



Dayanand Education Society's  
**Dayanand College of Commerce, Latur**

NAAC Re-accredited 'B++' (3rd Cycle)

Affiliated to Swami Ramanand Teerth Marathwada University, Nanded

Internal Quality Assurance Cell Organizes

Indian Council of Social Science Research Sponsored

**Leveraging India's Demographic Dividend  
for a Self-Reliant and Sustainable Future by 2047**

**D.C.C.I.**

IQAC Organizes

**ICSSR Sponsored**

**One Day  
National Seminar**

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## President's Message

I congratulate IQAC, Dayanand College of Commerce, Latur for taking initiative in organizing ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

This seminar aims to explore transformation of India into a self-reliant, innovative, and sustainable nation by 2047 by effectively harnessing the potential of its youthful population, ensuring equitable growth, and establishing a resilient economy and society.

It also aims toward Cultural and Social Development by promoting and preserving India's diverse cultural heritage, which can also become a part of the economic growth strategy through tourism and cultural industries.

I hope in this one day national seminar the Guests, Resource Persons, Professors, Research Scholars and participants will surely share their broad views on India's Demographic Dividend and come out with suggestions on the seminar theme.

**Laxmiraman Lahoti**

President,

Dayanand Education Society, Latur.

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## Message

India's demographic dividend refers to the economic advantage that arises from having a large, youthful population relative to its dependent age groups. This phenomenon is often seen as a significant opportunity for economic growth and development.

The seminar theme will focus on sustainable practices to ensure that economic growth does not come at the expense of environmental degradation and will discuss to implement efficient resource management strategies to support long-term development.

In this regard, Dayanand Education Society's Dayanand College of Commerce, Internal Quality Assurance Cell is organizing one day national seminar to bring together the wisdom and experience of senior researchers and public intellectuals with the energy and inventiveness of emerging scholars and students to think collaboratively, share ideas and questions, and possibly find new ways toward India's self-reliant and sustainable future by 2047.

The seminar will provide a platform for interdisciplinary exchange and collaboration and offer opportunities for networking and learning. I wish all the best to all the participants.

**Ramesh Biyani**

Secretary,

Dayanand Education Society, Latur.

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## Message

I congratulate the IQAC & faculty of college for organizing ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

Organizing this seminar is an initiative step taken by our college to understand India's demographic dividend to become self-reliant. India's demographic dividend presents a tremendous opportunity for economic growth and development. However, realizing this potential requires strategic investments in education, skill development, healthcare, infrastructure, and inclusive economic policies. By addressing these areas, India can effectively harness its youthful population to drive sustained economic progress and enhance its global standing by 2047.

India has a relatively large proportion of its population in the working-age group (15-64 years). As of 2024, approximately 65% of India's population is under the age of 35. This age group represents a potential workforce that can drive economic growth if properly educated and employed.

I am sure this one day national seminar will discuss topics pertaining to the seminar theme and will reach to the fruitful outcomes.

**Dr. Prashant Mannikar**

I/c Principal,

Dayanand College of Commerce, Latur.

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## Editor's Note

At the outset, I appreciate and congratulate IQAC team and faculty for their contribution in organizing this ICSSR Sponsored One Day National Seminar on "Leveraging India's Demographic Dividend for a Self-Reliant and Sustainable Future by 2047".

The organizers have taken conscientious efforts to reach the nation-wide research scholars and collected papers on various issues allied with the seminar theme.

The essential themes of this national seminar include Enhancing Skill Development and Vocational Training, Adapting Labor Market Dynamics for the Future Workforce, Promoting Lifelong Learning and Continuous Education, Leveraging Emerging Technologies for Innovation, Building Global Partnerships and International Collaboration, Improving Infrastructure for Sustainable Development so on and so forth.

Achieving a self-reliant India by 2047 involves developing a robust, resilient economy that minimizes dependence on external resources and maximizes internal capabilities. This vision aligns with the goal of economic independence, technological advancement, and sustainable development.

I appreciate all researchers for the time and efforts they have put in writing research papers pertaining to the seminar themes.

**Dr. Balaji Kalambe**

IQAC Coordinator

Dayanand College of Commerce, Latur.

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## DIMENSIONS OF GLOBALIZATION ON HUMAN RESOURCE MANAGEMENT

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### Abstract

Globalization as a whole in the age of competition represents differently the creation of a world structure characterized by the free transfer of technology and human beings. Due to the spread of technology, the property of the whole country can definitely be considered. The present research paper aims to study how the various dimensions of globalization have implications for human resource management. Overall, through globalization, the culture of each nation has been transformed into a specific policy matter. Dealing with it and managing it strategically is highly commendable.

Balancing global trends in human resource management is essential. Culture of a nation is affected through globalization. Different aspects of human resource management are affected by differences in national culture. Managing human resources in the above chosen culture is a daunting task considering the impact of globalization and technology.

To a certain extent in today's global economy, human resource activities are successful through a diverse culture, but this success depends of course on the manager. In today's global economy to the extent that it can be implemented on the basis of appropriate technology and knowledge. Whether human resource activities succeed through a diverse culture largely depends on the manager. The ability to know and balance the values of other cultures and to gain the power of a force is definitely determined by the values and other values that make it happen.

**Keywords:-** Globalization, innovation, human resource management, internationalization, innovative knowledge and holistic development.

### Introduction

Let us know in detail how globalization in human resource management takes place in accordance with the exchange of knowledge. Human resource management is the method of monitoring and managing the people working in an organization. This includes hiring, training, compensation and ensuring a positive work environment as a whole. Globalization, on the other hand, refers to the process of increased interconnectedness and integration between countries, economies and cultures. It is the exchange of knowledge between different countries or the transfer of information in terms of economy or culture beyond a particular geographical boundary.

When this concept is applied in human resource management, it means that organizations are expanding their operations across borders, hiring talent from different parts of the world, knowledge-based people, and quality people. Globalization in human resource management involves the adoption of human resource practices for international recruitment. Mainly in Human Resource Management it is an open platform where any knowledge based or skill absorbing person from any country or any organization gets a world class platform independently.

Through the globalization of human resource management, managing the global workforce or work group or manpower as a whole, handling the cultural diversity of other regional areas, carrying out the responsibilities according to the compliance of various employment and labor laws. All these are trying to happen in human resource management through this globalization.

### Impact of Globalization on Human Resource Management:-

Human resource management is seen to be significantly transformed by globalization. This affects how a corporation or organization manages its diverse workforce. As a result, some of the significant impacts of globalization on human resource management can be shown below.

- **Opportunity for Innovation**

A workforce with a diverse worldview serves to create an ecosystem where large-scale innovation thrives primarily as professionals from different cultural heritages or backgrounds work together based on their specialized knowledge-focused perspectives. As a result, creative success comes easily.

This collaboration results in new ideas and new solutions that help the team as a team to perform.

- **Link to Enhanced Talent Pool**

Both globalization and human resource management together act as a link to bring you knowledge across geographical boundaries as a whole. You can hire skilled professionals with diverse educational backgrounds and skills work team. Diversity continues to improve as employees learn collaboratively through each other.

- **Complex Compliance**

Staying abreast of ever-evolving international law is essential to maintain a global presence and avoid legal pitfalls. There is an urgent need for comprehensive skills in complying with labor laws, taxes, regulations and employment standards in different countries. Managing employee benefits and compensation structures across the aforementioned international trade jurisdictions can be a bit of a tricky task.

In line with all the above influences, we are underlining that there has definitely been an increase in the comparison of knowledge and the speed of innovation and expansion in human resource management through globalization.

### **Challenges of Globalization in Human Resource Management:-**

Although the globalization of human resources has brought various benefits, along with these benefits, there are some top challenges from the point of view of globalization of human resources.

The challenges faced can be elaborated as follows.

- **Virtual Team Management**

In a globalized world workforce or manpower these teams are seen to be spread across different destinations and across time systems or time zones. This underlines the fact that coordination of work across the system has definitely created a challenge in effective communication.

In situations where team members do not communicate face-to-face, it becomes difficult to build trust with each other and manage conflict situations. Navigating such physical barriers across borders while ensuring proper coordination and team work remains a major challenge.

- **Talent Retention and Engagement**

In globalization, it is definitely a challenge for companies to retain their talent or skills in such an environment. in which employees are exposed to various other opportunities around the world Characteristics when employees' work expectations and their personal goals are different. In that case it can be difficult to maintain a sense of belonging among employees and provide them with opportunities for personal advancement. That's why keeping the entire workforce engaged and motivated plays a vital role in preventing turnover.

- **Training and Development Adaptation**

Through globalization in human resource management there is a constant need to improve knowledge and skills. And building a collective training program for all of them from different cultures and geographical backgrounds is a challenge. Building an overall training and development program is definitely a challenge. A deliberate planning is required to standardize the overall content while ensuring their relevance to local conditions.



- **Privacy and Security**

As information and content are shared across geographical boundaries, ensuring the privacy and security of highly sensitive employee information systems from a security perspective can certainly be complicated. Human resource department is responsible for managing all this content or information. In various such cases it is the responsibility to reasonably follow the rules to protect the useful content and information and to protect against the breaches that occur.

Balancing the need to exchange useful information with legal requirements within a department or region is another key challenge.

- **Global HR Strategy Alignment**

From a global perspective, each country may have different labor laws, cultural norms, and ways of doing business. Similarly, creating a unified global HR strategy that strictly complies with labor laws and aligns with the overall company's global goals is definitely a challenge for HR professionals. Creating such a unified policy is very important.

**Advantages of Globalization in Human Resource Management:-**

Globalization seems to have an overall positive effect or impact on human resource management. Because with globalization there is a kind of variety in any function or system.

Correspondingly, such companies or organizations can definitely benefit from this.

- **Cultural Exchange and Collaboration:-**

Globalization in human resource management facilitates performance across teams by opening up cross-cultural integration to all. Human resource management directly benefits by facilitating the exchange of ideas, knowledge and best practices from a conceptual perspective. Promotes an overall great work environment leading to a massive increase in creativity and adaptability.

- **Enhanced Learning and Development:-**

Different teams or functions that are globally dispersed based on global standards definitely expose the human resource management to different innovative learning and development methods. Adopting or assimilating best practices in all areas truly encourages professional growth and knowledge expansion.

In this mainly the employees of the company get the benefit of a different innovative approach towards the business and definitely exhibit the business method. Overall there is momentum towards their professional personal progress.

- **Flexibility and Market Adaptation:-**

Globalization drives human resource management to adopt flexible workforce or manpower models or structures such as virtual teams. It greatly helps a corporation or organization to efficiently accommodate different time zones and market demands across geographical regions or borders.

This overall agility enables companies to respond quickly to changing market conditions and always provide solutions to the problems faced by customers worldwide.

- **Expanded Market Reach:-**

Globalization in human resource management facilitates the process of easily entering new markets and customers. So definitely companies can easily learn about their various components. Based on the information received, various regional policies can be formulated to meet or meet the needs. According to this overall situation, they can definitely cooperate with the customer's cultural preferences. It helps to increase the competitive strength of the organization by creating products and services that are required for a particular region.

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**● Strategic Resource Allocation:-**

In many places globalization enables human resource management to align resource allocation based on situational need. It definitely plays a role in increasing efficiency in a proper distribution system. The result is that the team is structured in such a way as to maximize productivity and expertise in each area.

**Conclusion:-**

The present article has studied how the globalization of human resource management has been incorporated into the global innovation in accordance with different dimensions or different aspects of human resource management. Overall knowledge has evolved beyond global work boundaries through how decentralization and differentiation have taken place through the value of globalization in human resource management. It has come about through the value of globalization in human resource management. There is a call for human resource managers to become world-class effective strategic partners. Human resource management is playing a strategic role at the functional level by taking a proactive business approach.

In line with human resource management, there is definitely a certain category of well-qualified human resource in the globalization boom. It certainly plays a role of strengthening a kind of competency in a work team or group that is specialized and acquires knowledge based on a certain parameter. A workforce with technological know-how in various corporations or organizations is definitely an opportunity to bring about its proper use in human resource management with a globalization initiative.

Globalization has undeniably shaped the dimensions of human resource management. Technology and recruitment are two aspects of wider influence. As business continues to evolve in this interconnected world, HR professionals must integrate and adapt, adopting innovative solutions and strategies to effectively manage their workforce.

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# EXPLORING FINANCIAL LITERACY AND INVESTMENT BEHAVIOUR AMONG WORKING WOMEN IN HIGHER EDUCATION: A LITERATURE REVIEW

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Head Management Science and Business Administration,  
Dayanand College of Commerce Latur, Maharashtra.

## Abstract

This literature review examines the intersection of financial literacy and investment behaviour among working women in higher education. Financial literacy, defined as the ability to understand and apply financial concepts, significantly influences the investment decisions of individuals. Working women in academia face unique challenges and opportunities that shape their financial behaviours, including educational attainment, economic empowerment, and investment risk. This review synthesizes existing studies to highlight the critical factors that affect financial literacy and investment decisions among this demographic. The findings underscore the need for comprehensive financial education programs tailored to the specific needs of working women in higher education, providing avenues for personal and professional advancement.

**Keywords:** Financial Literacy, Investment Behaviour, Working Women, Higher Education

## Introduction

Financial literacy is a vital skill that enables individuals to manage their finances adeptly and make informed investment choices. For working women in higher education, financial literacy is especially significant as it influences their investment behaviour and overall financial well-being. This literature review aims to examine the interplay between financial literacy and investment behaviour within this demographic. Working women in higher education encounter unique circumstances and challenges, including balancing professional responsibilities with personal financial management. Understanding how financial literacy affects their investment decisions can offer insights into improving their financial outcomes and address specific needs they face. By reviewing existing research, this review seeks to shed light on the critical role financial literacy plays in shaping investment strategies and enhancing financial stability among working women in academia.

## Definition and Importance of Financial Literacy

Financial literacy encompasses a range of competencies, including budgeting, saving, investing, and understanding financial products. Research indicates that individuals with higher financial literacy levels are more likely to engage in positive financial behaviours, such as investing in stocks or retirement accounts (Lusardi & Mitchell, 2014). Working women, particularly those in higher education, may benefit from enhanced financial literacy not only for personal financial management but also for their long-term career trajectories.

## Objectives of study:

1. To find the Impact of Financial Literacy on Investment Confidence and Decision-Making with the help of existing study.
2. To Investigate the societal, familial, and educational barriers that affect working women's participation in investment activities through review of literature
3. To find how financial education interventions, including those provided through higher education curricula and workplace wellness programs, improve investment behaviours and financial stability among working women.

## Review of Literature:

1. Graham et al. (2009): Graham and colleagues provide insights into gender differences in investment behaviour, with a focus on women's risk aversion. The study shows that women tend to be more risk-averse than men,

which affects their investment choices. Understanding these differences is important for developing strategies that can help women make more confident and balanced investment decisions.

2. Lusardi & Mitchell (2014): Lusardi and Mitchell emphasize the economic importance of financial literacy, highlighting its impact on investment behaviour. Their research indicates that higher financial literacy levels are associated with better investment outcomes and more effective financial management. This underscores the need for comprehensive financial education to support individuals in making sound investment decisions.
3. Zinman (2014): Zinman's research explores the relationship between financial literacy and risk-taking behaviours. The study finds that financial literacy can influence investment strategies by shaping individuals' perceptions of risk. Enhanced financial knowledge helps individuals, including women, make more informed and less emotionally driven investment decisions.
4. Mottola (2014): Mottola examines how financial literacy affects retirement planning and investment choices among working women. The study highlights that higher financial literacy levels contribute to better retirement planning and more strategic investment decisions. This research emphasizes the importance of financial education in preparing for long-term financial goals.
5. Drexler et al. (2014): Drexler and colleagues examine the effects of financial literacy interventions on investment decisions among working women. The research demonstrates that targeted financial education interventions can lead to more confident and informed investment choices, improving financial outcomes for women in the workforce.
6. Clark et al. (2015): Clark and colleagues discuss the integration of financial education into higher education curricula. Their study emphasizes that embedding financial literacy into academic programs is essential for enhancing students' financial knowledge and investment capabilities. This approach prepares students, including working women, to make more informed financial decisions and manage their investments effectively.
7. Sullivan & Warren (2015): Sullivan and Warren investigate the impact of financial literacy on debt management and investment decisions. Their study reveals significant gaps in financial education for working women, affecting their ability to manage debt and make informed investment choices. The findings highlight the need for targeted financial literacy programs to address these gaps.
8. Agarwal et al. (2015): Agarwal and colleagues investigate how financial education shapes investment behaviour and enhances financial outcomes. The study shows that financial education positively influences investment decisions and financial management, suggesting that well-designed educational programs can improve investment behaviour among working women.
9. Tufano (2015): Tufano discusses the influence of financial literacy on investment choices, emphasizing the need for targeted financial education. The study highlights that increased financial literacy helps individuals make more informed and effective investment decisions, addressing the gaps in financial knowledge that can affect investment behaviour.
10. Moore (2016): Moore analyses the effects of financial literacy on investment decisions and financial planning among working women. The study finds that higher financial literacy leads to better investment decisions and more strategic financial planning, highlighting the importance of financial education for achieving financial stability.
11. Klapper & Panos (2016): Klapper and Panos analyse how financial literacy influences investment choices and financial stability among working women. The study shows that higher financial literacy is associated with better investment decisions and improved financial stability. This research underscores the importance of financial education in enhancing investment behaviour and overall financial well-being.
12. Lusardi & Mitchell (2017): Lusardi and Mitchell review recent advancements in financial literacy research, highlighting its impact on investment behaviour. Their study indicates that improved financial literacy leads to better investment decisions and financial planning. This review underscores the continued need for financial education to support effective investment strategies.
13. Bucher-Koenen et al. (2017): This study explores the role of financial literacy in fostering economic empowerment among women. The researchers found that higher levels of financial literacy significantly enhance women's confidence in making investment decisions. By equipping women with the necessary financial knowledge, they are better positioned to engage in investment activities, which can lead to improved financial outcomes and greater economic independence.

14. Atkinson & Messy (2017): Atkinson and Messy provide a comparative analysis of financial literacy levels and investment behaviours across different countries. Their study shows significant variations in financial literacy and investment practices, emphasizing the need for tailored financial education programs to address diverse needs and improve investment outcomes.
15. Campbell (2017): Campbell examines how financial literacy impacts investment strategies and risk management among women in academia. The study reveals that improved financial literacy leads to more effective investment strategies and better risk management, highlighting the role of financial education in enhancing investment behaviour.
16. Behrman et al. (2018): Behrman and colleagues study the relationship between financial literacy and investment behaviour, focusing on higher education institutions. The study finds that financial education provided through academic institutions significantly improves students' investment behaviour and financial management skills, benefiting working women in higher education.
17. Rhyne (2018): Rhyne reviews the barriers to financial literacy among women, especially those from economically disadvantaged backgrounds. The study identifies challenges such as limited access to financial education and resources, which hinder women's ability to engage with financial markets. Addressing these barriers is crucial for improving financial literacy and investment behaviour among economically disadvantaged women.
18. Ghosh (2020): Ghosh studies the effects of financial education programs on investment behaviours among working women. The research shows that well-designed financial education programs can significantly improve investment behaviours, helping women make more informed and confident investment decisions.
19. Davis (2020): Davis examines the impact of workplace financial wellness programs on employees' financial literacy and investment behaviours. The study demonstrates that employers who offer financial wellness initiatives can significantly enhance their employees' financial knowledge and investment practices. These programs are particularly beneficial for working women, who may otherwise lack access to financial education resources.

Based on the literature review, the following findings emerge regarding financial literacy and investment behaviour among working women in higher education:

1. **Increased Confidence in Investment Decisions:** Higher financial literacy levels are associated with increased confidence in making investment decisions among women. Studies like Bucher-Koenen et al. (2017) show that improved financial knowledge helps women feel more empowered and capable of making informed investment choices.
2. **Barriers to Investment Engagement:** Women face multiple barriers to engaging in investment activities, including societal norms, familial pressures, and limited financial education (Chong, n.d.; Rhyne, 2018). These barriers often result in reduced investment participation and lower financial confidence.
3. **Importance of Financial Education Integration:** Integrating financial education into higher education curricula is crucial for enhancing students' financial literacy and investment capabilities. Clark et al. (2015) highlight that embedding financial literacy into academic programs can prepare students, including working women, for better financial management and investment decisions.
4. **Role of Workplace Financial Wellness Programs:** Workplace financial wellness programs significantly contribute to improving employees' financial literacy and investment behaviours. Davis (2020) demonstrates that employer-sponsored initiatives can enhance financial knowledge and support better investment practices among working women.
5. **Gender Differences in Risk Aversion:** Women generally exhibit more risk aversion compared to men, impacting their investment strategies (Graham et al., 2009). Financial literacy can help mitigate this risk aversion by providing women with the knowledge and confidence needed to make balanced investment decisions.
6. **Impact of Financial Literacy on Financial Stability:** Higher financial literacy is linked to improved investment choices and greater financial stability. Research by Klapper & Panos (2016) indicates that better financial knowledge leads to more effective financial management and improved financial outcomes.



7. **Effectiveness of Financial Education Interventions:** Financial education interventions have been shown to positively influence investment decisions among working women. Studies such as Drexler et al. (2014) find that targeted educational programs can lead to more confident and informed investment choices.
8. **Long-Term Financial Planning Benefits:** Financial literacy positively affects long-term financial planning, including retirement preparation. Mottola (2014) highlights that increased financial literacy enables working women to make better retirement planning decisions and manage their investments more effectively.

These findings underscore the critical role of financial literacy in shaping investment behaviour and highlight the need for targeted financial education programs to address barriers and enhance financial decision-making among working women in higher education.

## Conclusion

The review of existing literature demonstrates a complex relationship between financial literacy and investment behaviour among working women in higher education. While education improves financial literacy levels, it is essential to address the unique challenges faced by these women to foster better investment outcomes. The findings advocate for tailored financial literacy programs that equip working women with the necessary knowledge and confidence to engage in investment activities actively. Further research is needed to explore effective pedagogical strategies that can enhance financial literacy and investment behaviour among diverse populations of working women.

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## IMPACT OF CLIMATIC CHANGE ON AGRICULTURE

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### Abstract

Agriculture productivity can be affected in two ways: one directly, due to change in temperature, precipitation or CO<sub>2</sub> level and two indirectly, through changes in soil, distribution and frequency of infestation by pests, insects, diseases or weeds. Sixty five per cent on India agriculture is heavily dependent on natural factors such as rainfall. It is also restricted by a lack of complementary inputs and institutional support system. In tropical Asia, although wheat crops are likely to be sensitive to an increase maximum temperature, rice crops would be vulnerable to an increase in minimum temperature. The adverse impacts of likely water shortage on wheat productivity in India could be minimized to a certain extent under elevated CO<sub>2</sub> levels; this impact, however, would be largely maintained for rice crops. Resulting in a net decline in rice yields. Acute water shortage conditions combined with thermal stress could adversely affects wheat and, more severely, rice productivity in Indian even under the positive effects of elevated CO<sub>2</sub> in the future.

**Keyword :** Agriculture productivity affected, CO<sub>2</sub> level, impact on crop.

### Introduction

Many climatologists predict significant global warming in the coming decades due to increasing atmospheric carbon dioxide (CO<sub>2</sub>) and other green house gases including methane (CH<sub>4</sub>) nitrous oxide (N<sub>2</sub>O) etc. Changes in temperature, precipitation and solar radiation basically define crop production and will have an effect on the productivity of crop as well as live stock agriculture with economic effects on farm profitability, prices, supply, demand and trade. Sustainability of agriculture lies in the sustainability of the resources being used in the agriculture like soil, water, and atmosphere with weather and climate, plant etc. There exists a reciprocal relationship among these three, if one is changed. Remaining get automatically changed. This relationship decides the agriculture production. It was through necessary to study “Effect Of Climatic Change On Agriculture”

### Objective of the study:

- 1) To study impact of global warming.
- 2) To study causes of climate change.
- 3) To study Effect of climatic Change on Agriculture.
- 4) Impact of climate change on soil.
- 5) Impact of climate change on productivity (Rice and wheat)

### Hypothesis of study:

- 1) Effect of climate change on crop productivity is negative.
- 2) Elevated CO<sub>2</sub> caused significant effects in the productivity of rice and wheat.
- 3) Global warming exhibits direct and indirect effect on agriculture.

### Methods And Materials:

Finding from the General circulation Model based on the equivalent of doubling of carbon dioxide (CO<sub>2</sub>) concentration have been used. In the present paper products of various group to study the effects of changing climatic scenario at IARI, IISC on crop through simulation models are utilized to study “Effect Of Climatic Change On Agriculture”.

**Result And Discussion:**

Man made activities of pouring carbon dioxide, methane and nitrous oxide etc. increased warming due to green house in the atmosphere. Global mean air temperature is increased by 0-60C in the past 100 years due to increase in the green house gases.

**Background:**

The prevailing international scientific opinion on climate changes that human activities resulted in substantial global warming from the mid-20th century and that continued growth gas concentration caused by human-induced emission would generate high risks of dangerous climate change. The intergovernmental panel on climate change (IPCC) has predicted an average global rise in temperature of 1.40 c (2.50F) to 5.80C (10.40F) between 1990 and 2100. [4]

**Climate change:**

The average weather of an area is called the climate of that area. The climate change greatly affects the environmental features to the alarming situations. Man-made (Anthropogenic) activities are disturbing the delicate balance between various components of the environment. An increase of green house gases in the atmosphere has resulted in increase in the average global temperature. This rise in global temperature referred as global warming may upset the hydrological cycle result flood and drought in different regions of the world cause sea level rise, changes in agricultural productivity deforestation, famines and finally death of human beings as well as livestock.

**Causes of climate change:**

The causes of climate change are natural and anthropogenic which are listed below:

Earth's tilt, Volcanoes, Temperature, Precipitation, Atmospheric CO<sub>2</sub>

**Man & climate Change**

Over population is another cause to exacerbate environmental problems, such as climate change, loss of wildlife habitat deforestation, and air and water pollution. The world population is getting doubled each 40 years. According to the United Nations, for example, 95 percent of the world's cities still dump raw sewage into their water supplies. Over-population result in urbanization, pollution and deforestation.

