rural youth displaced by environmental degradation often migrate to urban areas in search of livelihood opportunities. This migration can create social dislocation, cultural alienation, and economic insecurity.

From a sociological perspective, youth are not only victims of climate change but also agents of social transformation. Student movements, environmental activism, and digital campaigns demonstrate the growing involvement of young people in climate justice movements. Youth participation is essential for creating sustainable societies because future generations will inherit the consequences of present environmental decisions.

MDGs, SDGs, and the Meaning of Sustainability

The global understanding of development has evolved significantly over the past decades. The Millennium Development Goals (MDGs), introduced by the United Nations in 2000, focused primarily on poverty reduction, health, and education. However, growing environmental crises revealed the need for a more comprehensive developmental framework.

Consequently, the Sustainable Development Goals (SDGs), adopted in 2015, integrated environmental sustainability with economic and social development. Goals related to climate action, clean energy, sustainable cities, responsible consumption, and biodiversity emphasize the interconnectedness of ecological and social well-being.

Yet sustainability must be understood beyond policy language. True sustainability means ensuring that future generations inherit a healthy planet capable of supporting human life and biodiversity. It requires changing human attitudes toward nature and moving away from excessive consumerism.

Indian philosophical traditions have historically emphasized harmony between humans and nature. Concepts such as coexistence, non-violence, and ecological balance can contribute significantly to modern sustainability discourse. Sustainable development should therefore combine scientific innovation with ethical responsibility and cultural wisdom.

Climate Change, Global Cooperation, and International Relations

Climate change has the potential to become a unifying force among nations. Since environmental crises transcend political boundaries, countries must cooperate despite ideological differences. Shared environmental goals can improve diplomatic relations and reduce international tensions.

For example, international climate agreements encourage countries to collaborate on renewable energy, carbon reduction, scientific research, and disaster management. Environmental diplomacy can strengthen trust and cooperation among nations.

Sociologically, global environmental cooperation reflects the emergence of a shared human identity. Climate change reminds humanity that all people are interconnected through ecological systems. Polluted air, rising sea levels, and extreme weather affect the entire planet regardless of nationality.

At the same time, climate politics also reveals global inequalities. Developing countries often argue that industrialized nations bear greater historical responsibility for carbon emissions. Therefore, climate justice requires fair distribution of responsibilities, technological support, and financial assistance between developed and developing nations.

Environmental responsibility should thus be viewed not only as an ecological issue but also as an economic and social issue. Sustainable environmental policies can reduce poverty, improve public health, create green employment, and promote social stability.

Collective Responsibility and the Future of Humanity

One of the most important aspects of climate change is that its solution cannot be achieved by any single individual, government, or institution alone. Collective social effort is essential. Every member of society must recognize their responsibility toward nature and future generations.

Modern societies often prioritize individual success and material achievement over collective welfare. However, environmental crises demonstrate the limitations of excessive individualism. Human survival depends upon cooperation, social solidarity, and ecological responsibility.

The COVID-19 pandemic provided an important lesson in this regard. During lockdowns, environmental conditions improved significantly in many regions. Rivers became cleaner, air pollution declined, and wildlife reappeared in urban spaces. This period showed that nature possesses the capacity to heal itself when destructive human activities are reduced.

At the same time, the pandemic exposed the vulnerability of human civilization. Millions suffered due to health crises, economic instability, and social isolation. The experience reminded humanity that going against nature can produce catastrophic consequences.

Nature does not discriminate. Environmental destruction affects people across caste, class, religion, gender, and nationality. Therefore, environmental responsibility must also transcend social divisions. Collective action based on equality, cooperation, and shared humanity is necessary for addressing climate change effectively.

Conclusion

Climate change represents one of the greatest sociological and environmental challenges of contemporary society. In India, the crisis is intensified by rapid urbanization, pollution, industrialization, social inequality, and unsustainable developmental practices. From a sociological perspective, climate change is deeply connected with structures of power, consumption patterns, public awareness, and collective behavior.

The article has highlighted that environmental responsibility must be shared between governments and citizens. Governments must formulate effective environmental policies, strengthen global cooperation, and ensure sustainable development, while individuals and communities must adopt environmentally responsible lifestyles and ethical accountability toward future generations.

Climate change also profoundly affects youth psychologically and socially, creating uncertainty, anxiety, and insecurity. However, young people also possess the potential to lead environmental movements and create transformative social change.

The transition from MDGs to SDGs reflects growing recognition that environmental sustainability is inseparable from social justice and human development. True sustainability requires collective consciousness, cultural transformation, and intergenerational responsibility.

Ultimately, climate change is not only a crisis of the environment but also a crisis of human values, social systems, and global relationships. Humanity must move beyond divisions and work collectively for ecological balance and social harmony. Only through cooperation, responsibility, and sustainable thinking can societies ensure a safer and more just future for coming generations.

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