**Impact of Global warming on Agriculture Productivity:-**

Global warming exhibits direct and indirect effect on Agriculture productivity. Frequency of heat waves alters the pattern of rainfall and also change in top soil management practices. Dry land yields of corn, wheat shorten a crop's life cycle. Summer cooling electricity demands would increase, while winter heating demand would decrease. As a result of climate change, annual electricity demands are expected to increase by 4 to 6% by the year 2055, additional power plants will be required to meet peak demands.

**Impact of climate changes in agriculture:-**

The major impacts of climate change on agriculture are:-

1. Destabilization in production and productivity.
2. Less availability of irrigation.
3. Reduction in fertilizer use efficiency
4. Detrimental effect in fruits, vegetables, medicinal and aromatic plants.

Man made activities of pouring carbon dioxide, methane & nitrous oxide etc. increased warming due to green house in the atmosphere. Global mean air temperature is increased by 0-60C in the past 100 years due to increase in the green house gases. Assuming double increase of CO<sub>2</sub> the global mean temperature is likely to

increase ranging from 1oC to 3.5oC. This rise will be unequally distributed over the globe. The temperature rise will be more in higher latitudes than in equilateral or low latitudes. Rise of at least 1 to 2oC by 2030 AD seem to result.

#### Impact of climate changes on soil :-

- Decease in soil cabin.
- Soil erosion due to denuding of forests and Vegetation
- Shift in land suitability.
- Increase in transient salinity.
- Change soil biology and microbial population.

#### Impact of climate changes on wheat productions :-

Wheat production in Maharashtra is likely to e reduced by 50% due to less moisture in soil, inadequate rainfall attack and change in temperatures. Due to temperature rises of 2 to 5oC during November 20C and 6oC in January about 20% reduction in yields expected.

#### Consequences of Climate change and its impact:-

Despite increase in total yields on global basis, the growth yield rates of the various crops have been declined. Higher latitudes appear to benefit agriculture, more consistently. Lower latitudes either do not benefit significantly or Loose productivity. Straight Conclusion across the world is difficult to draw.

#### Rabi/Winter Crops to loose in Agriculture:-

Rise in temperature due to climate change can affect the rabi crops like wheat, gram, musters, linseed etc. giving tow yields due to fast maturity. Soyabean, pigeon-pea groundnut, semi-rabi sesamum originally "kharif sowri but domesticated in rabi can have better future and better yield which may find "new growing period" Higher temperature and higher CO<sub>2</sub> values in rice. Plants resulted in 3-5 days early flowering in indica rice verities. In general it is necessary to modify the present cropping patterns to suit and to derive possible benefit of climate change.

#### Emission of carbon from fossil fuels:-

88th per cent of world energy needs are supplied by fissile fuels while the balance coming from hydro-electric generation and nuclear power plants. Nearly 75 percent carbon is released per unit of energy when coal is burnt instead of natural gas while the synthetic oil or gas made from coal or shale oil, produces about 80 percent carbon than coal.

#### Green House Gases : Past, Present and future Details.

Sr. No	Parameter Concentration	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CFC <sub>s</sub>
1	1950	280 ppm	1150 ppb	285 ppb	0.0 ppb
2	1985	345 ppm	1790 ppb	305 ppb	0.4 ppb
3	Expected 2075	526 ppm	4402 ppb	478 ppb	3.8 ppb
4	Annual concentration increase	0.4	1	0.2	5
5	Relative green House efficiency CO <sub>2</sub> <sup>-1</sup>	51	25	230	1500
6	Current Green house contribution %	57	12	6	25
7	Anticipated rate between 1985 and	0.57	10	0.5	25

	2075 %				
8	Equilicipated temperature change 1850- 2075 °C	3.12	0.62	0.28	0.93
				Total	4.95°C
9	% total temperature change	63	12	06	19=100%
10	Life time year	100	10	150	100

Table reveals that CO<sub>2</sub> had generated significant amount of Green house gases and follows methane Nitrous Oxide and CFCs, respectively. Developed Countries are the main contribution for Green house gases by human activity.

### Conclusion:-

The effects of climate changes on the agriculture are discussed and are alarming and to maintain its sustainability it is necessary to undertake suitable policy, research and planning to keep up the sustainability of the various resources like soil, water, atmosphere and plant on which agriculture depends. All economic equation of sustainability of agriculture are settled and climate and therefore may take new magnitude and dimension under the climate change to be faced in future.

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## SOCIO-ECONOMIC STATUS OF WOMEN STREET VENDORS IN LATUR, MAHARSHTRA

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### Abstract

In India, women street vendors (WSVs) contribute a significant role in building up a strong economy. Street vendors have to work for a long hours in a day. They are part of informal sector. They contribute to the low circuit of economy. This article will help to know about the socio-economic conditions of women street vendors in Latur city of Maharashtra state. This article will also focus on problems faced by women street vendors and causes of inflation of vegetables in the market. It also describes their effects on day-to-day life. It also explains about unawareness among street vendors regarding government schemes.

**Keywords:** socio-economic, profit status, health status, vendors.

### Introduction

“Empowerment of women is essential as their value systems lead to the development of a good family, good society and ultimately a good nation”.

- Dr. A.P.J. AbdulKalam

Street vendors are marginalized people in India. They are part of informal sector. Space provided for street vendors in the city is highly congested. Women street vendors, almost, occupy public places such as street, bus stand, etc. As women street vendors have low income amount on daily basis, so they contribute through the low circuit of economy.

Government of India is supporting street vendors by launching various schemes and organizing various programmes to protect their rights. One programme of government through ministry of Housing and Urban Affairs i.e. Pradhan Mantri Street Vendor Nidhi (PMSVNIDHI). But due to lack of knowledge among street vendors, none of the respondents among street vendors have taken benefit of government schemes.

### Review of Literature

- 1) Socio-Economic Condition among The Women Street Vendors: Anthropological Study on a Street at Jamshedpur, Parikshit Chakraborty & Samarpita Koley, The study focuses on the socio-economic condition among street vendors in a daily market at Jamshedpur. The present researchers attempt to explore the socio-economic milieu of women street vendors of a daily market near Tatanagar Rail Station, Jamshedpur. Particular importance has been given to inward bound as women street vendors. The data has been collected by anthropological methods in terms of observation method, interview with the structure and unstructured questionnaire and other qualitative methods including case studies. This study covered 64 women street vendors. Bottom of this study, illustrated the socio-economic condition of women street vendors; thus, the study pointed that economic condition of the women street vendors is very poor.
- 2) Socio-Economic and Health Conditions of Street Vendors in Kozhikode, Amrutha P, Dr. Ibrahim Cholakal, Street vendors have an important role in the urban informal economy in terms of generating more employment. Almost all street vendors are doing their business independently and majority of them are struggling to survive because their daily income is less than Rs. 500 and have large competition in this field. This paper tries to examine socio-economic and health conditions of street vendors in their business life.
- 3) Socio-Economic Status of Street Vendors (Case study of Chandigarh), Seepana Prakasam, The economic status of street vendors during post migration is much better than the pre migration scenario hence they are not interested in reverse migration. The percapita income of street vendors households are less than the percapita income of India as well as Chandigarh. The economic statuses of mobile street vendors are relatively better than stationary vendors. Street vendors household monthly percapita income is more than the India's urban

monthly percapita consumption expenditure, but they are deprived in terms of Human Development Index (HDI) parameters. The maximum proportion of clientele of street vendors in Chandigarh, belong to lower and middle income groups, are in favor of granting conditional license to street vendors.

### Objectives of the study

- 1) To study the socio-economic status of women street vendors selling vegetables of Latur city.
- 2) To study the problems faced by women street vendors in Latur.
- 3) To study the causes of inflation of vegetables in Latur.
- 4) To study the knowledge about the scheme launched –‘PM Street Vendors Nidhi’ by government.

### Sample and Period of Study

The researcher has adopted simple random sampling method. The universe is found more in number. But the researcher has interviewed only thirty one (31) women street vendors. It is a tiny project completed in the academic year 2023-24.

### Area of the Study

The researcher has personally visited vegetables market nearby two places of Latur city- one near Dayanand gate and another near PVR talkies.

### Data Collection

- 1) **Primary Data:** The researcher has directly collected the data from women street vendors by framing questionnaire. He has also discussed with women street vendors and written the answers with his own. The main reason is that they are illiterate, even though they are literate; they are not willing to write the answers in the questionnaire. Questions are asked in the form of interview and discussed the problems with them personally.
- 2) **Secondary Data:** The researcher has also used secondary data through the help of google by searching various articles, government websites, reports, newspapers, etc.

### Limitation of the Study

- 1) It is limited to two areas of Latur city i.e. only nearby Dayanand gate and PVR talkies.
- 2) It is limited to number of thirty one (31) in Latur city.
- 3) On the basis of interview and discussions formal questionnaires are filled by the researcher in front of women street vendors. So it may occur discrepancies sometimes.

### Data Analysis

- 1) All the thirty (30) women street vendors interviewed have married status and only one (01) has unmarried status.
- 2) Women street vendors are classified age wise. Above 45 years- 18 women street vendors i.e. 58% of the total population and below 45 years- 13 women street vendors i.e. 42% of the total population.

#### Agewise Classification

Years	Number of WSVs	Percentage (%)
Above 45 years	18	58%
Below 45 years	13	42%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 3) Family structures of women street vendors are also studied. Thirty (30) women street vendors are living in nuclear families i.e. 97%. Only one (01) living in joint family i.e. 3%.

Family Structure of WSVs

Families	Number of WSVs	Percentage (%)
Nuclear Family	30	97%
Joint Family	01	3%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 4) Education Level- When we study the education level of women street vendors, the researcher has collected the information at three levels – Illiterate, Below 10<sup>th</sup> and Above 10<sup>th</sup>.

Out of total thirty one (31) sample respondents, thirteen (13) respondent were illiterate i.e. 42% women street vendors, eighteen (18) respondents are below 10<sup>th</sup> i.e. 58% women street vendors and none of the respondent is above 10<sup>th</sup>.

Education level of WSVs

Education Undertaken	Number of WSVs	Percentage (%)
Illiterate	13	42 %
Below 10 <sup>th</sup>	18	58%
Above 10 <sup>th</sup>	00	--
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 5) The researcher has studied from where the women street vendors came for sale of vegetables. He has classified respondent into two i.e. rural areas and urban (local) areas. He has found that 55% i.e. 17 women street vendors came from rural areas, specially for the purpose of sale of vegetables. On the other hand, fourteen (14) i.e. 45% of the women street vendors come locally from city only.

WSVs Came for Sale of Vegetables

Areas	Number of WSVs	Percentage (%)
Rural	17	55%
Urban (local)	14	45%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 6) The researcher has studied the women street vendors working hours for sale of vegetables are as follows:
- Nine (09) respondents' works for six hours daily.
  - Eighteen (18) respondents' works for eight hours daily.
  - Three (03) respondents works for nine hours daily.
  - One (01) respondents works for ten hours daily.

- 7) Sales Area: There are two places on Barshi road, Latur city sitting for sale of vegetables. One nearby Dayanand gate and another nearby PVR talkies in daily life. But most of the street vendors sits nearby dayanand gate i.e. twenty three (23) respondents. We can say that 74% of women street vendors sit nearby dayanand gate and only eight (08) respondents i.e. 26% of women street vendors sits nearby PVR talkies.

Sales Area		
Areas	Number of WSVs	Percentage (%)
Near Dayanand Gate	23	74%
Near PVR Talkies	08	26%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 8) Health Status of WSVs: The researcher has studied four major problems are studied of women street vendors. They are headache, joint pains, menstruation and any other problems. Some women have more than one problem such as headache as well as joint pains and others. So the number of respondents has increased.
- Due to continous sitting in hot areas, five (05) women are facing problem of headache.
  - Maximum women have problems of joint pains i.e. eighteen (18) women street vendors.
  - There is no any menstruation problem while sitting for sale of vegetables.
  - There are other problems of women street vendors due to age fact, fifteen (15) respondents have responded.

Problems faced by WSVs		
Health Issues	Number of WSVs	Percentage (%)
Headache	05	13%
Joint Pains	18	47%
Menstruation	00	--
Any other	15	48%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- 9) Facilities: The researcher has considered two facilities – one free toilet facilities and other facilities such as shades, drinking water etc. Basic facility of toilet is provided by government to women street vendors. When the researcher has completed survey, it is found that only two (02) women street vendors has told about the toilet facility and all other women street vendors, twenty nine (29) interested in other facilities such as shades for sitting , drinking water etc.

- 10) Profit Status: All the women street vendors think about the profit by selling vegetables in day-to-day life. The survey was completed in four categories and findings are as follows:

Monthly Profit of WSVs		
Range of Profit	Number of WSVs	Percentage (%)
Rs. 3000 - Rs. 5000	12	39%
Rs. 6000 – Rs. 8000	13	42%

Rs. 9000 – Rs. 10000	4	13%
No Profit No Loss	2	6%
<b>Total</b>	<b>31</b>	<b>100%</b>
Source: Primary data collected from women street vendors.		

- Twelve (12) respondents i.e. 39% of women street vendors have monthly profit in between Rs. 3000 to Rs. 5000.
- The monthly profit of women street vendors between Rs. 6000 to Rs. 8000 are thirteen (13) in number i.e. 42%.
- Only four (04) women street vendors i.e. 13% have high profit in between Rs. 9000 to Rs. 10000.
- Two (02) respondents i.e. 6% of women street vendors are doing their business on no profit and no loss.

#### 11) Problems faced by Women Vegetables Vendors:

Some common problems told by women street vendors are as follows:

- There is less production and high rate of inflation problems faces by women street vendors in the market.
- Due to rainfall in the area, women street vendor faces the problem of increased inflation rates of vegetables.
- Customers demand vegetables at very low rate. They want the vegetables in the market less than the principal amount.
- Many times vegetables purchased are not proper from inner, women street vendors have to face the problems of losses.
- Only one respondent have told that there is a no problem at all.
- Eight (08) women street vendors have land problems i.e. sitting arrangements of street vendors for selling vegetables.
- Some respondents have told that there are dirty places for selling vegetables near dayanand gate.
- Fifteen (15) respondents have told that many family problems are created so at last they have to choose the profession of selling vegetables.
- One woman has told about the security problem at home i.e. a lady has to live alone at home in day time so she think it is better way to sell vegetables rather than thinking about profit.

#### 12) Causes of Inflation Rate of Vegetables:

The researcher has also asked causes of inflation rate of vegetables in day-to-day markets. The following are opinion of women street vendors-

- Six (06) respondents have told about less supply of vegetables in the market.
- Fifteen (15) respondents told that due to less rainfall in the area, inflation rate is increased.
- Less production of vegetables nearby Latur city is one of the major cause of increasing rates of vegetables.
- Due to water problems, less crop plantation of vegetables nearby Latur city replied by two (02) women street vendors.
- One (01) respondent has told that due to natural disaster, there is an inflation rates of vegetables during the time.

#### 13) Pradhan Mantri Street Vendor Nidhi (PMSVNIDHI)

PMSVNidhi is a central sector micro credit scheme launched on 1<sup>st</sup> June, 2020 by Ministry of Housing and Urban Affairs (MoHUA) to provide handholding support to street vendors. The scheme facilitates a working capital collateral free loan of Rs. 10,000, with subsequent loans of Rs. 20,000 and Rs. 50,000 with a 7% interest subsidy. This scheme helps street vendors to give upliftment to the marginalized society economically.

The researcher has discussed and done survey in Latur city about the scheme PMSVNidhi. But none of the women street vendor has got benefits of the scheme. Many street vendors do not know about the scheme. This shows that regarding the scheme.



### Conclusions

- 1) Almost all women street vendors live in nuclear family.
- 2) Women street vendors have mostly below 10<sup>th</sup> education.
- 3) Most of the street vendors come from rural areas for selling their vegetables in the market of Latur city.
- 4) Maximum women vendor faces health problems of joint pains.
- 5) Maximum women street vendors have given opinion that they are earning income between Rs. 3000 to Rs. 5000.
- 6) One of the major problem they have faced is less rainfall in the area has direct impact on low production and high inflation rate of vegetables.

### Suggestions

Latur Municipal Corporation must arrange proper places for selling of vegetables to street vendors. They must also provide basic facilities to street vendors such as drinking water. Latur Municipal Corporation must conduct various awareness programmes for street vendors regarding schemes of government available for them. This will help them to possess knowledge about the schemes launched by central government and state government.

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## INNOVATIVE EDUCATION MODELS FOR THE NEXT GENERATION

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### **Abstract:**

The definition of 'education' can be said as 'Imparting knowledge 'to perform new things or to find better ways to act according to the changed conditions. Learning is always difficult because it relates to the learner's mental and physical attention and alertness. Education can be imparted in any way depending on the subject to be learned, and the learner's capabilities. The technical aspects are generally learned through the practical environment, mostly by trial-and-error methods. The non-technical aspects of education are always challenging as they require maximum mental alertness and involvement. The effectiveness of the 'education' is generally ascertained by the volume of 'success' that a learner achieved within a stipulated time. If the volume of learners is huge, then it can be judged that 'such' an education system is more effective. The traditional system of 'rote learning' which is generally based on many numbers of repetitions of the concepts, is used to impart basic knowledge of the subject, but it can be used entirely. To understand the complexities and technical aspects of every subject, many innovative education models are required, to get the mental alertness of the learners. This research paper will highlight the History of the Indian Education system and explain its transformation of new methods of education by comparing the benefits and limitations

**Keywords:** Learning, Knowledge, Trial-And-Error Method, Involvement, Rote Learning

### **Introduction**

The 'Indian method of Education' has a great history where, earlier the students at the early age of 5 years, were sent to the 'Guru-Ashrams.' From there, the students learn knowledge by serving their 'Gurus for a span of 12 to 15 years. The Guru Ashrams teach all sorts of education mostly through the 'rote-learning method'. Guru Rabindranath tried to implement a new method of education in which students get knowledge under the trees, free from narrow buildings. To improve the education standards in India after the Independence, both the State and Central Governments have been administering the Indian Education system with special 'Ministries'. Under these 'ministries', various commissions are appointed such as

- 'The Radhakrishnan Commission' is the first education commission constituted in 1948-1949, which recommended to improve teaching standards, by adopting appropriate curriculums.
- Acharya Narendra Debe Committee constituted in 1952, which advised a common school system, improvement of teachers' education, importance of vocational education, need for early child education, and the necessity of women's education in India
- The Mudaliar Commission constituted in 1952 suggested the merger of School education with the +2 and higher education.
- The Kothari Commission constituted in 1964-1966 recommended free and compulsory education for the children age from 6 to 14
- The National Policy on Education of 1986 emphasises the removal of un-equalities and equalise education opportunities for all

All the above-said committees generally focussed on imparting education to all the citizens of India but did not suggest effective methods of imparting education in the most qualitative and productive ways. The mere getting an educational degree does not help students to acquire basic skills for their own growth and development and also the 'Nation' wealth creation.

### **Objective Of The Research Paper**

The Primary Objective of this present Research Paper is to identify and analyse the various methods of innovative educational models and their pros and cons which are effective for the next generation of students.

## Research Methodology

To attain the above-mentioned objective, the present research paper is based on the ‘Secondary Data’ of various scholars' thoughts which are published in different magazines, newspapers and internet portals. The above information will guide this research paper in analysing the in-depth aspects of the topic of “Innovating Educational Models for the Next Generation

## Review Of Literature:

1. Mr Palanivel Kuppusamy and Mr Suresh Joseph K of the Department of Computer Science, Pondicherry University, Puducherry, in their article on ‘A Deep Learning Model to Next-Generation Education Analytics, published in ‘ADALYA JOURNAL’ (ISSN NO:1301-2746) of Research Gate, explained different algorithms of smart learning and deep learnings. These models have good possibilities for adopting smart education methods. Effective ways of imparting education are based on the data and learning management systems can provide quantitative data by way of reports.
2. P.S. Aithal and P. Shubhrarjyotsna Aithal of Srinivas College, Pandeshwar, Mangalore in their article on ‘An Innovative Education Model to Realize Ideal Education System’ Published in International Journal of Scientific Research and Management (IJSRM), Volume 3, Issue 3, identified an Ideal Education System with some characteristics as Input and Output conditions. They argued an Ideal Education System has to be identified and classified. They found the online Mobile Education model has most of the Ideal Education System Characteristics.
3. D.Kalyani, and K Rajasekaran of the Department of Educational Planning and Administration of Tamilnadu Chennai in their research paper titled “Innovative Teaching and Learning” Published in the Journal of Applied and Advanced Research, 2018: 3 (Suppl.1), observed that ‘the biggest challenge to any teacher's face is capturing the attention of the learner, to put their ideas of the concepts, and they provided some of the innovative ideas to help the teachers to their classes more interesting. They argued that teachers should adopt new methods of technology in the classroom to make their efforts more meaningful.
4. Varsha M. Pathak and Sweta G. Phegade of KCES’s Institute of Management and Research, Jalgon, expressed their views in their article titled ‘An Innovative Digital School Model for Primary Education in Rural Area’ as when every aspect of human life digitalized in know-a-days, the teacher also upgrades their skills in imparting education in the most efficient and innovative methodologies with the help of ICT tools.

## Discussion:

The hardest part of human living is educating themselves to understand and access things. In the earlier days, most of the education learning was made through ‘trial and error methods with lots of costs and also time-consuming. As learning of many things is tough and complicated, there is need for effective education methods are required. The need and necessity for innovative learning is less required, especially for traditional education. The innovative Education Model does not mean the total usage of technology, and the usage of technology is the only way to impart effective education. Many times, the learners may not get the required result even after using various pedagogical methods entirely with the Information and Communication Tools. Hence, the usage of ICT tools is considered one of among many of ‘innovative education models’

## The Objective Of Adapting Various Innovative Educational Models Is:

1. To attain creativity which helps in a clear understanding of the subject
2. The one which helps in critical thinking and enhances problem-solving skills
3. Helps the individual self-directed and self-regulated
4. Helps to meet the learner's needs and necessities
5. Encourage personal and professional development.

Innovative education approaches are more effective in keeping pace with the changing environment. Some of them are Problem-based learning, Case-based instruction, experiential learning, project-based learning, inquiry-based

learning, practical works, digital and e-learning, online learning, flipped classroom, blended learning, and Field-based learning. The features of the models are

#### **1. FLIPPED CLASSROOM**

The flipped classroom way of imparting education is extremely opposite to traditional teaching methods. In this method, the students are experienced with components of what they have to learn, later in the classroom, the students get to understand the concept by way of discussions with their teachers and peers. The method enhances personalized learning, and full engagement of the students, but this method requires total preparedness from students as well as teachers.

#### **2. BLENDED LEARNING**

This method combines both traditional techniques and the usage of modern methods. In this method, the concepts are explained in the classroom along with the digital resources. Most of the education is delivered through online modes. This method requires sufficient access to technology along with sufficient training for the teachers.

#### **3. PROJECT-BASED LEARNING**

In the project-based learning method, the students learn while working on a defined 'project' for a stipulated period. The students will acquire knowledge equally to the real-world application. As this method, enhances experiential learning, a deeper understanding of the concepts and students will have to play a primary role in learning, at the same time this method of learning is time-consuming, and requires total teacher attentiveness.

#### **4. GAME-BASED LEARNING**

In game-based learning, the learning elements along with the rules and regulations are incorporated in the 'game'. The students will obtain the knowledge while playing the game. In this method, the student engages totally and interacts with peers in learning new concepts. This method is quite motivating and provides instant feedback from the learners. To create appropriate games, this method demands lots of time, money and compatible technology.

#### **5. COLLABORATIVE LEARNING:**

In this method of learning the students will learn the knowledge in groups for a common goal. In this method, difficult topics can be learned by providing complex tasks and asking the group to solve them. In this method, the student will learn education with sufficient communication skills. Active participation, increased responsibility, and problem-solving techniques qualities were also acquired in this method. The difficult parts in implementing this method are identified as unequal participation for the learner in the group, and time-consuming.

#### **6. PERSONALISED LEARNING**

This method is based on the learner's needs and abilities, and this method helps the learners to learn at their own pace by identifying the learner's strengths and weaknesses. This method demands 'individual attention' and is based on learners' competencies, because of this quality the learning outcomes are achieved easily. However, this method demands more resources, data protection, and judging of individual capabilities is required.

#### **7. INQUIRY-BASED LEARNING**

This method examines the learning interests of the students. The students have to ask questions on what to learn and are encouraged to investigate the solution by providing direction to the teacher. In this method, the teacher is merely a facilitator and enables to connect with real-world problems. By adopting this method, the curiosity of the learners can be encouraged. This method provides a deeper understanding of the concepts. Time-taking, appropriate teacher training, and readiness of the students are the requirements of this method.

#### **8. PROBLEM-BASED LEARNING**

The key features of problem-based learning methods are student-centred, help in connecting with real-time world problems, facilitate teamwork and help learn different subjects. This method also helps the learner to get deeper knowledge of the subject requires increased engagement of the student and enables to make collaborations. Time-consuming, abundant teacher training in the subject, and judging the qualities of the students are some of the difficulties in adopting this method of education.

## 9. EXPERIENTIAL LEARNING

This is the method, where the subject can be imparted to the students by way of learning by doing. It is based on the real-world experiences. It considers the benefits of the application of problem-solving methods, demands active participation, helps in personalized learning, improves critical thinking, and finally students with the experiences they had this method may lead to their personal growth. Hence, adopting this method demands more resources, and safety concerns while receiving practical learning and time consuming. The best examples of this method are fieldwork, simulations, internships and project-based learning.

## 10. PRACTICAL WORKS

This method of imparting knowledge is similar to the experiential learning method. In this method, students actively participate in the learning process and gain knowledge by performing the assigned tasks. In this method of learning real-world issues are addressed. With this method immediate feedback on the performances of instructors. This method provides the benefits of providing problem-solving skills, appropriate application of principles, and keeping the students motivated and interested. In adopting this method abundant resources, and experienced trainers are required. Apprenticeship method of coaching is the best example of this method.

## 11. CASE-BASED LEARNING

In this method of learning certain hypotheses are formed and learnings are made in testing these hypotheses. This method tests the application of theory and principles to practical or current situations. This method allows the learners to make critical thinking and improves decision-making skills. This method is widely used in social sciences. Under this method 'discussion and debates' are made to come to certain conclusions. The role of the instructor is very crucial to guide the learners. As this method of learning requires a lot of time, and unable to decide on the appropriate assessment methods.

## 12. FILED-BASED LEARNING

This method stresses experiential learning by allowing the students to apply theory-based principles to actual field environments. This method of imparting education is closer to real-world situations. This method provides a 'hands-on experience to the learners and the reliability of application of principles to the practical situations. This method helps the learners enhance their understanding of real-time problems, improves problem-solving skills and helps to understand the nature of various subjects. This method also requires lots of resources and assessment difficulties. Community Service Projects are the best examples of 'filed-based learning'.

## Conclusion:

The objective of adopting various educational methods is, to provide the requisite knowledge to the learners, and help the learners to apply to real-time problems and get solved. The traditional methods of providing education help to get degrees as qualifications but do not provide any sort of knowledge in solving real-time problems. There are many new educational models which are scientifically tested and proven appropriate which not only help in gaining physical and mental engagement of the learner but also help them in getting the skills to deal in real-world situations. It is also concluded that different situations require different education models, there is no unique educational model which can be used for all purposes.

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# A DECADE OF GROWTH: ANALYZING THE TRENDS IN WIND ENERGY GENERATION IN INDIA (2014-2023)

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## Introduction

Energy is a critical input for all sectors of a country's economy. Whether in agriculture, industry, transportation, commerce, or domestic use, every aspect of the economy depends on a steady supply of energy. In recent years, energy security has become a strategic priority, vital for ensuring comprehensive economic development. The nation's economic growth and its global competitiveness are closely tied to the availability of reliable, high-quality power at competitive prices. Therefore, it is crucial to prioritize the development of electrical power availability as a foundation for the growth of other sectors.

India's wind energy sector, driven by a robust indigenous wind power industry, has demonstrated consistent growth over the years. This expansion has fostered a resilient ecosystem with strong project operation capabilities and a substantial manufacturing capacity of approximately 12,000 MW annually. As of December 31, 2022, India holds the position of the fourth largest wind power producer globally, with a total installed capacity of 41.93 GW, including 1.85 GW added in 2022 alone. From January to November 2022, wind power projects generated 66.05 billion units of electricity, underscoring the sector's significant contribution to the nation's renewable energy landscape.

## Objective

- 1) To analyze the year-wise trends in wind energy generation in India from 2014 to 2023.
- 2) To evaluate the growth and challenges of wind energy in India and its role in the renewable energy mix.
- 3) To identify key factors influencing wind energy production in India.

## Research Methodology

This study is based on the descriptive and analytical method of research design. This study is based on secondary method of data collection. This data is collected from Ministry Of New And Renewable Energy official website, and annual reports

The research is based on quantitative data

## Limitation Of The Study

- 1) This study is restricted to specific period 2014-2023.
- 2) The outcomes of this study report are based on the individual understanding of the researcher.
- 3) The researcher has used only secondary data.

## Literature Review

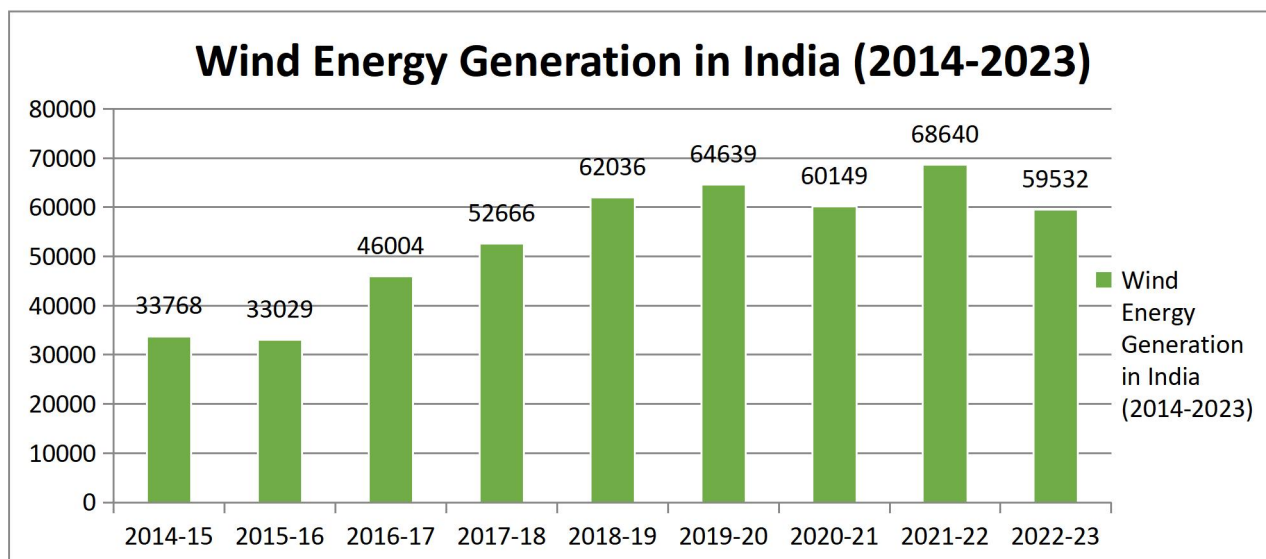
1. A study on economics of renewable energy in gujarat with a special reference to wind power. Thesis of Shah Vaishali.
2. An article entitled "Global meet calls for more use of wind power" described that power system stability is enhanced through the connection of windenergy, as it provides efficient clean energy production consistently and reliably throughout the year.
3. Ramakrishnan (2005) affirmed in his article that among the nonconventional sources of power, wind seems to be the best bet, and is the biggest success story in renewable energy. Though still insignificant contributors to

the overall power demand, wind may soon become the fastest growing source in India, as is happening elsewhere in the world.

### Assess the trends and changes in the number of Wind Energy Generation in India (2014-2023)

Sr.No	Year	Generation (Million Units)
1	2014-15	33768
2	2015-16	33029
3	2016-17	46004
4	2017-18	52666
5	2018-19	62036
6	2019-20	64639
7	2020-21	60149
8	2021-22	68640
9	2022-23( upto December,2022)	59532

Source: Annual Report 2022-2023 Ministry of New and Renewable Energy



The year-wise electricity generation from wind energy in India shows a general upward trend with some fluctuations:

- 1) 2014-15 to 2015-16: A slight decline from 33,768 MU to 33,029 MU.
- 2) 2016-17 to 2018-19: Significant growth from 46,004 MU to 62,036 MU due to capacity additions and favorable conditions.
- 3) 2019-20: Peak generation at 64,639 MU, followed by a drop to 60,149 MU in 2020-21, likely due to the pandemic.
- 4) 2021-22: Record high at 68,640 MU, reflecting recovery and growth.

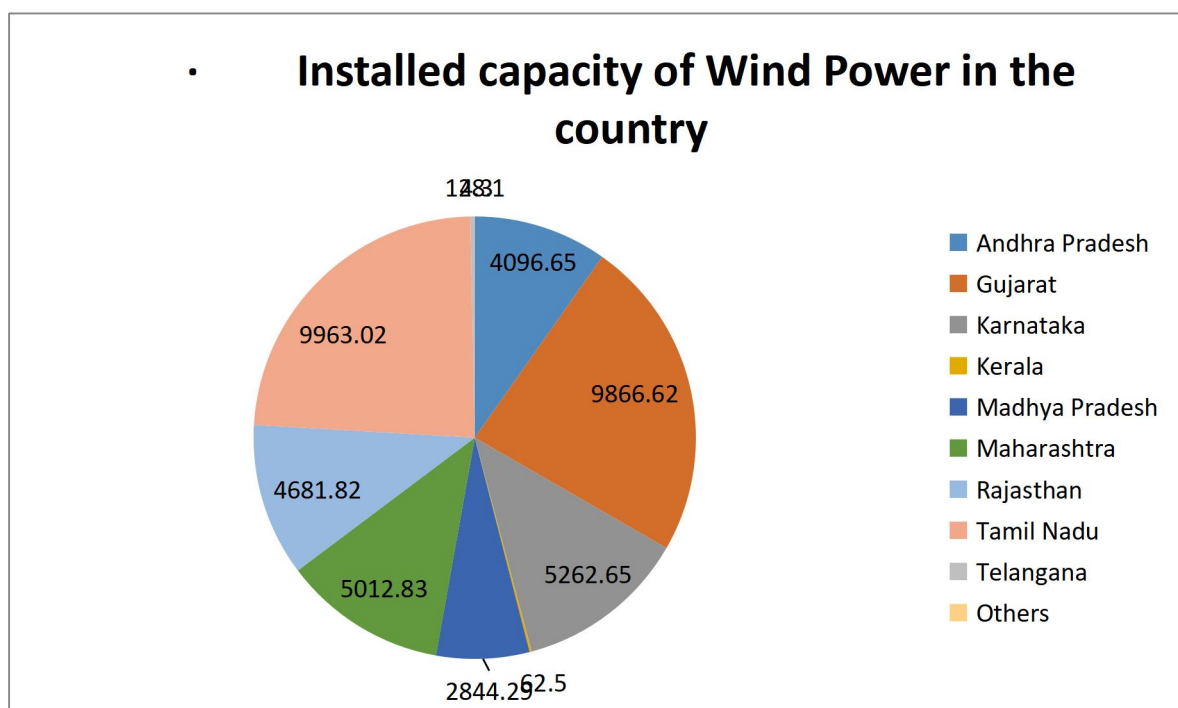
- 5) 2022-23 (up to December 2022): 59,532 MU, indicating stable generation but awaiting final figures for the full year.

### Installed capacity of Wind Power in the country

The installed capacity of grid-interactive wind power in the country as on 31.12.2022 is 41.93 GW and state wise installed capacity (in MW) is shown in

Sr.No	State	Installed capacity (MW)
1	Andhra Pradesh	4096.65
2	Gujarat	9866.62
3	Karnataka	5262.65
4	Kerala	62.50
5	Madhya Pradesh	2844.29
6	Maharashtra	5012.83
7	Rajasthan	4681.82
8	Tamil Nadu	9963.02
9	Telangana	128.10
10	Others	4.30
	Total (MW)	41929.78

Source: Annual Report 2022-2023 Ministry of New and Renewable Energy



## Technology development and manufacturing base for Wind Power

The Wind Turbine Generator technology has evolved and state-of-the-art technologies are available in the country for the manufacture of wind turbines. Around 75% localization has been achieved with strong domestic manufacturing capacity for wind energy turbines and its components in the country. All the major global players in this field have their presence in the country and over 35 different models of wind turbines are being manufactured by more than 14 different companies, through (i) joint ventures under licensed production (ii) subsidiaries of foreign companies, and (iii) Indian companies with their own technology. The unit size of the largest machine has gone up to 3.60 MW. Wind turbines and components manufactured in India are also being exported to various countries. The current annual production capacity of wind turbines in the country is about 12,000 MW.

### Conclusion:

The analysis of wind energy generation in India over the past decade reveals a significant and positive trajectory in the sector's growth. From 2014 to 2023, wind energy generation has shown an overall upward trend, marked by periods of substantial growth and some fluctuations. The sector has demonstrated resilience and adaptability, particularly evident in the recovery and peak generation levels achieved in 2021-22, despite the challenges posed by the COVID-19 pandemic. India's wind energy sector has evolved substantially, supported by a robust domestic manufacturing base and technological advancements. With an installed capacity of 41.93 GW as of December 31, 2022, India stands as the fourth-largest wind power producer globally. The sector's growth is bolstered by approximately 12,000 MW of annual manufacturing capacity, a high level of localization (around 75%), and a diverse range of wind turbine models produced by various companies.

The year-wise data from 2014 to 2023 illustrates the sector's dynamic nature, with significant increases in generation capacity and output driven by technological progress and capacity expansions. The state-wise installed capacity data highlights regional disparities and strengths, with key states like Tamil Nadu, Gujarat, and Karnataka leading in installed capacity. Despite the progress, challenges remain, including the need for continuous technological innovation, infrastructure development, and addressing regional imbalances. To optimize wind energy production further, it is essential to focus on enhancing grid integration, improving policy frameworks, and fostering research and development. In conclusion, India's wind energy sector has made remarkable strides over the past decade, contributing significantly to the country's renewable energy landscape. Continued investment in technology, infrastructure, and policy support will be crucial for sustaining this growth and achieving future energy goals.

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## BALANCING RURAL AND URBAN DEVELOPMENT FOR EQUITABLE GROWTH

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### Abstract:-

Balancing rural and urban development is important for economic growth. Shared property and equitable growth. It can help by working towards it was access to service economics opportunities and standards of living. It can also reduce migration pressures to cities balance regional development and enhance national cohesion.

Indeed achieving balanced the growth between rural and urban regions is vital for economic development. By prioritizing initiative to uplift real estate and infrastructure occurs the nation in the upcoming budget the government can ensure balance the growth and development across the nation.

### Introduction:-

Urban areas rely on rural areas to meet their demand for food, waterwood, raw materials etc., which are basically product of a rural ecosystem services. Nevertheless, the benefit that rural areas game from urban development search as market from input s employment opportunities etc. Rural and urban areas are economically social and environmentally interlinked spaces. Ecosystem services are among the major areas of rural-urban linkages in which their interdependence is highly manifested. This paper is based on the systematic review of diversified theoretical and empirical literature. Promote water supply sewage treatment and solid waste management project and service for 100 large cities through bankable projects.PM Awas Yojana urban 2.0 needs of 1 crore urban poor and middle class families will be a dress with an investment of rupees 10 lakh crore.

Rural development is the cornerstone of sustainable development and the SDGs recognise its importance. The truth however is different in that rural issues tend to take a back seat compared to urban urban in equality in development and living conditions is bleeding to migration as a survival strategy for the rural population. Regional inequality is worsening and the need of the hour please don't find criteria and measures to overcome this look at development Concerning hard and soft infrastructure is needed to achieve the goal of equitable growth for there long neglected and vulnerable section of the population and to strike balance between rural and urban living condition.

### Objective:-

1. To study aims of analytical and descriptive study about urban and Rural development balance.
2. To study aims of last 5 years balancing urban and rural development.

### Research methodology

All the data which is collected based on secondary. Data collected from e-books e- journals and references books.

### Limitations:-

1. The study is limited to urban and rural areas.
2. The study is limited to equitable growth.
3. The study is limited to last 5 year analysis.

### Review of related literature:-

1. Apart from the, Mohan (1998),konwar P,(1999),Grewal(2000),sarma, G.K.(2000), natrajan R and babban company (2003) Anjali Mehta (1977) and few other also worked on the issue related to school education.

2. Sen(2002) has also stressed on the study of health equity in terms of gender. she viewed health through a gender lens and had commented that greater privatization had late to gender and class equity i.e. patience with higher economics status specially means general seek better medical facilities as compared to their counterparts and people of low economic class.
3. Chyi ethics al (2018 ) investigated the mediating moderating effects of pursue the trace on the connection between stress and burnout.
4. M.VASAN: In the earth customer satisfaction towards internet banking of ICICI Bank limited and examination level of satisfaction toward internet banking studies also to observe and analysis the using of internet banking reasons for chosen internet banking. Satisfaction of the customers towards internet banking and to find out the problems encountered by the customers. In his study clearly indicated that the majority of the users internal banking where in the high level of satisfaction (Vasan, 2015)

### **Some ways of balance rural and urban \*development**

1. Invest in public service and infrastructure:-

Investing in rural areas can help with agricultural development and non farm sectors.

2. Co-ordinate and cooperative:-

Success full rural development requires cooperative among all stake holders and functioning institution.

3. Invest in capacity development:-

Investing in capacity development at the individual's organisational and social level can help lead to balanced urban and rural development.

4. Implement policies and strategies:-implementing policies and strategies can lead to an integrated approach to balanced urban-rural development development.

### **The 2024-2025 union Budget:-**

The 2024-25 union budget of India has a located rupees 82,577 crore for the Ministry of Housing and urban Affairs, which is a 19% increase on the 2023-24 received estimates. The budget also includes rupees 2.66 black crore for rural development. Here are some of the initiatives for urban and rural development in the 2024 -25 budgets.

### **Urban development:-**

The budget includes initiative s to address housing need water supply sewage treatment and solid waste management.

#### **P.M.Awas Yojana:-**

The budget will construct 3 crore additional house under the PM Awas Yojana including PM Awas Yojna urban 2.0 which will provide housing for 1 crore urban poor and middle class families. The budget will provide rs 10 lakh crore for this initiative along with rs 2.2 lakh crore in Central assistance over the next 5 years. The scheme will also offer interest subsidies to help people get affordable loans.

\*Water supply sewage treatment and solid waste management. The budget will promote projection services for these areas in 100 large Cities.

#### **\*Rural development:-**

The budget includes institutes to improve the quality of life in rural areas throw better connectivity healthcare education and economic opportunities.



**\*Agriculture research:-**

The budget will fund research in both the public and private sectors to improve productivity and climate resilience. It will also introduce 109 new varieties of crops that are high yielding and climate -resilient.

**\*Natural farming:-**

The budget will introduce natural farming practices to one crore farmers over the next 2 years and provide certificate and branding support.

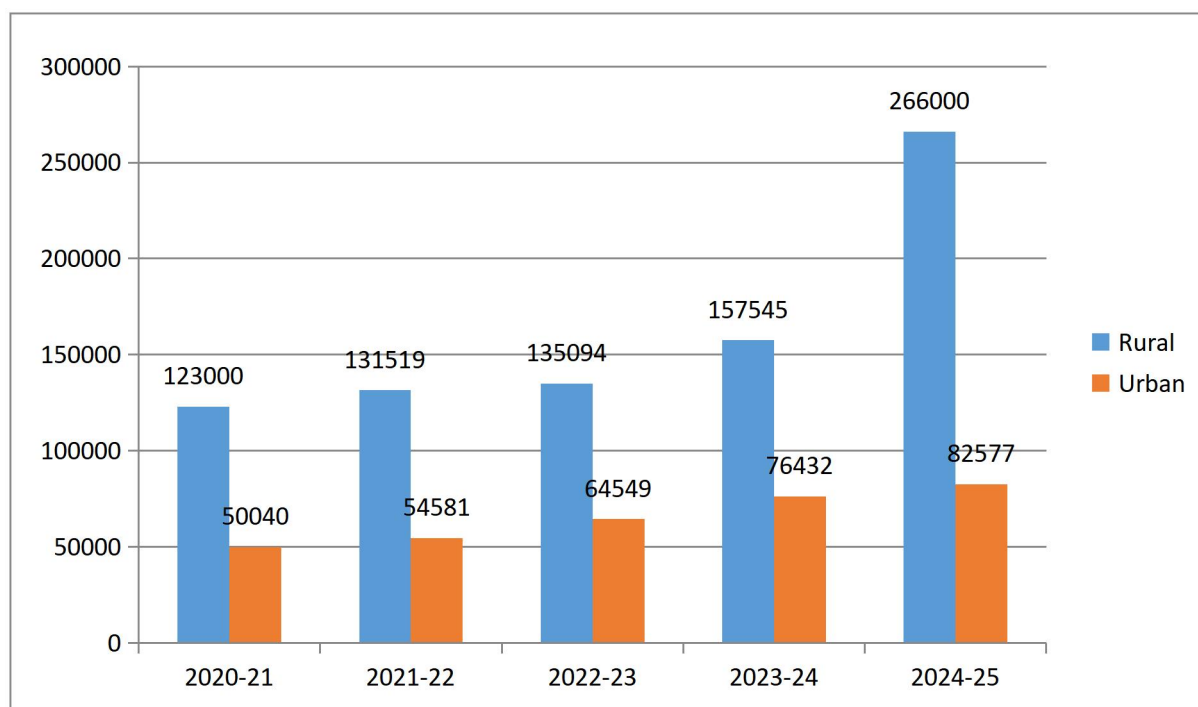
**\*Pulses and oilseeds:-**

The budget will strength products storage and marketing to help India become self-sufficient in pulses and oilseeds.

**\*Cooperative sector:-**

The budget will aim to systematically develop the cooperative sector and Fast track. The growth of the rural economy to create more employment opportunities.

**• Union Budget Allocation of Last Five Years**



**Conclusion:-**

Balancing rural and urban development is a complex process that requires policy makers to consider the needs of both areas and how they can support each other. Some say that balanced growth between rural and urban regions is important for economic development and that a reciprocal relationship based on equality is needed.

A large proportion of the population lives in rural areas and their development and contributions are extremely beneficial to Nations building efforts. Agriculture and related activity must be developed in order to provide gain full employment in rural areas and improve overall food production. While sustainable rural development has received increased attention in India. The focus on a rural oriented development policies tea has for to go and he is a work in progress.

The Indian budget 2024-25 through its emphasis on inclusive development and social justice, e presents. a comprehensive and ambitious approach to urban development and improve infrastructure. By targeting various

marginalized groups and addressing religion imbalances the government aims to credit more equitable and prosperous society.

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## “STUDY OF CHANGING TRENDS IN INVESTMENT AVENUES WITH REFERENCE TO PALGHAR DISTRICT OF MAHARASHTRA”

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### Abstract

This study aims at providing an understanding of the changing trends in investment avenues in Maharashtra especially in Palghar district. Researcher tries to find out whether really modern youth is having inclination towards new investment avenues or still traditional avenues of investment are at preference? Indian economy having a great history as savings economy now needs to develop a smart demography with the assistance of digital platforms.

India today presents a great investment destination to any international business due to its large economy, strong consumer market and abundance of young talented human resource. According to CEICDATA.COM Indian Investment accounted for 28.6 % of its Nominal GDP in Dec 2021, compared with a ratio of 33.6 % in the previous quarter. The data reached an all-time high of 41.2 % in Sep 2011 and a record low of 20.7 % in Jun 2020. These facts lead thoughts of increasing the percentage of savings and convert them into productive investments which will multiply savings much more times than that of traditional avenues. Investment trends in India showcase tremendous potential as India is one of the world's fastest-growing economies.

### Rational behind the study:

Being a country of a rich heritage it's our duty and concern to create awareness about modern avenues of investment amongst our own people, Maharashtra is a very developing state, but still people are scared of investment in stock market. Earlier incidences of frauds are imprinted so harshly on the minds of people. Its high time to create awareness amongst our investors positive sides of stock market for uplifting their savings and investments one step forward. So researchers tried an attempt on same line to find real situation in study area.

### Limitations of the study:

For the study all areas & products of stock market & are not covered due to time constraints. Primary as well as Secondary data is used by researcher for study, so limitations of primary & secondary data are applicable.

### Objectives of the research:

1. To study changing trends & attitude of Maharashtra investors towards traditional & modern avenues of investment.
2. To study state wise investors of share market in India.
3. To place suggestions for investors before investing in stock market.

### Hypothesis of the research:

H<sub>01</sub>: There is no change in attitude of investors towards investments.

H<sub>02</sub>: There is no contribution of Maharashtra State population in growth of stock market.

H<sub>03</sub>: There is no relation between gender & fear of investment in stock market

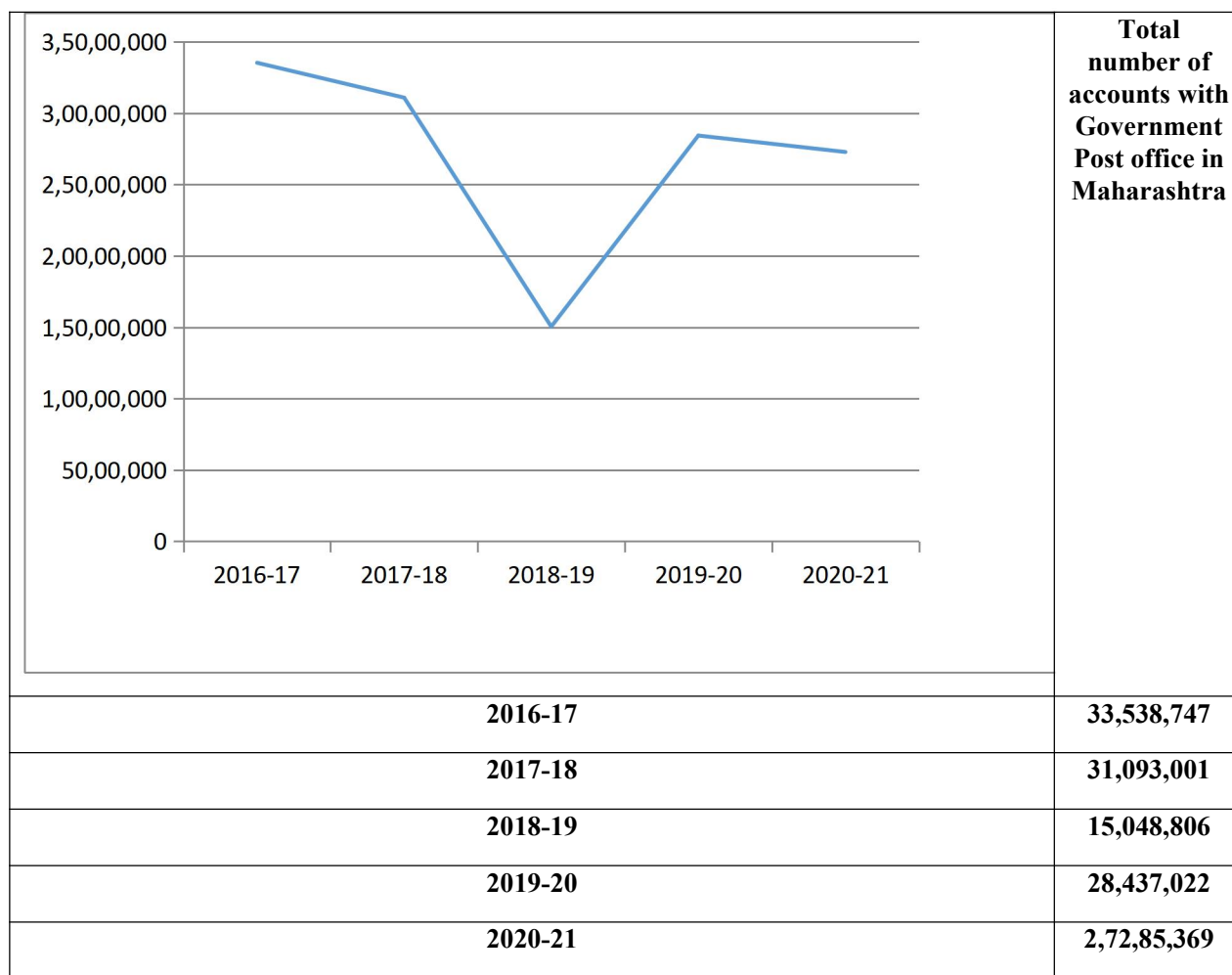
### Methodology:

Researcher used Primary & Secondary data for study. Sample responses of 32 post graduate male & female from different streams and age groups are taken from palghar district by judgement probability method for study. For analysis of data Charts graphs & chi square test is used. For secondary data news papers & websites are accessed.

### Changing trends & attitude of investors

In Maharashtra total 13000 post office are available as per the data of Postal Circles Annual report 2019-20 of which 8762 are post office with full range of services that is second in its rank followed by Uttar Pradesh with 17672 total post offices. Maharashtra is having 45 Panchayat Sanchar Sewa Kendra & 133 Franchise Outlets, having total 54 MukhyaDakGhar 3 Rural & 51 Urban (Source: Planning Section Annual report 2019-20 pg no.148/160).

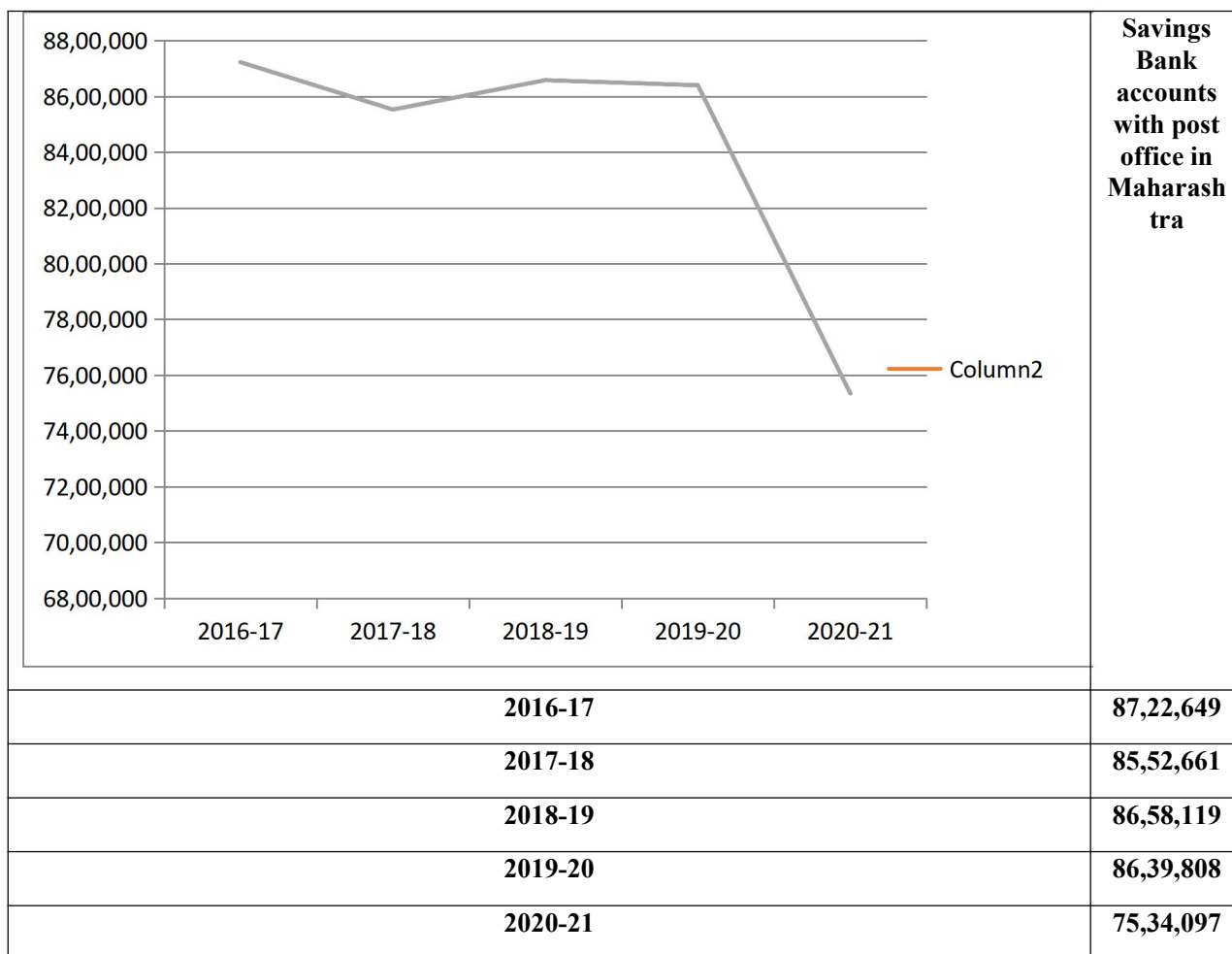
**Table & graph.1**



(Source:Annual reports of govt. post office dept.)

The above table & graph 1 clearly depicts change in number of accounts in post office of Maharashtra. It is declined in comparison with year 2016-17 to year 2020-21 by 6,253,378 accounts. It means investors interest in having accounts with post office is gradually declining since 2016-17 To 2020-21.

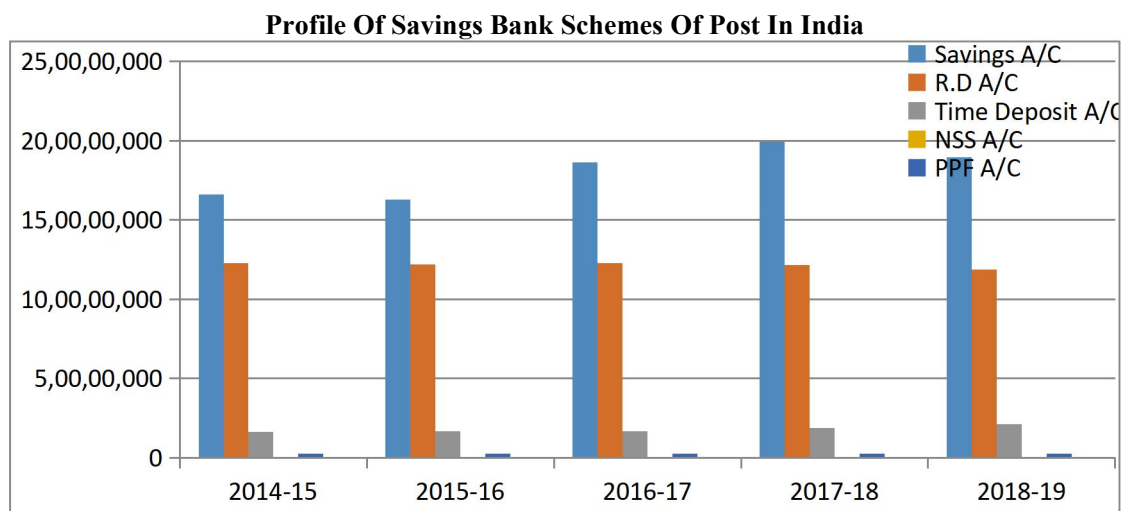
**Table & graph.2**



(Source: Annual reports of government post office year 2016-17 to 2020-21)

The above table & graph 2 is a proof to show that savings bank accounts of post office in Maharashtra is having a decline in number from 87,22,649 to 75,34,097 from year 2016-17 to 2020-21.

**Table & graph.3**



(in number of accounts)

	Savings Accounts	RD Accounts	Time Deposit Accounts	NSS Accounts (87 & 92)	PPF Accounts	Fixed Deposits
2014-15	16,59,68,186	12,29,38,104	1,62,38,903	3,20,174	24,24,984	516
2015-16	16,30,30,431	12,21,89,563	1,67,49,513	3,05,001	24,56,944	681
2016-17	18,62,00,705	12,27,03,759	1,66,69,195	2,85,125	24,65,767	388
2017-18	19,94,51,789	12,14,03,354	1,87,42,881	2,72,867	25,30,301	402
2018-19	18,98,00,753	11,87,52,677	2,12,50,457	2,71,331	26,04,498	390

(Source: Annual reports of government post office year 2016-17 to 2020-21)

The above table & Figure 3 shows that number of accounts in RD, NSS Accounts & Fixed Deposits Accounts in post office declined right from year 2014-15 to 2018-19.

**Table 4. Data collected personally through questionnaire**

Gender	Having Fear of Share market investment	Not having Fear of Share market investment	Total
Male	09	07	16
Female	12	04	16
Total	21	11	32

(Source: Primary data collected by researcher)

For above data Chi square test is used for testing hypothesis at 5 % level of significance.

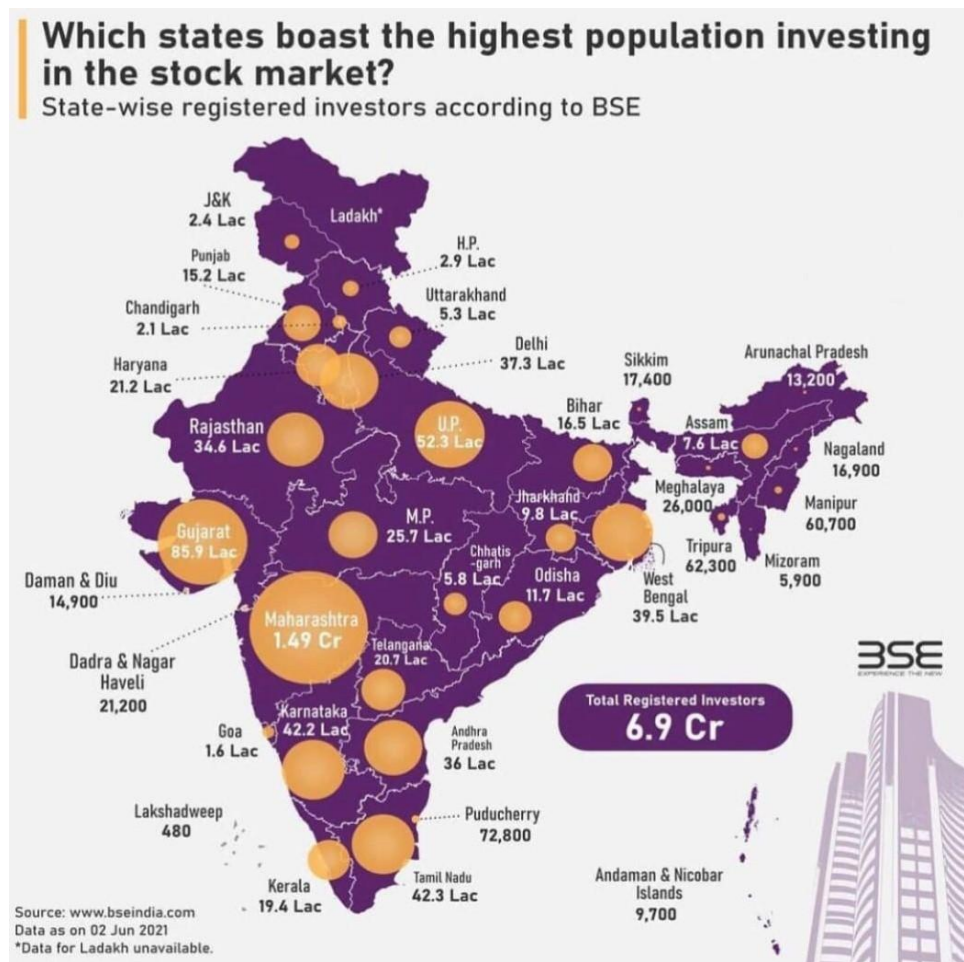
Gender	Having fear to invest in Share market	Don't have fear to invest in Share Market	Marginal Row Totals
male	9 (10.5) [0.21]	7 (5.5) [0.41]	16
female	12 (10.5) [0.21]	4 (5.5) [0.41]	16
Marginal Column Totals	21	11	32 (Grand Total)

The chi-square statistic is 1.2468. The  $p$ -value is .264173. Not significant at  $p < .05$ .

Therefore the null hypothesis  $H_0$  is rejected & relation exists between gender & fear of investment in share market.



Figure 5



(Source: [www.bseindia.com](http://www.bseindia.com))

The above figure 5 shows that in year 2021 Maharashtra states investors are highest in number at 1.49 crore which is 21.59% of total registered investors in India.

#### Findings:

1. Investors interest in having accounts with post office is gradually declining since 2016-17 To 2020-21 by 6,253,378 accounts.
2. Savings bank accounts of post office in Maharashtra is having a decline in number from 87,22,649 to 75,34,097 from year 2016-17 to 2020-21.
3. Number of accounts in RD , NSS Accounts & Fixed Deposits Accounts in post office declined right from year 2014-15 to 2018-19.
4. Relationship exists between gender & fear of investment in share market.
5. Maharashtra states investors are highest in number at 1.49 crore which is 21.59% of total registered investors in India.
6. State wise in Maharashtra number of investors are on first rank, second is Gujarat, third is U.P, fourth T.N, fifth is Karnataka.

7. There is slow but gradual changing trend in attitude of Maharashtra investors towards traditional & modern avenues of investment as preference for Fixed deposits & R.D is slowly declining.

### Conclusion:

The study concludes on the result that there is a slow & gradual change in attitude of investors towards investments. No doubt Investors are having fear of investment in share market but still, slowly they are stepping forward towards share market leads Maharashtra on top of registered share market investors. Female also trying to come forward in this sector for investment. Inclination towards traditional avenues of investment like Post office R.D, Fixed Deposits & NSS accounts is diminishing gradually, investors are shifting towards equity & mutual fund investments slowly. Table & graph 2 is a proof to show that savings bank accounts of post office in Maharashtra is having a decline in number from 87,22,649 to 75,34,097 from year 2016-17 to 2020-21, & Figure 5 is a proof that number of investors in share market are increasing. Table & graph 2 is a proof to show that savings bank accounts of post office in Maharashtra is having a decline in number from 87,22,649 to 75,34,097 from year 2016-17 to 2020-21. Also table & Figure 3 shows that number of accounts in RD, NSS Accounts & Fixed Deposits Accounts in post office declined right from year 2014-15 to 2018-19. According to data released by Bombay Stock Exchange [www.bseindia.com](http://www.bseindia.com) on 2<sup>nd</sup> June 2021 total registered investors of stock market are 6.9 crore of which in Maharashtra total registered investors are 1.49 crore. In Palghar district if people will turn towards investment in this line would earn better on their savings considering the present inflation.

### Suggestions:

After talking with stock brokers it is suggested that an investor must have knowledge about world & Indian economy. If do not have much knowledge of current market then it is always best to invest in share market through Mutual funds. Educated Investors are expected to understand the factor of inflation over a period of time of investment, before blindly spoofing all funds into Traditional avenues of investment. Always maintain a diversified portfolio of investment with a combination of Traditional as well as modern investment avenues. Also it is must to understand the difference between share trader & share investor because the share trading is a risky task but share investment is not a risk considering time period of investment.

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# THE ROLE OF RENEWABLE ENERGY AND GREEN TECHNOLOGIES IN ACHIEVING SUSTAINABLE DEVELOPMENT

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## Abstract

The rapid depletion of fossil fuel resources and the growing concerns over climate change have catalyzed a global shift towards renewable energy and green technologies. This paper explores the current landscape of renewable energy, analyzing its various forms, including solar, wind, hydroelectric, and biomass energy. Additionally, it delves into the innovations in green technologies that support the sustainable production, storage, and distribution of energy. The paper highlights the environmental, economic, and social benefits of these technologies, while also addressing the challenges and barriers to their widespread adoption. Finally, it provides policy recommendations to enhance the global transition towards a sustainable energy future. It is essential that an appropriate model of green building be used by the administrators and professionals. The global problems of environmental degradation have forced the society to rethink about the way of development and evolve the concept of sustainable development. Indeed, the new environmentally friendly technologies are fundamental to attain sustainable development. Various green initiatives are being taken to maintain and improve the quality of environment that might flourish on the new resource efficient and sustainable thinking society of the future. There is hope for international action in the application of science and technology to environmental concerns a hope born of the urgency of current environmental problems, of the new-found recognition of mutual environmental interests and of the fundamental role of science and technology in general and green technologies, in particular, in assessing and responding to environmental threats. This study aims to investigate the prima facie conjecture that there are problems to an evaluation on development of green building and energy efficiency in developed country with regard to the effectiveness of green building. These problems may explain why the main players are less responsive to the implementation and practice of the green building and energy efficiency. The data were collected via a questionnaire survey and analysed with the help of SPSS. This study recommends the need for selection of green technologies, some of the feasible green technologies and challenges and alternatives in sustainable development. In conclusion, it can be inferred that the green building is still at its infancy stage and as such serious attention is needed among the players in the development of green building and energy efficiency in developed countries.

## Keywords

Renewable energy, Human development, Health, Education, Income, Sustainable development goals (SGDs), Green Technology, Energy Efficiency, Sustainable Development, Environment Protection

## Introduction

The 21st century is marked by a growing awareness of the finite nature of fossil fuel resources and the environmental degradation caused by their use. As the world grapples with climate change, pollution, and resource scarcity, renewable energy and green technologies have emerged as key components in the pursuit of sustainable development. This paper aims to provide a comprehensive overview of renewable energy sources and the technological innovations that support their deployment, with a focus on their role in mitigating climate change and promoting environmental sustainability. Green energy offers a promising alternative to traditional energy sources. The fact that renewable energy accounts for only a modest proportion in meeting the world's (commercial) energy demand means that there is a missing link in their potential and their implementation - the barriers in their implementation. These barriers (either financial or non-financial) need to be identified and addressed in order to design innovative policy approaches for the international and domestic financing of renewable energy technologies. Renewable energy can play an important role in helping to meet basic energy needs through the use of modern technologies Green technologies. The Rio Declaration adopted at United Nations conference on Environment and Development in Rio emphasizes entitlement of healthy and productive human life in harmony with integration of environment protection in the development process. The Earth Summit at Rio adopted Agenda 21 on June 14, 1992,

which proposes various actions to be implemented from now and into the 21st century to accelerate sustainable development.

## Literature review

The theoretical link between renewable energy and human development is centred on the idea that using renewable energy can drive economic growth, subsequently benefiting human development. The utilization of non-renewable energy for economic development is seen as a primary contributor to CO<sub>2</sub> emissions, resulting in environmental degradation and, consequently, adverse effects on human health and income. Meanwhile, the influence of renewable energy consumption on income directly impacts individuals' purchasing power and their ability to access higher-quality healthcare and education services, further promoting human well-being.

Most previous studies about the relationship between renewable energy consumption and human development focus on a causal relationship, or unidirectional causality from renewable energy consumption or unidirectional causality from human development and or no causality. However, these investigations have not yet evaluated the degree of influence of renewable energy technologies on human development to answer whether adopting green energy may promote human development. There is no denying that renewable energy has advantages over non-renewable energy because this renewable source is more environmentally friendly but expensive and has more potential risks in the implementation progress. Basically, utilizing renewable energy technologies initially may require some costs and be inherently risky, implying that resources may be diverted to the development of renewable energy infrastructure. Unlike non-renewable energy, renewable energy involves high initial capital costs, and the monetary benefits from such projects may take time to materialize.

## Objectives

1. Examine the Types of Renewable Energy
2. Assess the Role of Green Technologies
3. Evaluate the Environmental, Economic, and Social Benefits
4. Identify Challenges and Barriers

## Types of Renewable Energy

Renewable energy refers to energy derived from natural processes that are replenished at a faster rate than they are consumed. The main types of renewable energy include:

**Solar Energy** Solar energy harnesses the power of the sun to generate electricity through photovoltaic (PV) cells or solar thermal systems. It is one of the most abundant energy sources, with the potential to meet global energy demands multiple times over. Advances in solar technology, such as the development of more efficient PV cells and solar energy storage systems, have significantly increased its viability as a major energy source.



**Wind Energy** Wind energy is generated by converting the kinetic energy of wind into electricity using wind turbines. Wind power has grown rapidly in recent years due to technological improvements and cost reductions. Offshore wind farms, in particular, hold great promise due to the stronger and more consistent wind patterns over the ocean.

**Hydroelectric Energy** Hydroelectric energy is produced by harnessing the energy of flowing water, typically through the construction of dams. It is one of the oldest and most established forms of renewable energy, providing a reliable and consistent energy source. However, large-scale hydroelectric projects can have significant environmental and social impacts, such as habitat disruption and displacement of communities.

**Biomass Energy** Biomass energy is derived from organic materials, such as plant matter and animal waste. It can be converted into electricity, heat, or biofuels through various processes, including combustion, gasification, and anaerobic digestion. Biomass is considered carbon-neutral, as the carbon dioxide released during combustion is offset by the carbon dioxide absorbed during the growth of the biomass feedstock.

**Geothermal Energy** Geothermal energy exploits the heat from within the Earth to generate electricity or provide direct heating. It is a reliable and consistent energy source, with a minimal environmental footprint. However, its deployment is limited to regions with significant geothermal activity.

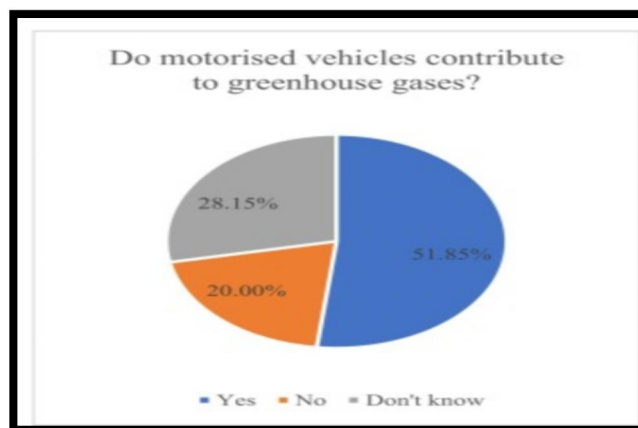
### Green Technologies Supporting Renewable Energy

Green technologies encompass a wide range of innovations designed to reduce environmental impacts, improve energy efficiency, and support the transition to renewable energy. Key green technologies include:

**Energy Storage Systems** Energy storage technologies, such as batteries, pumped hydro, and thermal storage, are essential for balancing supply and demand in renewable energy systems. They enable the storage of excess energy generated during periods of high production, which can be used during periods of low production or high demand.

**Smart Grids** Smart grids are advanced electrical grids that use digital technology to monitor and manage the flow of electricity more efficiently. They enable better integration of renewable energy sources into the grid, reduce transmission losses, and improve the reliability of the electricity supply.

**Electric Vehicles (EVs)** Electric vehicles, powered by renewable energy, represent a major step forward in reducing greenhouse gas emissions from the transportation sector. Advances in battery technology and charging infrastructure have made EVs increasingly practical and affordable.



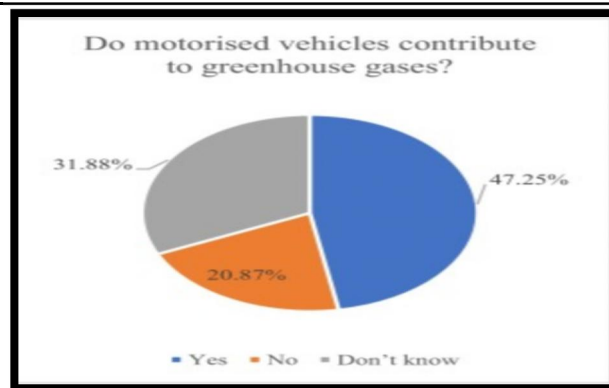
**Energy-efficient Building Technologies** Green building technologies, such as energy-efficient lighting, heating, ventilation, and air conditioning (HVAC) systems, and sustainable building materials, reduce energy consumption and minimize environmental impacts. These technologies are crucial for creating sustainable urban environments.

### Environmental, Economic, and Social Benefits

The adoption of renewable energy and green technologies offers numerous benefits:

**Environmental Benefits** Renewable energy sources produce little to no greenhouse gas emissions, reducing the impact on climate change. They also minimize air and water pollution, preserve natural habitats, and reduce dependence on finite resources.





**Economic Benefits** The renewable energy sector is a major driver of economic growth, creating jobs in manufacturing, installation, and maintenance. It also reduces energy costs in the long run and enhances energy security by reducing reliance on imported fuels.

**Social Benefits** Access to clean and affordable energy improves quality of life, particularly in developing regions. Renewable energy projects can also empower local communities by providing decentralized energy solutions, reducing energy poverty, and fostering sustainable development.

### Challenges and Barriers

Despite the numerous benefits, there are several challenges to the widespread adoption of renewable energy and green technologies:

**Technological and Infrastructure Challenges** The intermittent nature of some renewable energy sources, such as solar and wind, poses challenges for grid stability and energy storage. Additionally, the existing energy infrastructure is often outdated and not equipped to handle the integration of large-scale renewable energy projects.

**Economic and Financial Barriers** The initial capital costs of renewable energy projects and green technologies can be high, making them less accessible to low-income regions. There is also a lack of financial incentives and support for renewable energy investments in some countries.

**Policy and Regulatory Barriers** Inconsistent and unclear policies, regulatory frameworks, and subsidies for fossil fuels can hinder the growth of renewable energy. Moreover, the lack of international cooperation and standardization can create barriers to the global adoption of these technologies.

### Policy Recommendations

To accelerate the transition to renewable energy and green technologies, the following policy recommendations are proposed:

**Supportive Policies and Incentives** Governments should implement policies and incentives that promote the adoption of renewable energy and green technologies. These may include tax credits, subsidies, and grants for renewable energy projects, as well as carbon pricing mechanisms to internalize the environmental costs of fossil fuels.

**Investment in Research and Development** Increased investment in research and development is crucial for advancing renewable energy technologies and overcoming existing challenges. Public-private partnerships can play a key role in driving innovation and scaling up new technologies.

**Infrastructure Modernization** Modernizing the energy infrastructure to accommodate renewable energy sources is essential. This includes upgrading the grid, expanding energy storage capacity, and developing smart grid technologies.



**International Cooperation** Global collaboration is necessary to share best practices, harmonize standards, and promote the transfer of technology and knowledge between countries. International agreements and frameworks can also facilitate the global transition to sustainable energy.

## Conclusion

Renewable energy and green technologies are indispensable in the pursuit of sustainable development. While significant progress has been made, much work remains to be done to overcome the challenges and barriers to their widespread adoption. By implementing supportive policies, investing in innovation, and fostering international cooperation, the world can transition to a sustainable energy future that benefits the environment, the economy, and society as a whole. Since carbon is an essential component of the earth's ecosystem, a sustainable equilibrium is required, which is not the case right now. Between the earth's surface and the ozone layer, carbon atoms have become stuck in the atmosphere. This is insulating and warming our planet, resulting in catastrophic effects: sea levels are rising, extreme weather is getting worse, and glaciers are melting. Climate change can only be stopped by using renewable energy. The engineering college in Coimbatore offers courses on energy and power systems for both undergraduate and graduate students. A degree in renewable energy will prepare you for employment in that profession and other related fields. Renewable energy is a linchpin in the pursuit of the Sustainable Development Goals (SDGs). Its potential to provide clean and affordable energy, mitigate climate change, drive economic growth, create jobs, and enhance the quality of life for urban and rural communities alike makes it an indispensable tool for achieving the global vision of sustainable development. However, realising this potential requires concerted efforts from governments, businesses, and individuals to invest in renewable energy infrastructure, research, and technology development. By harnessing the power of renewable energy, the world can move closer to a future where the SDGs are not just aspirational but achievable.

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# EMPOWERING WOMEN: THE ROLE OF WORK-LIFE BALANCE IN GENDER EQUALITY AND CAREER GROWTH: A STUDY OF LATUR CITY

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## Abstract:

The study explores how women's professional advancement and gender equality are advanced by work-life balance. Due to established gender roles and workplace environments that may not fully meet their requirements, women in the workforce still confront considerable obstacles in juggling their personal and professional obligations. This study emphasizes how career development opportunities, supportive workplace regulations, and flexible work schedules affect women's empowerment and representation in leadership roles. Through an analysis of the experiences of one hundred female professionals from various industries, the research offers valuable insights on the efficacy of work-life balance tactics in promoting gender parity in career advancement. The major conclusions indicate that although remote work and flexible work schedules are highly regarded, there is still disagreement over how beneficial they are for advancing leadership positions. The research concludes by recommending enhanced workplace policies that offer flexibility, family support, and professional development as critical to achieving gender equality in the workplace.

**Keywords:** Gender Equality, Work-Life Balance, Women Empowerment, Career Advancement, Workplace Policies, Flexible Work Arrangements

## Introduction

Women's empowerment and sexual equality are important topics in the dynamics of the modern workforce. Despite the progress in the participation of education and employees, women face permanent and systematic obstacles that hinder their ability to obstruct their career progress and be fully aware of their professional capacity. In these challenges, there is a matter of work-life balance. The organization and policies are trying to understand how to understand the structures and social expectations in the workplace and how social expectations affect women's professional ways. The balance of the demands of work and personal life presents unique difficulties for women, many of whom are still mainly responsible for household responsibilities. This unequal burden is often forced on women to make progress in their careers and complete family responsibilities, resulting in a reduction in leadership positions, a reduction in the progress of careers, and, in some cases, a quick exit from the career. The effect of these pressures is most intense in the environment where the hard hours of work, humble policies, and traditional workplace culture fail to accommodate the double roles in which many women are expected to navigate. Furthermore, a lack of effective work-life balance does not only affect women's personal careers but also maintains wide sexual inequality at work. In some cases of women's constant representation and sexual wages in the role of senior leadership, there is a reflection of how the structured work structures are obstructed in women's capacity to compete with men. This inequality has increased due to social criteria that look at women as primary caregivers, increase inequality in commercial opportunities, and strengthen the sex partitions of labour. It's research on female empowerment and Tries to investigate the role of life-life balance to promote sex equality. By analyzing the intersection of working-life balance policies and intersections of women's career results, this study has the goal of determining how to create a more flexible and supportive work environment. In the end, this research will search for the probability of work-life balance activities to fill the greater inclusion and fair workplace for all of the research and to fill the sexual gap in careers.

## Review Of Literature

**Mansi Vashisht (Jun. 2024):** The study examines the difficulties women encounter in striking a work-life balance, highlighting tactics like flexible scheduling and organizational assistance to enable women for growth in the workplace and gender equality. Through a thorough assessment of the literature and a qualitative investigation of

women's experiences across a range of industries, this study identifies ways for enhancing work-life balance for women. These tactics consist of adaptable work schedules, organizational assistance, and individual time management methods. The results highlight the importance of individual resiliency, workplace culture modifications, and regulatory reforms in fostering an equitable work environment. The research aims to contribute to the current conversation on gender equality and work-life integration by tackling these challenges.

**Mellina Stephen, M.J (Jun 2024) :** Work-life balance is challenging for women employees in the IT sector due to traditional gender roles, social expectations, and care giving responsibilities. It affects their physical and mental health, job satisfaction, career advancement, and family well-being. The impact of work-life balance on women employee is a crucial issue that has gained significant attention recent years. Due to societal expectations, gender salary disparity, and traditional gender roles, it can be more difficult for female employees to achieve work-life balance. The expectation placed on women to provide greater care than that placed on males might make it challenging to strike a balance between personal and professional obligations. It may have an impact on their performance and job happiness, as well as their capacity to grow professionally. It may also have an effect on their families and society at large. Women may find it more difficult to strike a work-life balance, especially if they have children or are responsible for caring for others. As a result, some women may prioritize their personal lives over career advancement, leading to slower career progression compared to the male counterparts. Balancing professional and personal responsibilities can lead to increase stress and burnout for women. Sample was selected from 135 women employees in IT Sector.

**Mowpia (July 2023) :**The writers of this article examine the potential and difficulties that women have in establishing work-life balance in the current global context and develop a thorough model for doing so while taking into account the particular problems that working women confront. Every working woman must prioritize maintaining a work-life balance. Women have risen to prominence in a variety of sectors, including business, politics, and government service, thanks to education. The purpose of this study is to investigate the opportunities and obstacles that women encounter in the current global context when attempting to achieve work-life balance. Women now have unprecedented opportunity to achieve great success in their professional endeavours thanks to the resurgence of women's empowerment. But having a family can frequently weigh people down and prevent them from giving their jobs their all.

**Mr. Piyush, Ranjan Sahay, Dr. Shashank Bhushan Lall (Mar. 2024):** This study investigates the relationship between women in the workforce and their ability to perform well at work as well as their chances of getting promoted. It gathers information on work-life balance practices and experiences of women in a variety of occupations by applying a mixed-methods methodology. The analysis focuses on explaining how effectively juggling work and personal life affects job effectiveness and the likelihood of career advancement. Important conclusions highlight how important it is to address work-life balance issues in order to promote gender parity in the workplace and support women's professional advancement. Essentially, the study emphasizes how important work-life balance is for determining women's career paths and promotes prioritizing it in corporate policies and procedures.

### Objectives

1. To examine how work-life balance contributes to women's empowerment and promotes gender equality in career growth.
2. To analyze the impact of work-life balance policies on women's career advancement.
3. To investigate the influence of flexible working arrangements on achieving gender parity in leadership roles.

### Research Methodology

This study uses a descriptive survey design to explore the impact of work-life balance policies on women's career growth and gender equality. A **purposive sample of 100 female professionals, aged 25-50**, from various sectors of **Latur City** was selected. Data were collected via an **online Google Forms survey**, which included closed-ended and Likert scale questions. **Descriptive statistics** were used to analyze the effectiveness of work-life balance

strategies and suggested policy improvements. Ethical considerations, such as confidentiality and voluntary participation, were strictly followed.

## Data Analysis And Interpretation

### 1. What factors affect your work-life balance?

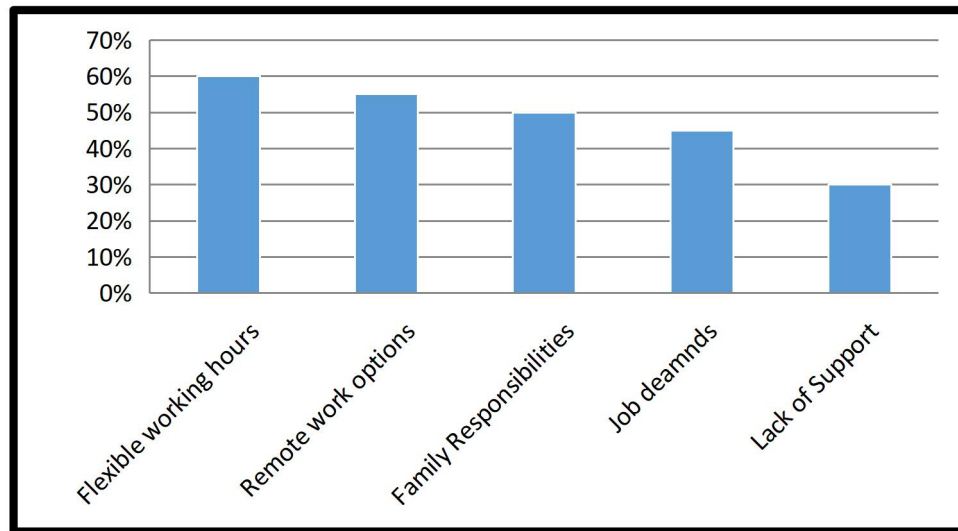


Figure 1.

Flexible working hours and remote work options are the most commonly cited factors affecting work-life balance, suggesting these are critical areas for policy focus.

### 2. How does work-life balance contribute to your empowerment at work?

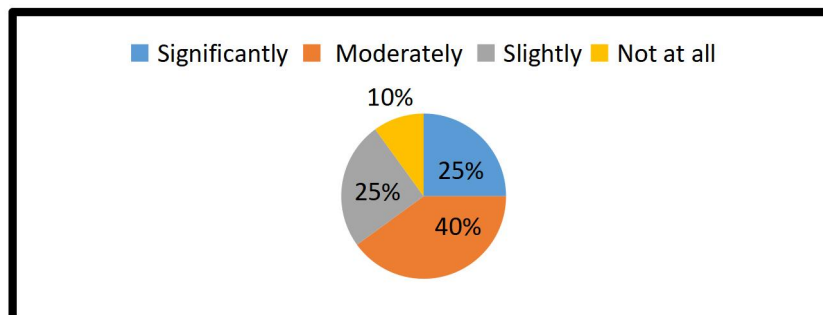


Figure 2.

The survey results indicate that work-life balance contributes to women's empowerment at work to varying degrees. 25% of respondents feel it contributes significantly, while 40% believe it has a moderate impact, showing that the majority see work-life balance as an important factor in their empowerment. Another 25% report that it contributes only slightly, and 10% feel it has no impact at all.

### 3. Does your organization support work-life balance for women?

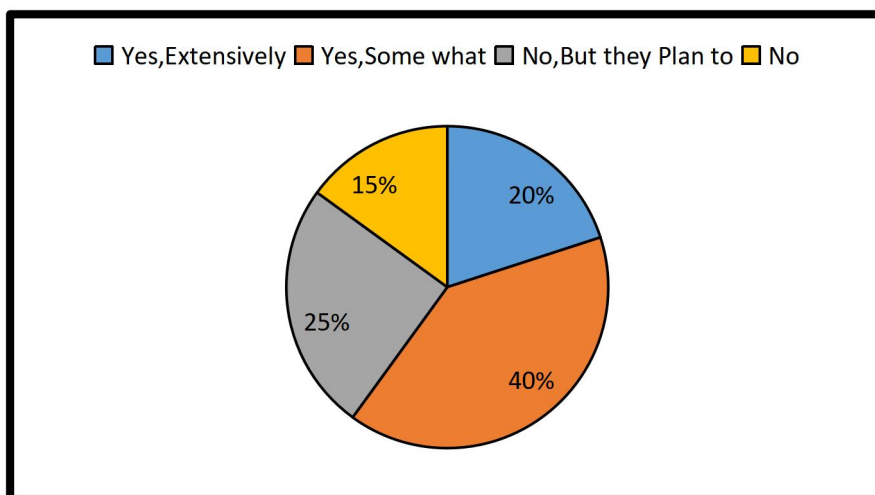


Figure 3.

The survey reveals that organizational support for work-life balance for women varies. 20% of respondents feel their organization supports work-life balance extensively, while 40% believe it is supported somewhat, indicating that many workplaces offer some level of assistance. 25% of respondents state their organization currently does not offer support but plans to, suggesting a growing awareness of the need for such policies. However, 15% report that their organization offers no support, reflecting a gap in addressing work-life balance for women in some workplaces. Many organizations are somewhat supportive but there is a noticeable percentage that either lacks support or is in the process of planning improvements. This suggests a need for greater and more immediate support for work-life balance initiatives.

### 4. Do work-life balance policies promote equal career opportunities for women?

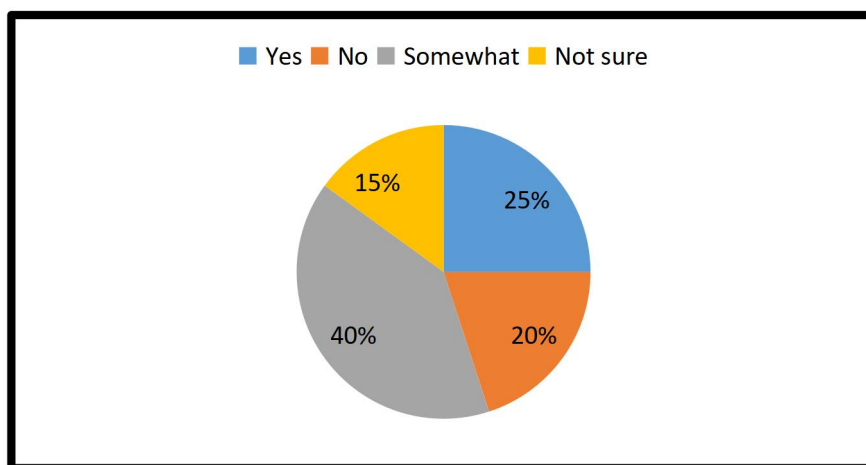


Figure 4.

Survey results show mixed views on the impact of work-life balance policies on equal career opportunities for women. While 25% of respondents believe these policies promote equality, 20% disagree. The largest group, 40%, thinks the policies help somewhat, but are not entirely effective, and 15% remain unsure. This indicates that while work-life balance policies have some positive effects, they may not fully address gender inequality in the workplace.

### 5. Do flexible working arrangements influence women's representation in leadership roles?

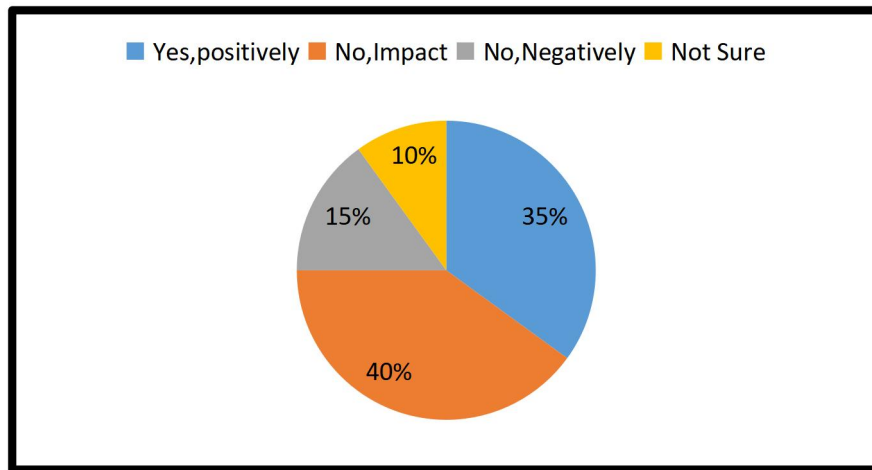


Figure 5.

Survey results show differing views on whether flexible working arrangements influence women's representation in leadership roles. While 35% believe these arrangements have a positive impact, 40% think they have no effect on leadership advancement. 15% feel they actually have a negative impact, possibly limiting opportunities, while 10% are unsure. This suggests that while flexible work may help some women advance, its overall effectiveness in promoting leadership roles is still debated.

### 6. How effective are flexible working arrangements in promoting gender parity in leadership

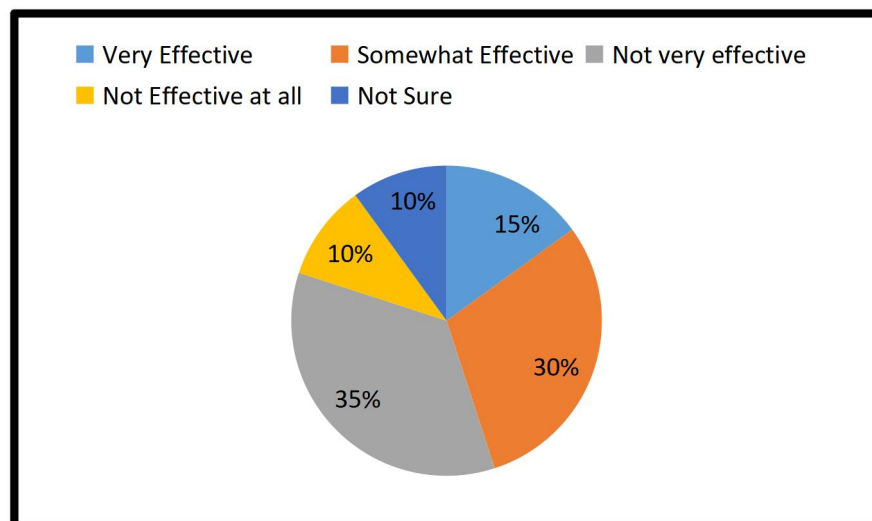


Figure 6.

The survey results indicate that flexible working arrangements are perceived with mixed effectiveness in promoting gender parity in leadership. 15% of respondents view them as very effective, while 30% find them somewhat effective, suggesting that nearly half of participants see some value in these policies. However, 35% believe they are not very effective, and 10% think they are not effective at all, indicating scepticism about their role in achieving gender parity. Additionally, 10% are unsure, reflecting uncertainty or lack of clarity on the impact of flexible working arrangements in advancing leadership equality.



### 7. What work-life balance strategies are most effective for women's career growth?

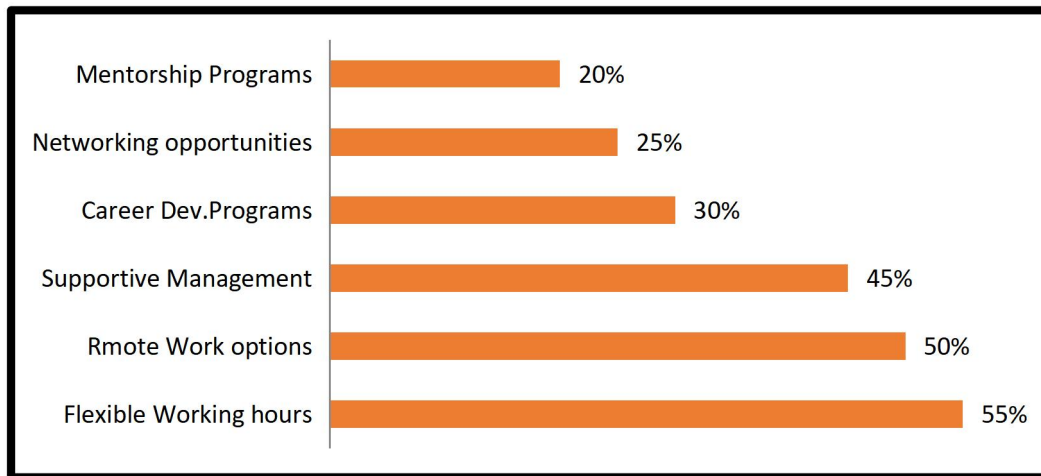


Figure 7.

The survey results highlight that flexible working hours (55%) and remote work options (50%) are seen as the most effective work-life balance strategies for promoting women's career growth. This reflects a strong preference for flexibility in managing both professional and personal responsibilities. Supportive management follows with 45%, indicating that leadership's backing is crucial for women's advancement. Career development programs (30%) and networking opportunities (25%) are also valued but are considered secondary to flexibility and support. Mentorship programs (20%) are perceived as less impactful, though still important in fostering career growth.

### 8. What improvements would you suggest for work-life balance policies?

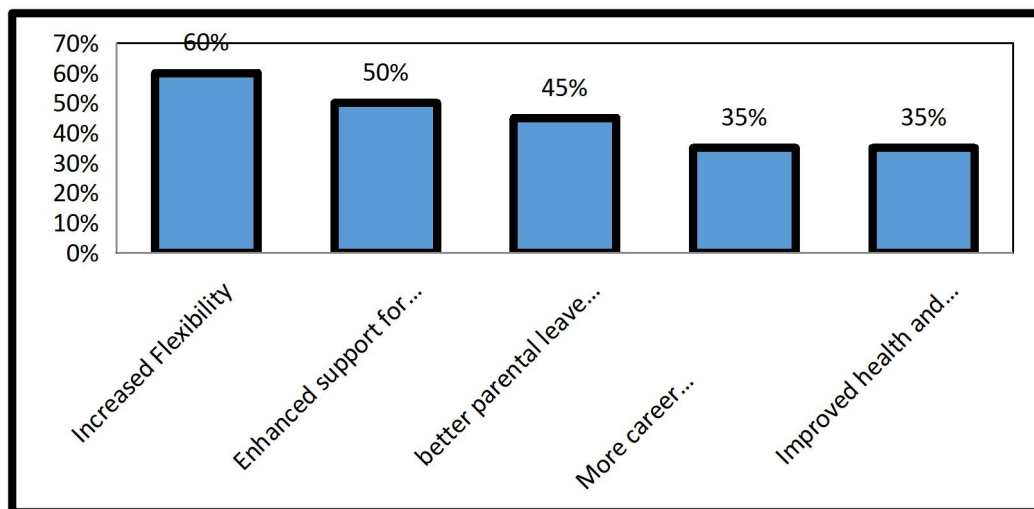


Figure 8.

The survey results suggest that increased flexibility (60%) is the most desired improvement for work-life balance policies, indicating a strong demand for greater autonomy in work schedules. Enhanced support for childcare (50%) and better parental leave options (45%) also rank highly, reflecting the importance of family support in achieving work-life balance. Additionally, more career development resources (35%) and improved health and wellness programs (35%) are seen as valuable, indicating that personal growth and well-being are key factors in improving work-life balance for women.

## Findings

1. **Work-Life Balance:** Most respondents rate their work-life balance as fair (4-6), with only 20% rating it as excellent. This indicates that many employees may be struggling to achieve an ideal balance. Key factors affecting work-life balance include flexible working hours, remote work options, and family responsibilities. These factors are critical areas influencing employees' ability to maintain balance.
2. **Impact on Empowerment and Career Advancement:** A significant portion of respondents believes that work-life balance contributes moderately to their empowerment at work. While 30% feel that work-life balance positively impacts career advancement, a substantial percentage (35%) see no impact, suggesting that balance alone is not sufficient for career growth. The effectiveness of current work-life balance policies in promoting equal career opportunities is viewed as mixed, with a considerable number finding them only somewhat effective.
3. **Flexible Working Arrangements and Leadership:** Opinions are divided on whether flexible working arrangements influence women's representation in leadership roles. While some see a positive impact, many feel there is no effect or are unsure. The effectiveness of flexible arrangements in promoting gender parity in leadership is also seen as limited, with many respondents rating them as not very effective or not effective at all.
4. **Suggestions for Improvement:** Respondents highly value flexible working hours and remote work options, indicating these are crucial for supporting work-life balance and career growth.
5. **Extended parental leave and enhanced childcare support** are frequently suggested improvements, reflecting a need for more comprehensive family support policies. Career development resources and better parental leave options are also commonly recommended for policy enhancement.

## Suggestions

1. **Boost Flexibility:** Across all industries, make remote work and flexible working hours more readily available. This could enhance career progression and address important aspects that affect work-life balance, especially for mid-level workers.
2. **To enhance family support,** consider extending parental leave and making improvements to on-site child care centers. Work-life balance can be significantly impacted by family duties, which can be lessened by taking these steps.
3. **Enhance professional Development:** Create and grow mentorship and networking programs as well as professional development initiatives. This can lessen the misconception that work-life balance regulations don't have a big influence on job advancement.
4. **Assess the Effectiveness of the Policy:** Make sure that work-life balance policies effectively advance gender parity in leadership by conducting frequent assessments of the policies. Employee input can be gathered to improve these rules and aid facilitates career growth.
5. **Strengthen Organizational Support** - Companies should make a concerted effort to offer comprehensive assistance for work-life balance, which includes fostering a positive work environment and communicating clearly about the tools that are available.

## Conclusion

The study reveals that work-life balance plays a significant role in women's empowerment and career growth, though its impact varies across individuals and industries. Flexible working hours and remote work options are key factors in promoting work-life balance, yet their effectiveness in advancing women into leadership roles is uncertain. While some respondents view work-life balance policies as contributing to gender equality, others find them only moderately effective. The findings emphasize the need for organizations to boost flexibility, enhance family support, and prioritize professional development initiatives to close the gender gap in leadership and career advancement. Overall, creating a supportive and inclusive workplace environment is essential to empower women and foster gender parity.

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# UNLOCKING FINANCIAL INCLUSION: A STUDY OF FINANCIAL TECHNOLOGY (FINTECH) INTEGRATION IN RURAL AREAS OF NANDED DISTRICT

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## Abstract

Financial technology (FinTech) has emerged as a transformative force in the global financial landscape, offering innovative solutions that have the potential to significantly enhance financial inclusion, particularly in rural areas. Despite the widespread adoption of FinTech in urban centers, rural regions, which are often underserved by traditional financial institutions, present unique challenges and opportunities for FinTech integration. This study investigates the role of FinTech in unlocking financial inclusion in rural areas, focusing on the factors that influence adoption, the barriers that hinder integration, and the socio-economic impact on rural communities. Through a mixed-methods approach that includes case studies, surveys, and interviews, this research explores the current state of FinTech adoption in rural areas, examining both the technological and socio-cultural dynamics at play. The study identifies key drivers of FinTech adoption, such as digital literacy, infrastructure availability, and trust in digital financial services, while also highlighting significant barriers, including limited internet access, resistance to change, and regulatory challenges. The findings reveal that while FinTech has the potential to revolutionize financial services in rural areas, its success depends on a nuanced understanding of local contexts and the active involvement of various stakeholders, including governments, financial institutions, and technology providers. The study concludes by offering recommendations for enhancing FinTech adoption in rural areas, emphasizing the need for targeted interventions that address specific challenges faced by rural populations. This research contributes to the broader discourse on financial inclusion by providing insights into how FinTech can be effectively leveraged to improve the financial well-being of rural communities, ultimately paving the way for sustainable economic development in these regions.

**Keywords:** FinTech, Rural FinTech, Financial Inclusion, FinTech Adoption, FinTech Innovation.

## Introduction

In recent years, the rise of financial technology (FinTech) has revolutionized the financial sector, offering innovative solutions that promise to enhance financial inclusion, particularly in underbanked and underserved populations. While much attention has been given to the urban and semi-urban adoption of FinTech, the potential impact of these technologies in rural areas remains a critical yet underexplored domain. Rural regions, often characterized by limited access to traditional banking services, pose unique challenges and opportunities for FinTech integration. Financial inclusion is pivotal to the economic empowerment of individuals and communities, facilitating access to essential financial services such as savings, credit, insurance, and remittances. In rural areas, where the majority of the population often relies on informal financial systems, the integration of FinTech can bridge significant gaps, offering a pathway to improved economic stability and growth. However, the adoption of FinTech in these regions is not without its challenges, including digital literacy, infrastructural constraints, cultural barriers, and trust in digital financial services.

This study aims to explore the dynamics of FinTech adoption in rural areas, focusing on how these technologies can unlock financial inclusion for rural populations. By examining case studies, adoption rates, and the socio-economic impact of FinTech in various rural settings, this research seeks to identify the key drivers and barriers to successful FinTech integration. Furthermore, the study will offer insights into how policymakers, financial institutions, and technology providers can collaborate to enhance the accessibility and effectiveness of FinTech solutions in rural communities. The findings of this research are expected to contribute to the growing body of knowledge on FinTech and financial inclusion, providing a nuanced understanding of how technology can be leveraged to improve the financial well-being of rural populations. Ultimately, this study aims to highlight the

critical role of FinTech in creating a more inclusive financial ecosystem, paving the way for sustainable economic development in rural areas.

## Review of Literature

**The Evolution of Financial Technology (FinTech):** FinTech has transformed the global financial landscape by introducing innovative digital financial services, such as mobile banking, digital wallets, and peer-to-peer lending platforms, which have the potential to reach underserved populations (Gomber et al., 2017).

**Financial Inclusion and Its Importance:** Financial inclusion is defined as the availability and accessibility of financial services to all individuals, particularly those in underserved areas. It is a key driver of economic growth and poverty alleviation, providing individuals with opportunities to save, invest, and access credit (Demirgüç-Kunt et al., 2018).

**Challenges of Financial Inclusion in Rural Areas:** Rural areas often face significant barriers to financial inclusion, including limited access to traditional banking services, poor infrastructure, low levels of financial literacy, and high costs associated with providing financial services to remote areas (Aggarwal, 2020).

**The Role of FinTech in Enhancing Financial Inclusion:** FinTech has the potential to bridge the financial inclusion gap in rural areas by offering low-cost, accessible, and user-friendly financial products and services. Mobile money, digital credit, and blockchain technology are some examples of FinTech innovations that can cater to the needs of rural populations (Ozili, 2018).

**Mobile Money and Its Impact on Rural Financial Inclusion:** Mobile money services, such as M-Pesa in Kenya, have been instrumental in increasing financial inclusion in rural areas by enabling individuals to perform financial transactions using their mobile phones without needing a bank account (Suri, 2017).

**Barriers to FinTech Adoption in Rural Areas:** Despite the potential benefits, several barriers hinder the adoption of FinTech in rural areas. These include limited internet connectivity, low levels of digital literacy, cultural resistance to new technologies, and concerns about the security and privacy of digital transactions (Donovan, 2016).

**Digital Literacy and Its Influence on FinTech Adoption:** Digital literacy is a critical factor in the successful adoption of FinTech in rural areas. Studies have shown that individuals with higher levels of digital literacy are more likely to adopt and use digital financial services (Hilbert, 2016).

**Trust in Digital Financial Services:** Trust is a crucial determinant of FinTech adoption in rural areas. Rural populations often exhibit a high level of mistrust toward digital financial services due to fears of fraud, lack of understanding, and previous negative experiences with financial institutions (Ravi & Tyler, 2017).

**Regulatory Environment and FinTech Integration:** The regulatory environment plays a significant role in the integration of FinTech in rural areas. Supportive policies and regulations that promote innovation while ensuring consumer protection are essential for fostering FinTech adoption in these regions (Arner, Barberis, & Buckley, 2015).

**The Role of Government and Policy in Promoting FinTech Adoption:** Governments can play a pivotal role in promoting FinTech adoption in rural areas by implementing policies that support digital infrastructure development, enhance digital literacy, and provide incentives for FinTech companies to operate in underserved areas (Lauer & Lyman, 2015).

**Case Studies on Successful FinTech Integration in Rural Areas:** Several case studies highlight the successful integration of FinTech in rural areas. For instance, the adoption of mobile banking services in India has significantly increased financial inclusion among rural populations (Kumar, 2019).

**Impact of FinTech on Economic Development in Rural Areas:** The integration of FinTech in rural areas has the potential to spur economic development by enabling access to credit, facilitating savings and investments, and providing insurance services to protect against risks (Beck, Demirgüç-Kunt, & Levine, 2007).

## Statement of the Problem

Despite significant advancements in financial technology (FinTech) and its widespread adoption in urban areas, rural regions remain largely underserved and excluded from the benefits of these innovations. Financial inclusion, which is crucial for the economic empowerment and development of individuals and communities, is still a major challenge in rural areas due to various socio-economic, infrastructural, and technological barriers. Traditional banking services have often failed to penetrate rural areas effectively, leaving a large portion of the rural population without access to basic financial services such as savings accounts, credit, insurance, and remittance facilities. The introduction of FinTech presents a promising solution to bridge this gap, offering the potential to deliver financial services more efficiently, affordably, and inclusively. However, the adoption of FinTech in rural areas is not progressing at the desired pace, and its impact on financial inclusion remains limited. The problem lies in the complex interplay of factors that influence FinTech adoption in rural areas, including low levels of digital literacy, limited access to digital infrastructure, cultural resistance to change, and concerns about the security and reliability of digital financial services. Additionally, the lack of targeted policies and support from government and financial institutions further exacerbates the challenges faced by rural populations in accessing FinTech solutions. This study seeks to address the critical question: **\*\*How can FinTech be effectively integrated into rural areas to unlock financial inclusion and drive sustainable economic development?\*** The research aims to explore the barriers to FinTech adoption in rural areas, identify the key factors that can facilitate its integration, and assess the socio-economic impact of FinTech on rural communities. By investigating these issues, the study will provide valuable insights into the potential of FinTech to transform the financial landscape in rural areas and offer recommendations for enhancing financial inclusion in these regions.

## Objectives of the Study:

To assess the current state of financial inclusion in rural areas

To examine the adoption rates of FinTech solutions in rural areas.

To explore the role of digital literacy and trust in influencing FinTech adoption

## Research Methodology

In this research study employs a mixed-methods research approach, integrating both qualitative and quantitative methodologies to provide a comprehensive understanding of FinTech integration and its impact on financial inclusion in rural areas. The mixed-methods approach allows for a nuanced exploration of the research questions, combining the depth of qualitative insights with the breadth of quantitative data.

**Research Design:** The research design is structured to explore the dynamics of FinTech adoption in rural areas, focusing on both the factors that drive and hinder this process. Researcher has been study is divided into three phases: Phase 1: A literature review to establish the theoretical framework and identify key factors influencing FinTech adoption in rural areas. Phase 2: Quantitative analysis through surveys to gather data on the current state of FinTech adoption among rural populations. Phase 3: Researcher was used Qualitative analysis through interviews and focus group discussions to gain deeper insights into the experiences, perceptions, and challenges faced by rural users and stakeholders in FinTech integration.

**Data Collection:** Methods in this research paper researcher has been used both primary and secondary data

### Quantitative Data Collection

**Surveys:** Structured questionnaires was distributed to a representative sample of rural households and small businesses across selected rural areas. This survey was capture data on: demographics information (age, gender, income level, education, etc.), Access to and use of financial services, Awareness and usage of FinTech products (e.g., mobile banking, digital wallets, online lending), Barriers to FinTech adoption (e.g., lack of digital literacy, trust issues, infrastructure constraints), perceived benefits and challenges of using FinTech services

**Sampling:** A stratified random sampling technique has been employed to ensure the sample is representative of the diverse demographic and socio-economic characteristics of the rural population.



## Qualitative Data Collection

**Interviews:** Semi-structured interviews conducted with key stakeholders, including FinTech providers, local government officials, community leaders, and rural users of FinTech services. The interviews have explored: The motivations and expectations behind FinTech adoption, Perceptions of the effectiveness and impact of FinTech services, Challenges encountered during the adoption process, Suggestions for improving FinTech services and increasing adoption rates

**Data Analysis:** Quantitative Data Analysis Descriptive Statistics: Basic descriptive statistics (mean, median, mode, frequency distributions) will be used to summarize the survey data, providing an overview of FinTech usage patterns in rural areas.

## Findings and Results:

**Current State of Financial Inclusion in Rural Areas:** The study reveals that financial inclusion in rural areas remains significantly low, with a large proportion of the rural population lacking access to formal financial services. Survey data indicate that only 30% of respondents have a bank account, and even fewer have access to credit, insurance, or savings products. Traditional banking infrastructure is sparse, with many rural residents needing to travel long distances to reach the nearest bank branch.

**Adoption Rates of FinTech Solutions:** The adoption of FinTech solutions in rural areas shows a gradual upward trend, with 45% of surveyed individuals reporting that they have used at least one FinTech service, such as mobile money, digital wallets, or online payment platforms. Mobile banking is the most commonly used FinTech service, with 35% of respondents utilizing it for basic transactions such as money transfers and bill payments. However, the adoption of more advanced FinTech services like online lending or investment platforms remains low, at less than 10%.

**Barriers to FinTech Adoption:** The research identifies several critical barriers to FinTech adoption in rural areas: **Digital Literacy:** 60% of respondents reported low confidence in using digital technologies, with many citing difficulty in understanding how to use FinTech applications. **Infrastructure Challenges:** Poor internet connectivity and lack of access to reliable electricity were reported by 70% of participants as major obstacles to using FinTech services. **Cultural Resistance:** 40% of respondents expressed a preference for traditional cash-based transactions due to mistrust of digital financial services and a lack of understanding of their benefits. **Cost Concerns:** High transaction fees associated with some FinTech services were identified by 25% of respondents as a deterrent to adoption.

**Role of Digital Literacy and Trust:** This study finds a strong correlation between digital literacy levels and FinTech adoption. Respondents with higher digital literacy were 2.5 times more likely to use FinTech services than those with lower literacy levels. Additionally, trust in digital financial services emerged as a significant factor; 50% of non-users cited concerns about the security and privacy of their financial information as a primary reason for not adopting FinTech.

**Socio-Economic Impact of FinTech Integration:** The integration of FinTech in rural areas has had a positive, albeit limited, impact on the socio-economic conditions of those who have adopted these services. For example, users of mobile banking reported an average 20% increase in their ability to save money, and 15% of users experienced improved access to credit. However, the overall economic impact remains modest due to the low penetration of FinTech in more remote and underserved communities.

**Effectiveness of Government Policies and Initiatives:** The study finds that existing government policies and initiatives to promote FinTech adoption in rural areas have had mixed results. While initiatives such as digital literacy programs and subsidies for mobile devices have increased awareness and initial adoption, their reach and effectiveness have been limited by inadequate infrastructure and lack of targeted support for the most disadvantaged groups.

## Conclusion

The integration of financial technology (FinTech) in rural areas holds significant promise for advancing financial inclusion and fostering sustainable economic development. This study has demonstrated that while FinTech can be a powerful tool for reaching underserved populations, the journey towards widespread adoption in rural regions is fraught with challenges. Key findings reveal that, despite the potential benefits, FinTech adoption in rural areas remains limited due to a combination of low digital literacy, inadequate infrastructure, cultural resistance, and trust issues. These barriers highlight the need for a multifaceted approach that goes beyond the mere introduction of digital financial services. Efforts must focus on improving digital literacy, building trust in digital financial systems, and ensuring that rural populations have the necessary infrastructure to support FinTech usage. Moreover, the study underscores the importance of targeted government policies and initiatives that cater specifically to the unique needs of rural communities. While current efforts have made some progress, there is a clear need for more robust and inclusive strategies that encourage the adoption of FinTech across all segments of rural populations.

The socio-economic impact of FinTech, although still in its early stages, shows promise. Increased access to digital financial services can lead to improved savings, greater access to credit, and enhanced financial resilience among rural users. However, for FinTech to truly unlock financial inclusion, there must be a concerted effort from all stakeholders, including government agencies, financial institutions, and technology providers, to address the underlying barriers and create an enabling environment for digital financial services to thrive. In conclusion, while the road to full FinTech integration in rural areas is challenging, it is also ripe with opportunity. By addressing the key obstacles identified in this study and implementing the recommended strategies, it is possible to harness the power of FinTech to bring about meaningful financial inclusion in rural areas, ultimately contributing to the broader goal of equitable and sustainable economic development.

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## LEVERAGING CAPITAL MARKET COMPONENT BY STOCK SPLIT

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### Abstract

Markets are a sum total of the actions of all participants at any given point in time. Which is why they reflect the quicks, fears, greed and mysterious behaviour of the participants. Each asset class- currencies, bonds, commodities and equities trades with its own characteristics. Stock splits is a corporate action which maximises shareholders wealth. The splitting company's stock price has been seen to react differently in price movements through the stages of the split life-cycle, starting from the event announcement date to the record date, and even beyond. stock split announcements are a signal of the management's optimism about the company's future earnings, and the firms use the positive reaction to the split announcement to raise more funds at a higher price after the split. It can be said that a split is meant to boost liquidity. The results of the current study indicate that in the post-announcement period, while the stock prices of the firms that announce the split earned only insignificant excess returns over the broad market, the firms announcing the split were successful in increasing the liquidity of their stocks.

### Introduction

The action of dividing existing shares into multiple shares is called stock split. It is a corporate action by the company management. Conceptually, a stock split event is not expected to materially affect a splitting company's financials. The splitting company's existing shareholders continue to hold the same percentage holding in the company before and after a stock split. A company's stock split announcement has been resulted to be a net positive impact event. After a split, new investors might be interested in buying the stock as it is available at a lower price, in the hope that they would stand to gain. A stock split may have no impact on the value of the investment if the fundamentals of the company remain the same. However, one would expect the market forces of demand and supply to determine the true price for the share as the liquidity increases and more floating shares become available after the split. The price performance of the share depends on the state of the market in addition to the fundamentals of the company.

### Objective of Study:

1. To examine four important aspects related to the stock split event.
2. To analyse the effect on the liquidity of firms that go in for a split.

### Hypothesis of Study:

1. The trading range and its impact on stock price.
2. The split action and company's growth prospects.

### Scope of Study:

1. The study focused on companies listed on the National Stock Exchange (NSE) in India.

### Stock splits at NSE and BSE up to 30<sup>th</sup> June 2024:

Splits provide better liquidity and reduce trading costs. stock splits are used by firms to signal the firm's favourable future and its earnings growth prospects. The researcher examined stock splits in six months of the 2024 i.e. from 1<sup>st</sup> jan.,2024 to 30<sup>th</sup> june2024. Some of the following companies stock split data given as follows:

Sr No	Name of company	Old FV	New FV	Date of split	Sr No.	Name of company	Old FV	New FV	Date of split
1	Indian link chai	100	10	03.01. 2024	26	United Van	10	05	26.03.2024

2	Pearl Global in	10	05	05.01.2024	27	Lorenzini Appar	10	01	28.03.2024
3	Nestle	10	01	05.01.2024	28	Dhatre Udyog	10	01	28.03.2024
4	7NR Retail	01	10	05.01.2024	29	Persistent	10	05	28.03.2024
5	Cochin Shipyard	10	05	10.01.2024	30	Cupid	10	01	04.04.2024
6	Franklin Ind	10	01	11.01.2024	31	Bodhi Tree	10	01	05.04.2024
7	Kaushalya Infra	10	1000	12.01.2024	32	Sprayking	10	02	12.04.2024
8	TriIshan Intd.	10	02	16.01.2024	33	Suratwwala BG	10	01	18.04.2024
9	Ishan Intl.	223	01	25.01.2024	34	Pulsar Int.	10	01	19.04.2024
10	Dolphin Offshor	250	01	25.01.2024	35	Bharat Bijlee	10	05	24.04.2024
11	Growington Vent	10	01	31.01.2024	36	Bhagirath Chem.	10	01	02.05.2024
12	HDFCNIFBAN	223	22	02.02.2024	37	Sonam	10	05	10.05.2024
13	HDFCSENSEX	250	25	02.02.2024	38	IPRU NF 100 ETF	10	01	10.05.2024
14	Maagh Advertisi	10	01	05.02.2024	39	Canara Bank	10	02	15.05.2024
15	SG Mart	10	01	22.02.2024	40	Vardhman Poly	10	01	17.05.2024
16	Remedium Life.	05	01	23.02.2024	41	Som Distilleries	05	02	24.05.2024
17	Tiger Logistics	10	01	04.03.2024	42	Bharat Dynamics	10	05	24.05.2024
18	Capri Global	02	01	05.03.2024	43	Balaxi Pharma	10	02	30.05.2024
19	Sunshine Capita	10	01	07.03.2024	44	Davangere sugar	10	01	31.05.2024
20	Manorama Indu.	10	02	07.03.2024	45	Colorchips New	02	10	12.06.2024
21	OK Play	10	01	11.03.2024	46	Kamopaints	05	01	14.06.2024
22	Waaree Renewab	10	02	15.03.2024	47	Visco trade	10	02	14.06.2024
23	Spright	10	01	18.03.2024	48	Premier Expl	10	02	21.06.2024

24	Colab Cloud	10	02	19.03.2024	49	Share Ind	10	02	27.06.2024
25	Refex Ind.	10	02	22.03.2024	50	Avonmore Cap	10	01	28.06.2024

Source: <https://www.moneycontrol.com>

Above table provided explains that there are 50 registered companies under NSE and BSE which stocks were split during 1<sup>st</sup> Jan., 2024 to 30<sup>th</sup> June, 2024. The above list of company includes Nestle and Canara Bank which are the part of large cap. The FMCG Nestle is recognised NIFTY 50 and Canara Bank is banking institution which is part of large cap. Other pain, fmcg, real state, infra, mutual fund, logistics, pharma and health sector companies' stocks were split. The behaviour of stocks after announcement date for split increases liquidity and a positive trend to stock price.

**H1:** The liquidity and the trading range hypotheses contend that splits help firms to create an optimal ticket size for the stock, which provides better liquidity and thereby reduces trading costs. The increase in liquidity would be a result of the stock being traded at the optimal ticket size; hence, the two hypotheses have been combined for the analysis here.

**H2:** The multiple events hypothesis posits that companies first split their stock to reveal information and then issue stocks after the split in the hope that the share price will be higher. With a higher share price, the company would raise more money through its subsequent equity offering.

Researcher found that after split for a very short period stock price turns in negative trend but increases liquidity. After a while positive direction to stock and retail investors also participated in the investment due to split. Splitting firms utilise positive increases in share prices to raise money within a stipulated time after the announcement of the split.

## Conclusion

Based on the evidence from the liquidity and trading range, it can be concluded that split firms have enjoyed positive price effects as against the market (CNX 100 index) in the pre-split period but the post-split excess returns over the market have been statistically insignificant. The results from the liquidity and trading range are thus suggestive of gaps in market efficiency. Policy makers and regulators would need to examine why this surge in volume and prices in the pre-split period is being observed. The analysis of the 5-day average value traded for split firms before and after the split announcement indicated that firms tend to benefit from an increased liquidity over the short and long run. This increased liquidity could also be indicative of the optimal ticket size for the stocks as expressed. It is concluded that the intention of the splitting firms was to utilise the positive increases in share prices to raise money subsequent to the split. An interesting subject for further research would be to understand how many firms that went for a split also announced a reverse split in the subsequent periods and how the market factored in such a move.

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## EMPOWERING WOMEN AND PROMOTING GENDER EQUALITY

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### **Abstract:**

The term gender refers to the economic, social and cultural attributes and opportunities associated with being male or female. In most societies, being a man or a woman is not simply a matter of different biological and physical characteristics. This paper deals with the importance of gender equality towards achieving the goal of women empowerment. It outlines the gender inequality scenario in India and types of inequalities between men and women. This paper sheds light on the importance of gender equality and the role of gender equality in women empowerment, gender concern in development and gender mainstreaming in development. This paper concludes with some interesting findings along with policy suggestions.

Gender equality and women's empowerment is the third of eight MDGs. It is an intrinsic rather than an instrumental goal, explicitly valued as an end in itself rather than as an instrument for achieving other goals. Important as education is, the translation of this goal into the target of eliminating gender disparities at all levels of education within a given time period is disappointingly narrow. Progress in achieving:

- Closing the gender gap in education at all levels;
- Increasing women's share of wage employment in the non-agricultural sector;
- And increasing the proportion of seats held by women in national parliaments.

**Keywords:** Gender equality, Women Empowerment, Education, Educational systems, Economic Growth, Economic development etc.

### **Introduction :**

A well-known thinker who supported an equitable society was Dr. Babasaheb Ambedkar. He did not distinguish between men and women. He asserted that gender inequality is caused by all of the Hindu holy texts, including the Vedas, Shastras, and Puranas. He proposed several reform improvements to secure and defend women's rights against this kind of social discrimination. He discusses every underlying issue that was connected, either directly or indirectly, to prejudice against order and social structure; he examined the inferior status of women. He was shocked by women's subordinate position in the hierarchical system.

Empowering women and promoting gender equality are crucial for the development and progress of any society. Gender equality ensures that both men and women have equal rights, opportunities and responsibility allowing them to contribute fully to their communities. Empowering women involves providing them with the tools, resources, and support needed to make decisions about their lives and careers. This includes access to education, healthcare, employment and participation in political and social processes.

### **Objectives:**

- 1) Examine the Current Status of Gender Equality
- 2) Propose strategies for promoting Gender Equality
- 3) Identify Barriers to Women's Empowerment
- 4) To Identify Government Several Schemes to Improve Women's Status.

### **Research Methodology:**

It is purely based on secondary data research work. By referring good research papers and reference books and official websites of the relevant subject matters.



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**Objective Wise Analysis :****Objective No.01 : To Examine the Current Status of Gender Equality**

# Following are the major Factors related to Current Status of Gender Equality;

**A) : Education:**

- **Enrollment and Completion Rates :**

Compare the enrollment and Completion Rates for boys and girls at different levels of education, from primary to tertiary.

- **Field of Study :**

Analyze the gender distribution in various fields of study, particularly in STEM ( Science, Technology, Engineering and Mathematics) versus humanities.

**B) Employment:**

- **Labour Force Participation:**

Assessment the participation rates of men and women in the workforce, including differences in the full-time versus part-time employment.

- **Wage Gap:**

Examine the gender pay gap by comparing average earnings between men and women in similar roles and industries.

- **Leadership Roles :**

Look at the representation of women in leadership positions, such as CEOs , board members and government officials.

**C) Political Representation :**

- **Government Representation :**

Analyze the proportion of women in local, regional, and national governments, including in legislative, executive and judicial branches

- **Participation in Decision-making :**

Assessment women's involvement in decision making processes in various Sectors, including Community leadership roles.

**D) Social Norms and Cultural Attributes:**

- **Cultural Norms :**

Evaluate how cultural and social norms impact gender roles and expectations.

- **Violence and Discrimination:**

Assess the prevalence of gender based violence, discrimination and harassment and examine the legal framework in place to protect against these issues .

**E) Global and National Indices:**

- **Gender Equality Indexes :**

Refer to global indexes like the world economic forums global gap report, the United nations gender inequality index and national reports to compare gender equality across different regions and countries.

**Objective No. 02 : Propose strategies for promoting Gender Equality**

Promoting gender equality requires a multi-faceted approach that addresses the various barriers and biases that exist in society. Here are some strategies that can be implemented to advance gender equality.

- 1) Education and Awareness Campaign
- 2) Government Policy and Legal Reforms
- 3) Empowerment
- 4) Representation and Leadership
- 5) Healthcare and Reproductive Rights
- 6) Changing Social Norms
- 7) Combating Gender Based Violence
- 8) Monitoring and Accountability
- 9) Global and Regional Cooperation
- 10) Technological and Digital Inclusion

**Objective No.03 : Identify Barriers to Women's Empowerment**

# There are many barriers to Women's Empowerment, including :

**A) Societal Norms and Gender Stereotypes:**

There are the most pervasive barriers, including the expectation of women's roles in society and the concept of leadership being more closely aligned with the male stereotype of agency .

**B) Economic Constraints:**

Women often face challenges in accessing credit and other financial services, which can make it difficult to achieve financial independence.

**C) Lack of Representation:**

Women are underrepresented in politics, business and media .

**D) Violence Against Women :**

Gender-based violence, including sexual and other forms of abuse , can severely impair a women's ability to work and function.

**E) Fragile Contexts:**

Women and girls are affected by fragility and conflict in unique ways, especially in conflict affected settings.

**Objective No.04 : Government Several Schemes to Improve Womens Status**

- 1) Beti Bachao Beti Padhao ( BBBP)
- 2) Mahila Shakti Kendra (MSK)
- 3) Pradhan Mantri Matru Vandana Yojana ( PMMVY)
- 4) Scheme For Adolescent Girls (SAG)
- 5) Clean Cooking Fuel Scheme (Pradhan Mantri Ujjwala Yojana )
- 6) Hub For Empowerment Of Women
- 7) Mission Shakti
- 8) Kishori Shakti Yojana
- 9) Swadhar Greh
- 10) One Stop Centre etc.

**Conclusion:**

The Conclusion of our paper is to empowering women and promoting gender equality are not just moral imperatives but essential Components for the development and progress of societies world-wide. Gender equality Fosters more inclusive and resilient economies, enhances social cohesion and leads to better decision making at all levels. Empowering women involves providing equal access to education, healthcare, employment opportunities and political participation. By breaking down the barriers that limit women's potential, Societies can harness the full range of talents and perspectives needed to address the challenges of the 21<sup>st</sup> Century.

**Suggestions:**

- 1) Organize Workshops and seminars to educate about gender equality and empower women through knowledge sharing.
- 2) Promote women for leadership roles and provide leadership training to build their confidence and skills
- 3) Offer financial literacy workshops and entrepreneurship programs to help women achieve financial independence.
- 4) Challenge gender stereotypes by promoting positive representations of women in media and culture.
- 5) Involve men as allies in gender equality initiatives to create a more inclusive environment for all.

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## EMPOWERING WOMEN AND PROMOTING GENDER EQUALITY

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### Abstract

Gender equality is not only in the country but the most important issue of the world and gender equality is the basic right of every human being whether it is a woman or a man. Gender equality is the most important requirement to create an atmosphere of peace and prosperity and a sustainable world in the world. Women and women can contribute the most in that. As people are becoming aware of education and empowerment of women. However, the progress of the country has started little by little. But even if we think about it, the country still does not think that the world will achieve gender equality by 2030.

**Keyword:** Empowerment, Women Empowerment, Empowering Women, Gender Equality, Promoting Gender Equality, Women Education.

### Introduction

Due to the progress of women due to women's education, women start to have many kinds of relationships. And in his thinking, behavior, speaking, thinking, living, many kinds of changes begin to take place. In that, women start acting responsibly. Difficulties in life are not faced alone. They don't need any kind of other person in their life when they are dealing with that situation. When women are educated. Then the biggest problem for them is the family and the society. Different types of people in the society have their thoughts. Women who have their opinions are opposed to education. The ideology of our society is that women should not go out to get education or work, but stay at home and wash dishes and take care of their children. but people don't realize how important women education is. Men are given importance in the society. They are respected in the society. Therefore, women are in dire need of education and empowerment. Because of women's education, they can face all the exploitation or injustice oppression they face by the society. They will not need to extend their hands to anyone for anything, they can do whatever they want whenever they want.

Women empowerment is a strong foundation. Gender equality. If we see, women became empowered and they started to understand that our culture is a male dominated culture. Here only men are given importance. It educates women by standing up against their traditional traditions and fighting for their rights. If women learn, what laws are there in their support, have reservations been given to women. What is right for women is their benefit. Men and women have equal opportunities. Why not if there are how many if not why not. Fighting for equal opportunities for women only educates women. All those things help women to move other women in the society. Women work together to strengthen economic conditions to a greater extent. Many women encourage other women. And they help women advance in society. Following is the Importance of Women Empowerment in Gender Equality.

### 1.Economic Growth.

If we see, if the economy of the country is to improve, the most important thing is that women and girls should be treated like men and treated like children. If they get the opportunity of education and learning like men, women will also contribute to the country's economy by contributing to the country's development in the right place and the country will develop. The country's economy will become stronger and stronger.

### 2.Improved Health and Education Outcomes.

Educated women have to understand what is right for them and what is right for their family. Their health is busy after what they eat or what they should eat. So that everyone's health is concerned and educated women understand what to do to improve their health and increase their life expectancy.

**Literature Review:****1.P. Belingheri (2021).**

It was found that research done by P. Belingheri (2021). In his “Twenty years of gender equality Research: A Scoping review based on a new semantic indicator”. In that highlighted is the author if we look at it, Gender equality has been talked about. It talks about economic growth and societal advancement. Gender equality is the biggest issue. Which is from the economics of the country to the business as well.

**2.Pranab Dahal, Sunil kumar Joshi, Katarina Swahnberg. (2022).**

It was found that research done by Pranab Dahal, Sunil kumar Joshi, Katarina Swahnberg. (2022). In his “A qualitative study on gender inequality and gender-based violence in Nepal”. In that highlighted is the author if we look at it Although gender equality and violence may not have much in common, they are closely related. We often see that women are gender equals when it is a topic. Then men are given much lower status than that. Whether it is in education or work or anywhere else, women are given lower status. And because of this, women are also beaten up at home.

**3.Michaela Guthridge, Maggie Kirkman Tania Penovic, Melita J. Giummarra (2022)**

It was found that research done by Michaela Guthridge, Maggie Kirkman Tania Penovic, Melita J. Giummarra (2022). In his “Promoting gender equality: A Systematic Review of intervention”. If you look at the United Nations on the Elimination of All Forms of Discrimination against Women (CEDAW). According to him, we are close to gender equality if we do it according to the method (CEDAW) it will help us to get social justice or act today.

**Objectives:**

- 1.To understand the concept of women empowerment and Gender Equality.
- 2.To Study of Importance of Women Empowerment in Gender Equality.
- 3.To evaluate the Promote of empowering women in gender equality.

**Research Methodology:**

The data for the study collected for the secondary sources. Secondary sources in that included Research articles, Research papers, Research Journal, books, news articles, newspapers, different websites.

**Promote Of Empowering Women in Gender Equality.**

- When there is gender equality, economic improvement starts first.
- When women empowerment happens. So, it was improved. Work Life Balance Because both men and women work equally.
- When women empowerment becomes gender equality, women start getting equal education in the country without discrimination.
- When women are empowered, it improves the health of women and their families and promotes well-being.
- When women are empowered, it improves the social development.
- When women are empowered improved political participation.

**Conclusion.**

From the study it is understood that even today there is discrimination between men and women. If we see, in many places such as norms, institutions and practices, men are given more importance. And women were underestimated. Even today, people do not understand that if women are educated and given gender equality rights, not only women but the whole country will be on the path of development. The economic condition of our country will be strong. Be it social or political, improvement starts happening everywhere in the country. Most importantly gender equal children women start getting respect in the society.

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5. Michaela Guthridge, Maggie Kirkman Tania Penovic, Melita J. Giummarra. "Promoting gender equality: A Systematic Review of intervention". SOCIAL JUSTICE RESEARCH (2022).



# MAPPING THE DRIVERS OF OCCUPATIONAL STRESS IN HEALTHCARE: INSIGHTS FROM RESEARCH TRENDS

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## Abstract

**Purpose:** This study investigates the occupational stress among healthcare professionals through a comprehensive bibliometric analysis. It aims to identify publication trends, key contributors, influential articles, and emerging themes in this field.

**Methodology:** Data was collected from Scopus database using specific keywords related to occupational stress among healthcare professionals, which were refined using PRISMA framework and 1077 documents were included for analysis. Bibliometric analysis was performed using biblioshiny and VOS viewer.

**Findings:** The analysis revealed an increasing trend in research publications. The most prolific source was international journal of environmental research and public health and influential authors highly cited documents were identified. The thematic analysis was done to find the important themes.

**Conclusion:** The study underscores the significant impact of occupational stress on mental health, job satisfaction, and burnout. The findings have important implications for healthcare policy and management, suggesting the need for inclusive workplace practices and targeted interventions to mitigate stress among medical professionals.

**Keywords:** Occupational stress, Job stress, Work-related stress, medical professionals

## Introduction

The current era has been described as an anxious one, as stress is something that affects many people every day. Life is full of hassles, deadlines, frustrations, and demands. In our way of life, stress is common and it has an impact on both general and targeted activities. The word "stress" first appeared in the Roman term "stringere," which describes bodily pain, famine, agony, and misery. According to (Newman & Beehr, 1978) stress is described as "a situation that disrupts or improves a person's psychological and/or physiological state, causing them to deviate from their usual functioning."

(Pestonjee, 1992) in his book "Stress and Coping" has attempted to present the nature and consequences of the stress phenomenon. He identified three important factors of life in which stress originates. These factors are: job and organization factors, social factors, intra-psychic factors. More generally stress is contributing factor towards a number of physical -health and mental-health conditions. Stress in the workplace is a common phenomenon that affects many individuals. Occupational stress is defined as "a set of physical, psychological, and behavioural responses of an individual who perceives a lack of correspondence between the demands of the environment and his or her capabilities, resources, or needs" (Leka & Houdmont, 2010). The researchers also found that individuals who experienced high levels of stress reported lower levels of job satisfaction and higher levels of physical and mental health problems. The healthcare sector is critical for the overall well-being of a society, and healthcare professionals play an important role in delivering quality healthcare services. However, the healthcare sector is also associated with high levels of occupational stress due to long working hours, heavy workload, emotional demands, and exposure to infectious diseases.

## Research Question

- What are the current publication trends in occupational stress among healthcare professionals?
- Which are the leading, influential and impactful sources and contributors to the existing literature?
- Which are the most influential articles in this research domain?
- What are the emerging research themes in the field occupational stress among health care professionals.

- What are the primary determinants and factors contributing to occupational stress among healthcare professionals.

## Methodology

- **Data collection:** The data was extracted by searching the electronic database from Scopus. The search employed the strategy - using selected keywords: “determinants,” “factors,” “predictors,” “occupation,” “job,” “work related,” “stress,” “healthcare,” “medical” and “professionals”. Initially, 1722 documents were identified and PRISMA framework was used to refine and filter the initial set of documents, resulting in a final dataset of 1077 documents.

**Table 1. PRISMA-based document filtering process**

Step	Inclusion Criteria	Exclusion Criteria	Documents Found/Filtered
<b>Initial Search</b>	Keywords: factors, determinants, predictors occupational, job, work related stress, healthcare, medical professionals	Non-healthcare related documents	1722
<b>Year Filter</b>	Published from 2013 -2024	Published before 2013	1324
<b>Subject Area</b>	Relevant subject areas	Irrelevant subject areas	1236
<b>Document Type</b>	Research articles, reviews, conference papers	Editorials, notes, letters	1193
<b>Final Published</b>	Published documents	Unpublished documents	1185
<b>Language</b>	English language	Non-English documents	1077

- **Data analysis:** The bibliometric analysis was conducted using tools such as Biblioshiny and VOS viewer. Biblioshiny facilitated the extraction of key metrics, including the annual growth rate, average document age, and citation metrics. VOS viewer, on the other hand, was instrumental in visualizing collaboration networks and co-occurrence patterns of keywords. The internationally widely used free bibliometric analysis. software VOS Viewer has applied by many bibliometric studies (Guo, et al., 2019) in the domain of management

## Result And Analysis

Table 2. provides the details of dataset used in the bibliometric analysis. It includes 1077 documents sourced from 529 different sources, showing annual growth rate of 7.75%. On an average these documents are 4.13 years old. The dataset involves 5762 authors with 36 singled author documents and 20.61% international collaboration.

Table 2. Overview of dataset

Description	Results
<b>MAIN INFORMATION ABOUT DATA</b>	
Timespan	2013:2024
Sources (Journals, Books, etc)	529
Documents	1077
Annual Growth Rate %	7.75
Document Average Age	4.13
Average citations per doc	28.02
References	44760
<b>DOCUMENT CONTENTS</b>	
Keywords Plus (ID)	3997
Author's Keywords (DE)	2111
<b>AUTHORS</b>	
Authors	5762
Authors of single-authored docs	36
<b>AUTHORS COLLABORATION</b>	
Single-authored docs	38
Co-Authors per Doc	5.99
International co-authorships %	20.61
<b>DOCUMENT TYPES</b>	
article	946

## 1. Research Trend and Scientific Production

The Figure 1 illustrates the trends in the number of articles published on occupational stress among healthcare professionals from 2013 to 2024. The figure shows a generally increasing trend, indicating growing interest and research in this field. Year 2021 shows highest publication with 176 documents. year 2022 and 2023 shows slight decrease in the production but presence of 75 documents in year 2024 shows that research is still going on this field. While there is an overall upward trend, there are fluctuations in the number of articles published each year.

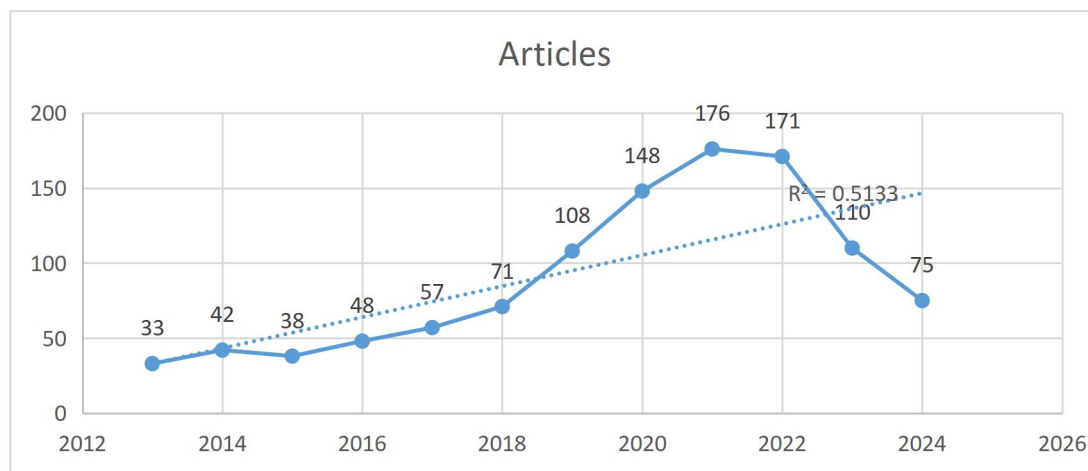
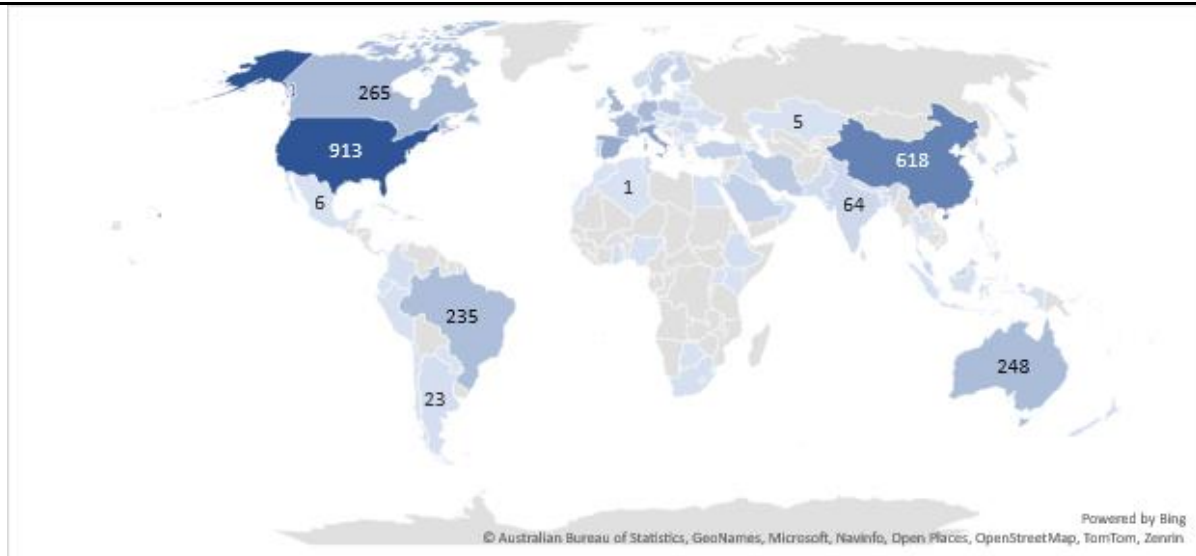


Figure 1. Research trends and scientific production

## 2. Geographical production:

The Figure 2. maps the geographical distribution of research publications. It shows that united states with 913 documents is leading country. USA is significant ahead of China which has 618 publications. Italy, Spain and United Kingdom also have significant publication with 428,357 and 286 publications respectively. This distribution indicates the global nature of this research area.



**Figure 2. Geographical production of research on occupational stress among medical professionals**

### 3. Most relevant sources

Table 3. lists the most prolific sources of research on occupational stress among healthcare professionals, international journal of environment research has highest no. of production with 102 articles. Following by Plos One BMJ open and Frontiers in psychiatry with 40,34,25, publications respectively.

**Table 3. Most Relevant sources on occupational stress among medical professionals**

Sources	Articles
International Journal of Environmental Research and Public Health	102
Plos One	40
BMJ open	34
Frontiers In Psychiatry	25
BMC Health Services Research	19
BMC Public Health	11
Journal of Clinical Nursing	11
Journal of Occupational and Environmental Medicine	11
Work	11
Frontiers in Public Health	10

The analysis of the most relevant sources reveals a diverse landscape of academic institutions actively contributing to the research on work-related stress among healthcare professionals.

### 4. Most Relevant Authors

The Table 4. highlights the most influential authors in the field. Authors like Li J, Wang and Canadas-de la Fuente GA are notable for their high citation counts with 260,256 and 460 citations respectively.

**Table 4. Most Relevant Authors**

Author	h_index	g_index	m_index	TC	NP	PY_start
Li J	7	10	1	260	10	2018
Wang J	7	13	0.875	256	13	2017
Cañadas-De La Fuente Ga	6	6	0.75	460	6	2017
JR	6	7	0.545	212	7	2014
Liu Y	5	9	1	170	9	2020
Wang Y	5	5	0.417	258	5	2013
Zhang Y	5	8	0.625	66	8	2017
Alonso J	4	4	1	203	4	2021
Angerer P	4	4	0.571	58	4	2018
Aragonès E	4	4	1	204	4	2021

## 5. Highly cited documents

The table 5. Presents the most cited documents in the dataset, indicating their influence in the field. Papers by (West, Dyrbye, & Shanafelt, 2018), (Muller, et al., 2020) and (J.Adriaenssens, Gucht, & Maes, 2015) are most cited documents with 1338,531 and 486 citations respectively. These works have significantly shaped the understanding of occupational stress and its impacts on healthcare professionals highlighting key issues such as burnout, mental health, COVID-19 pandemic and intervention to mitigate stress.

**Table 5. Highly cited documents on occupational stress among medical professionals**

Paper	Total Citations	TC per Year	Normalized TC
(West, Dyrbye, & Shanafelt, 2018)	1338	191.14	24.18
(Muller, et al., 2020)	531	106.20	11.19
(J.Adriaenssens, Gucht, & Maes, 2015)	486	48.60	10.27
(Elbay, Kurtulmuş, Arpacioğlu, & Karadere, 2020)	471	94.20	9.93
(Giorgi, et al., 2020)	463	92.60	9.76
(Aronsson, et al., 2017)	459	57.38	9.00
(Caruso, 2014)	385	35.00	7.44
(Pollock, et al., 2020)	384	76.80	8.09
(Brooks, Dunn, Amlôt, Rubin, & Greenberg, 2018)	372	53.14	6.72
(L.A Morgantini, et al., 2020)	354	70.80	7.46

The Figure 3. Provides visual representation of citation network among the documents. Highly connected nodes represent important studies and their interconnection.



Figure 3. Network Visualisation of citation of Documents

## 6. Highly cited countries

This Table 6 lists the countries with the highest citation counts in the dataset. The United States leads with the most citations, followed by Italy, the United Kingdom, China, and Spain. This indicates that research from these countries has had a significant impact in this research field. The average article citations also provide insight into the influence of research from different regions.

Table. 6. Countries with high citation

Country	TC	Average Article Citations
USA	6984	47.50
Italy	2410	39.50
United Kingdom	2048	42.70
China	1860	22.40
Spain	1731	33.30
Australia	1511	29.10
Canada	1127	29.70
Sweden	805	38.30
France	774	21.50
Turkey	735	49.00

## 7. Cooccurrence of keywords

The figure 4. Shows the network of co-occurring keywords in the dataset. clusters of related keywords indicate major areas of focus ,such as the impact of covid 19 on healthcare workers.



**Figure 4. network visulisation of co-occurrence of keywords**

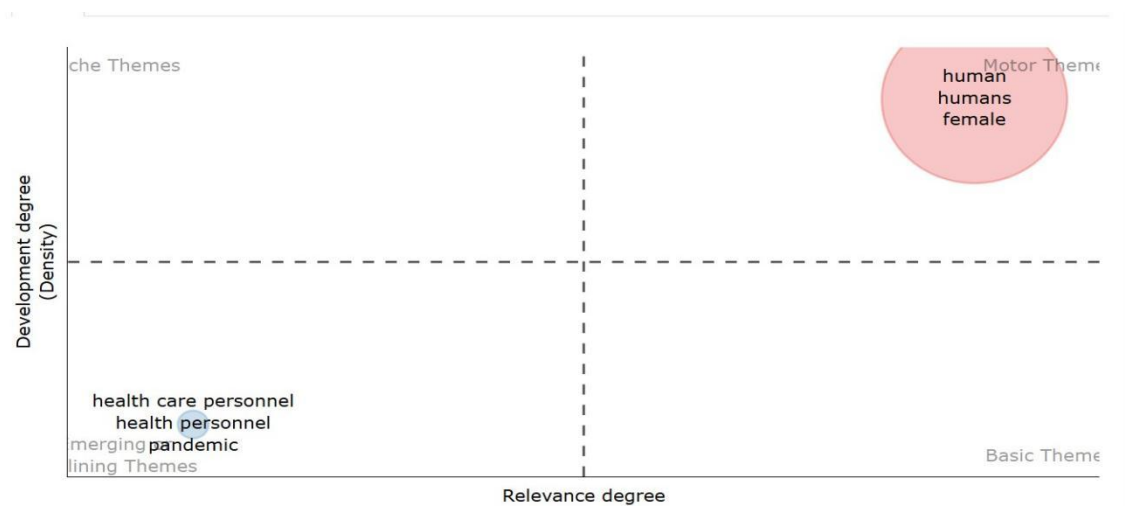
## 8. Thematic map analysis

**Motor theme: Gender and human factors**

In the motor theme includes well-developed and important themes, terms such as human humans and female are prominent. This indicates how occupational stress impacts different genders within the health sector

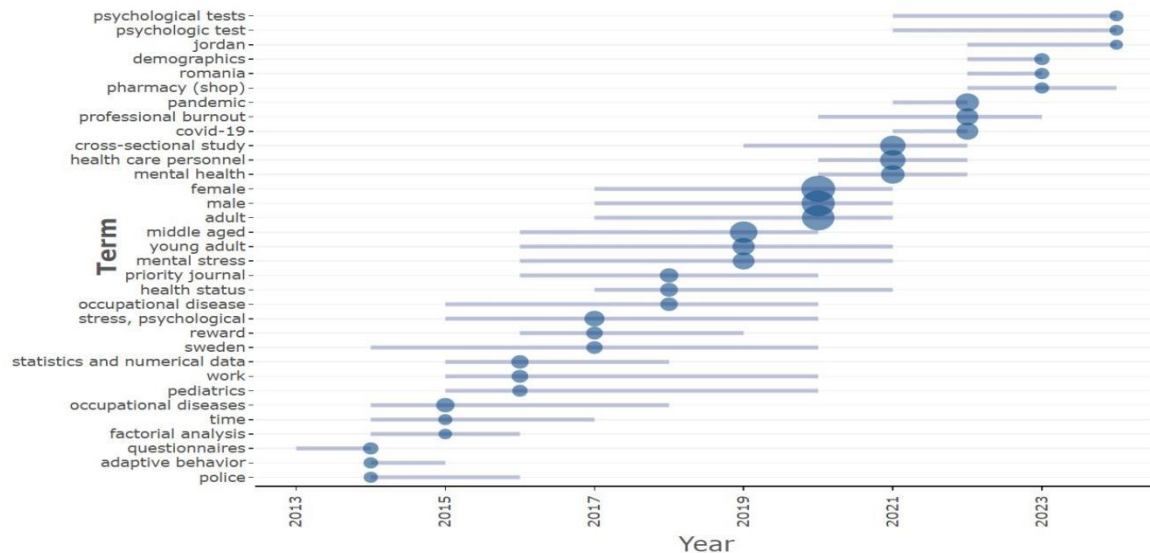
### Emerging or declining themes: Pandemic impact on healthcare

Emerging and declining themes have terms like health care personnel pandemic and covid-19. these terms indicate to themes to global pandemic. These topics are having prominence in research on occupational stress among medical professionals.



**Figure 5. Thematic map on occupational stress among medical professionals**

## 9. Emerging or Declining Themes: Trending topic



**Figure 5. Trending topic on occupational stress among medical professionals**

The figure 5 highlights the trending topics over time, showing how research focus has shifted. In initial years focus was on occupational disease and stress- related psychological conditions. In 2019 the emphasis shifted to mental stress in adults and middle-aged individuals. In year 2020-2021 focus was on mental health among healthcare personnel with particular focus on gender differences 2024 psychological testing has become prominent topic in addressing stress related issues.

## Discussion:

The bibliometric analysis explores the landscape of occupational stress among healthcare professionals. The findings highlight the critical insights into the factors, impacts and trends associated with this field. One of the key findings of this study is the significant impact of occupational stress on mental health, job satisfaction and burnout among medical professionals. The analysis revealed that these factors are not only prevalent but also interlinked.

### 1. Implications

The implications of this research are multifaceted. It can play important role in healthcare policy and management. insights into gender differences and other determinants of stress can lead to more inclusive workplace practices. by identifying trends and highly cited works, this study can guide future efforts and emerging themes in the field of occupational stress in healthcare.

### 2. Limitation

The study's limitations, includes its reliance on single database i.e. Scopus database. Only articles in English language were analysed and more focus on quantative metrics were given, these limitations should be considered. Despite these limitations the research provides valuable insights and sets the stage for future studies.

## Conclusion

In conclusion, the bibliometric analysis provides valuable insights into the multifaceted nature of occupational stress in healthcare. The study reveals significant impacts on mental health, job satisfaction, and burnout, highlighting these factors as interlinked and pervasive within the healthcare sector. The study not only highlights current trends and challenges but also points to future research directions and practical implications. Addressing occupational stress effectively is crucial for enhancing the well-being and job satisfaction of healthcare professional, despite limitations such as reliance on a single database and language restrictions, this study contributes valuable

insights into current challenges and future research directions in addressing occupational stress effectively. Enhancing the well-being and job satisfaction of healthcare professionals remains paramount for sustainable healthcare delivery.

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## A STUDY OF CONSUMER BEHAVIOUR TOWARDS LUXURY PRODUCTS IN LATUR CITY

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### Abstract:

Due to globalization, the luxury products are becoming more easily accessible to the general public and making them more affordable. As a result of increasing in number of luxury products that easy accessible to consumers, it is very difficult to determine the factors which are affecting the purchasing behaviour of the consumer. The objectives behind writing this paper are to explain and examine the buying behaviour of the consumers, who is the target consumer for luxury products? As well as to discover the factors affecting on the behaviour of the consumer while purchasing the luxury products. Which factors play a dominant role in the buying choice of the people? The finding and suggestions are collected with the help of survey of the native consumers from the Latur city. The fair relationship between actual purchase and purchasing intention of luxury products will observe in this research.

**Keywords:** Consumer Behaviour, Luxury Products, Satisfaction, Social Status etc.

### Introduction:

Everyone knows that marketing concept starts with consumer needs and behaviour in meeting these needs. Each and every action of the person is depending upon the person's needs and wants. The actual problem is that to learn what consumers think when they purchase any product in the market. What consumers take into consideration while choosing a particular brand? Such study is concerned with the consumer behaviour. Because each and every consumer has different behaviour in the market towards different product and services. For making a successful marketing campaign it is necessary for businessman to study the consumer behaviour so that he would know the attitudes, perceptions, intentions, desires and needs of the person. The Consumer is a centre point of the whole market. With the rapid urbanization, globalization and expanding economy the sector of luxury commodities has gained a prominent role in the business.

### Statement of the Problem:

Buying luxurious products might be an unnecessary monetary burden on the consumer except if you have a strong paying capacity. There are many consumers who purchase luxury products and are not able to have enough money. The consumers are not acting logically or practically while purchasing the luxurious products and, due to these facts, they feel regret after the purchase of a luxury commodity. Hence, it is necessary to study consumer behaviour with reference to luxury products. This can generate proper guidelines for consumers about how to behave in that particular situation and the marketer also gets an idea about framing the proper marketing strategies towards maximum sale of luxurious products.

### Review of Literature:

*Sheth et al., 1991* said in his study that there are numerous factors which influence the buying decisions of the consumers that beneficial in explaining why some of the products are purchased or don't purchase some of the specific products.

*Ahmed Hosaini, Dr. Kuldeep Chand Rojhe (May-June 2020)* studied in his paper titled 'factors influencing Consumer Behaviour' that consumer behaviour is concerned with the process in which consumer select, purchase and utilize of products and services to meet their desires, wants and needs. The ultimate goal of business enterprise is to get consumer satisfaction. So marketer has to find the clear requirement of the target consumers. There are various factors which are influence on consumer behaviour.

**Pandey A.C. & Pandey M.K. (2013)** studied and concluded in his study that impact of lifestyle on brand preference of consumer behaviour. Finally concluded that there are many factors which have major role in the changing the buyer's behaviour.

**Bhattacharya S, Mitra S (2010)** observed in his research that Brand name, Brand loyalty & Symbolic status are the major elements which are affected on consumer behaviour. They investigated and observed that, the impact of brand on consumer behaviour is more significant towards the female group rather than male group.

#### **Objectives of Study:**

- 1) To Study the behaviour of consumer related to luxury products
- 2) To Examine the consumer psychology while buying the luxury commodities
- 3) To acquire knowledge regarding various factors affecting on behaviour of consumer with reference to luxury products
- 4) To discover that how brand name of the product impact in consumer choice making

#### **Limitation of the Study:**

- 1) This study is limited to Latur city's geographical area only and has reflections of thinking of respondents of the said area. It may differ from the thinking of another city.
- 2) The primary responses are collected by questionnaire by using a convenience sampling method. The selected respondents choose randomly from the area of research. The responses of these respondent may vary in little format from the other respondent.
- 3) Super Senior Citizens i.e. above 80 years respondent are exempted from this study.

#### **Research Methodology:**

In every research the methodology which is used by researcher to collect data is considered as an approach to focus research area by using various steps, procedures, data collection, interpretation, finding and making suggestion about the study. This research is based on Primary and secondary data. The Primary data has been collected from 60 respondents, which is selected by convenience sampling method. A structured questionnaire was framed to extract information about the consumer preference about luxury brand, buying intention, brand loyalty, perception relation to luxury product, and opinion about availability of luxury products which influence the sale of luxury products. The secondary data also used for this research from books, Journals and various websites research papers written by researchers.

#### **Consumer Behaviour:**

A human being by nature is very complicated and complex to understand. Consumer behaviour is that subset of human behaviour which is concerned with decisions and acts of individual and households in purchasing and using the various products from the market. Hence it is too much difficult to understand the human behaviour. Thus the study of consumer behaviour is important. It is the study that how individual make decisions to spend their available resources i.e. money, time and efforts on consumption related products and services. The psychology of the consumers includes knowledge, attitude, intention and motive. These components are playing vital role in the decision making of the consumer while purchasing luxury products. But generally marketer has to face some difficulties in determining the buying motives of the consumers like unawareness of purchasers, non-disclosure by purchaser, difficulty in separation, ever changing pattern of motives, personality of the purchaser etc. These buying motives are the guiding force of a consumer for making the purchase decision.

"Consumer buying behaviour refers to the buying behaviour of final consumer- individuals and households who buy goods and services for personal consumptions." – **Kotler & Armstrong**

The study of consumer behaviour attempts to find the answers for the following questions?

Who are the target customers?	<b>Consumer Behaviour</b>	What do they buy?
Where do they buy?		How do they buy?
When do they buy?		Why do they buy?

#### Factors affecting on consumer behaviour:

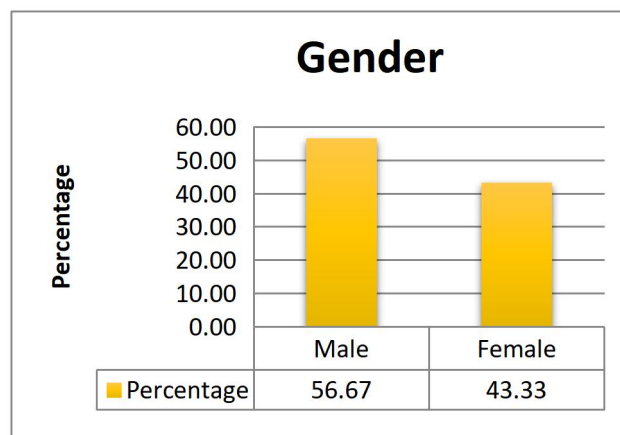
While purchasing the products from the market it is necessary to understand the factors influencing on consumer behaviour. Following are the factors affecting on consumer behaviour:

- 1) **Psychological Factors:** Motivation, Perception, Learning, Attitudes and Beliefs
- 2) **Social Factors:** Family, Reference Group, Roles and Status
- 3) **Cultural Factors:** Culture, Subculture, Social Class
- 4) **Personal Factors:** Age, Income, Occupation, Lifestyle
- 5) **Economic Factors:** Personal Income, Family Income, Income expectations, Consumer Credit, Savings

#### Date Collection and Interpretation:

Gender	Response	Percentage
Male	34	56.67
Female	26	43.33
<b>Total</b>	<b>60</b>	<b>100.00</b>

Table No.1

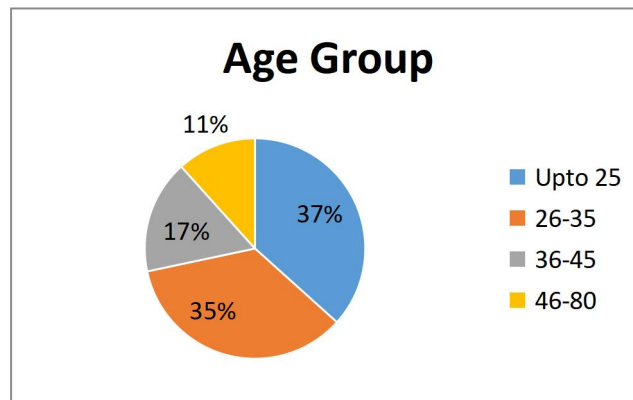


In this research the data is collected from 60 respondents which include (34) 56.67% Male respondent and (26) 43.33% female respondent from different locations.



Age Group	Response	Percentage
Up to 25	22	36.67
26-35	21	35.00
36-45	10	16.67
46-80	7	11.67
<b>Total</b>	<b>60</b>	<b>100</b>

Table No. 2

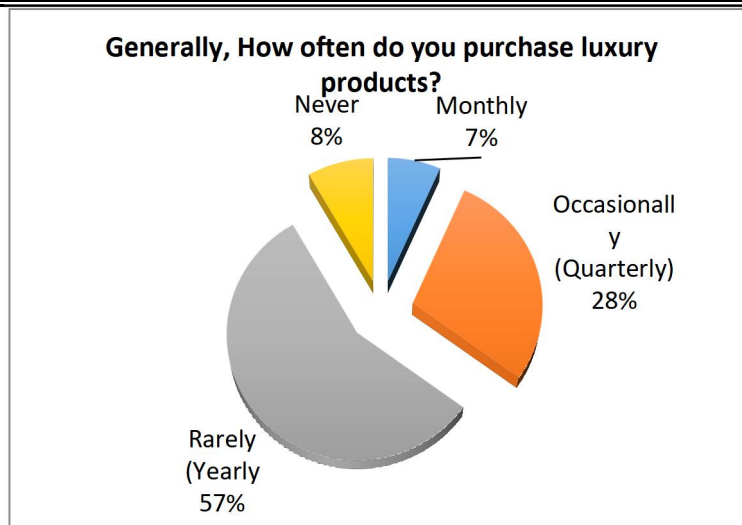


To find out the exact opinion from the different age group the respondents are divided into different age groups above graph show the details about it. 36.67% responses collected from the up to 25 years age group. 35% responses collected from the age group between 26-35 years. 16.67% from 36-45 and 11.67% from 46-60 years. Above 80 years respondent i.e. super senior citizens are exempted from this study.

To find out the actual purchase of luxury products from the native consumers, the question is asked about how often they purchase the luxury products and we get the following results:

Generally, How often do you purchase luxury products?	Response	Percentage
Monthly	4	6.70%
Occasionally (Quarterly)	17	28.30%
Rarely (Yearly)	34	56.70%
Never	5	8.30%
<b>Total</b>	<b>60</b>	<b>100.00%</b>

Table No. 3



To finding behaviour a consumer who uses luxury products, firstly marketer should aware about the purchasing pattern of the consumers. When they purchase the luxury products? What is the frequency of the purchase luxury products?the above table shows that 57% respondent purchase luxury product rarely i.e. year by year, 28% respondent purchase occasionally, 7% respondent monthly and 8% respondent never interested to purchase a luxury products.

What is the motivation behind purchasing the luxury products that is also an important element towards the study. The factors influencing the purchase decision or making decision to purchase luxury product are as follows:

What motivates you to purchase luxury products? (Select all that apply)*	Response	Percentage
Social Status	16	26.70%
Qualities	39	65.00%
Personal Satisfaction	31	51.70%
Investment Value	13	21.70%
Exclusivity	3	5%
Brand Image	22	36.70%
Others	7	11.70%

**Table No. 4**

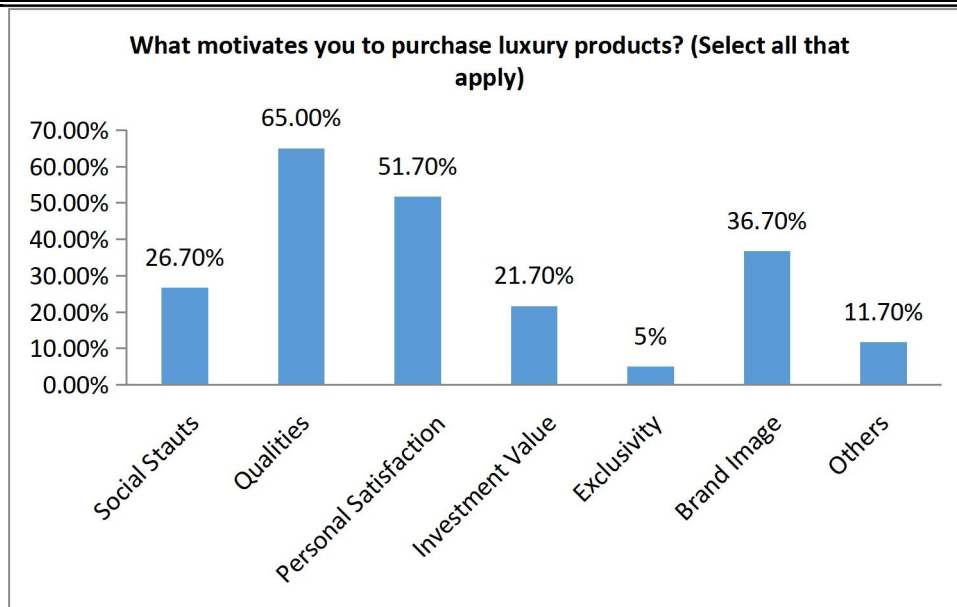
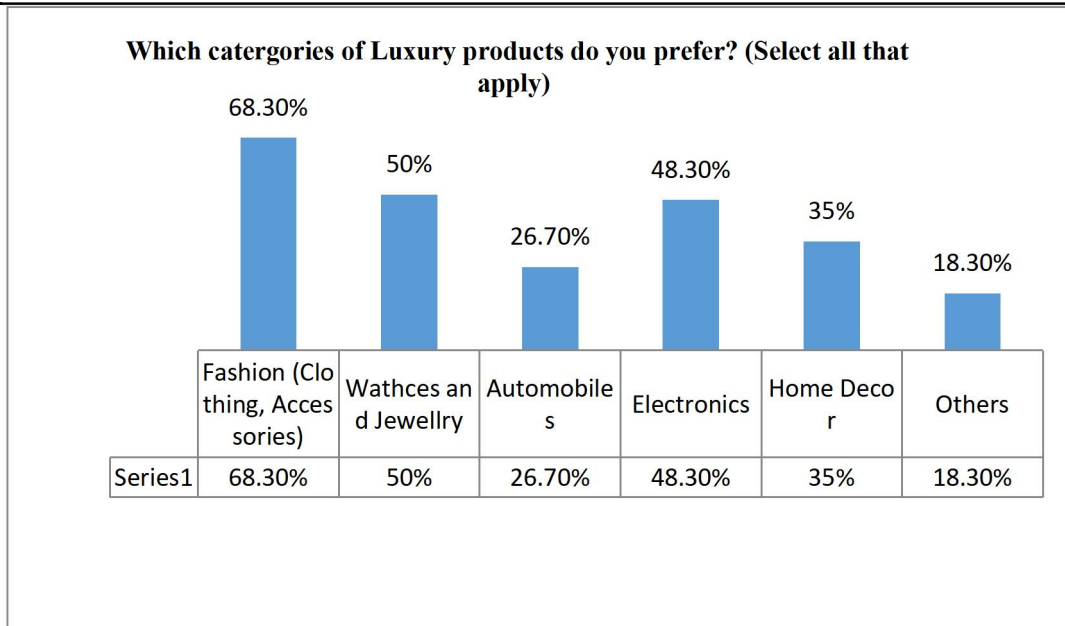


Table and Graph No. 4 Shows that out of 60 respondent 39 (65.00%) said that they are motivated by the qualities and 31 (51.70%) says that they motivated by personal satisfaction and hence they purchase the luxury products. The factors which are motivated to consumers are plays an important role in the decision making process. After that Brand image, Social status and Investment value get preference respectively i.e. 36.70%, 26.70% and 21.70%. The only 5% respondent gives preference to exclusivity and 11.70% for other factors.

Which categories of Luxury products do you prefer? (Select all that apply) *	Response	Percentage
Fashion (Clothing, Accessories)	41	68.30%
Wathces and Jewellry	30	50%
Automobiles	16	26.70%
Electronics	29	48.30%
Home Decor	21	35%
Others	11	18.30%

**Table No. 5**



In the research questionnaire the question asked about the which categories of luxury products mostly prefer by the consumer and answer get in the feedback i.e. 68.30% respondent prefer towards Fashionable goods (Like Clothing, Accessories etc.) then 50% and 48.30% respondent give preference to purchase watches and jewelry and electronics respectively. 35% respondent prefer to Home décor products, 26.70% prefer automobiles and 18.30% other products.

Which factors influence your decision when choosing a luxury brand? *	Response	Percentage
Price	25	41.70%
Brand Reputation	30	50%
Product Quality	47	78.30%
Celebrity Endorsement	4	6.70%
Peer Recommendations	3	5%
Availability in Local Stores	11	18.30%
Others	6	10%

**Table No. 6**

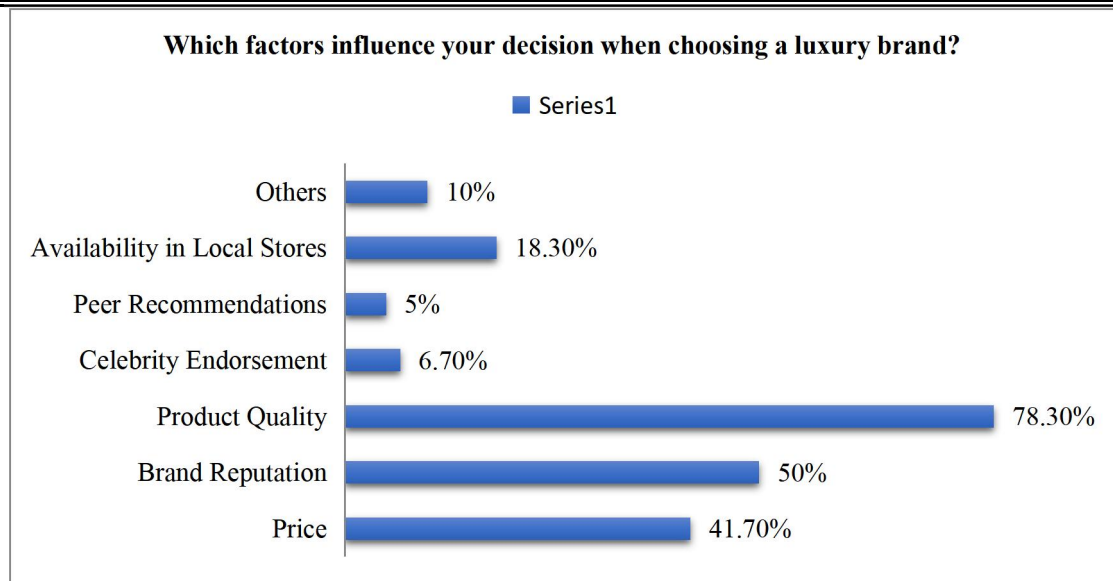
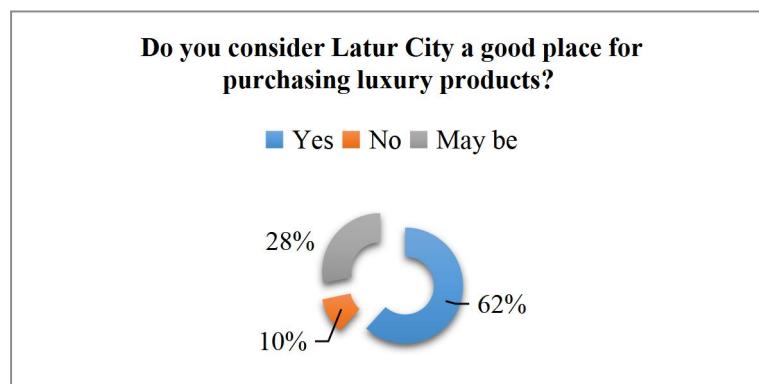


Table No. 6 Shows that which factors influence the decision when choosing a luxury branded products. The observation of the study said that, 78.30% respondent influence by the product quality while choosing the luxury products after that Brand reputation and price these two factors influence the decision to purchase luxury products. The availability of products in local stores also an important element of the decision making process. The 18.30% respondent are influenced by this factor that many of the products are available in local stores. Celebrity endorsement and peer recommendations have influence lesser in the form.

Do you consider Latur City a good place for purchasing luxury products?	Response	Percentage
Yes	37	61.70%
No	6	10%
May be	17	28.30%
<b>Total</b>	<b>60</b>	<b>100.00%</b>

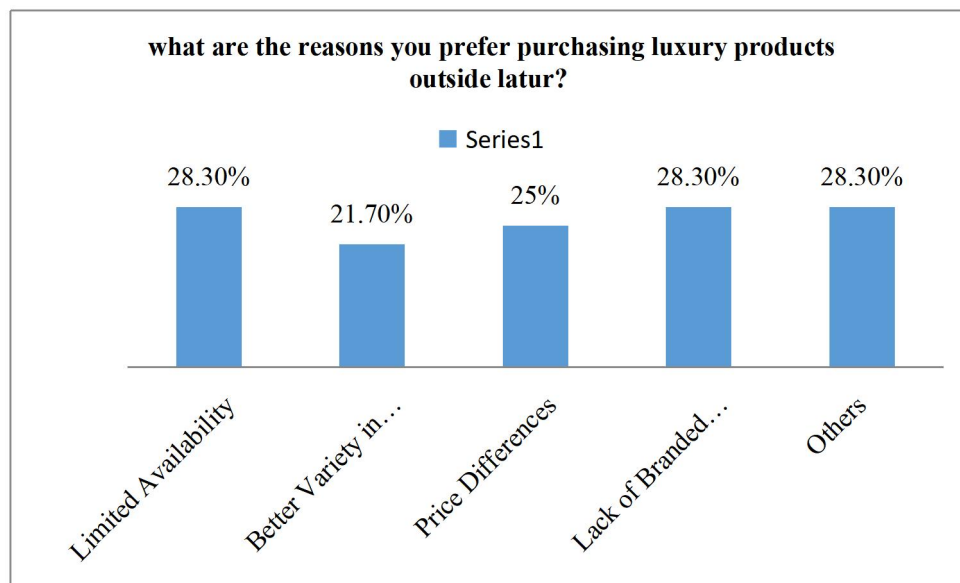
**Table No. 7**



Every consumer has to wish to purchase each and every product by easy access and not taking very much hard work. When we asked question to consumers regarding consideration of the latur city is goods place form purchasing luxury products or not. Then we got the response in the form of 62% people says yes latur is a good place for purchasing luxury products. Only 10% of the respondents are not happy with the luxury products available in the latur city. And 28% respondent said probably it is good place.

What are the reasons you prefer purchasing luxury products outside latur? *	Respondent	Percentage
Limited Availability	17	28.30%
Better Variety in Other Cities	13	21.70%
Price Differences	15	25%
Lack of Branded Stores	17	28.30%
Others	17	28.30%

Table No. 8



There are many limitations to latur luxury market as per respondent point of view. The majority respondent said that limited availability, lack of branded stores is the problems of latur market. After that better variety of products available in other cities compare to latur that one is also a crucial problem of latur market. And price difference also play vital problem to the market.

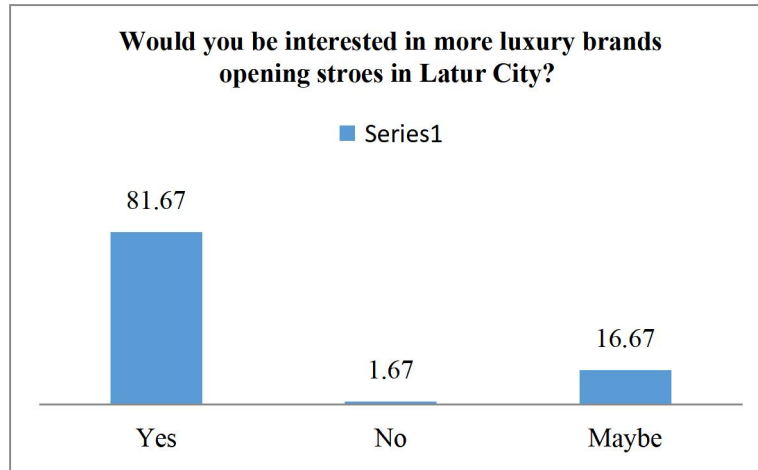
Consumer has to wish about product should be easily accessible. The question was asked about why the consumers are interested to purchase luxury products outside the latur. What are the limitations for the latur luxury market? Then we got the following results:

Would you be interested in more luxury brands opening stores in Latur City?	Response	Percentage
Yes	49	81.67
No	1	1.67



Maybe	10	16.67
<b>Total</b>	<b>60</b>	<b>100</b>

Table No. 9



There are 81.67% respondent are interested in more luxury brands opening stores in latur city. Only 1.67% is said not interested and 16.67% are may be interested.

#### Findings:

The conclusion from this study is that a consumer takes different types of decisions in different situation. In order to understand the consumer behaviour the marketer must make extensive use of social sciences including psychology, sociology, economics and anthropology. There are many inter-personal, intra-personal and other environmental variables that affect consumer's decision making process. These variables should be acquired by the marketer and adopt marketing polices according to them.

#### Suggestion:

If the marketer is able to understand the emotional and intellectual process that leads to potential consumers to accept or reject particular commodities, he might conceive marketing strategies that would make one more his instruments more productive. Hence to understand the consumer behaviour it is essential to take a deep study on this topic. The success of business is depending upon the sale maximization of the product. Hence to increase the sales of business it is essential to understand target consumer's behaviour. It is suggested that from the study that the consumer behaviour is psychological concept. It always changes in nature from period to period. And there are so many factors are influencing on the behaviour of the consumers. So after a particular gap of time it is necessary to study the behaviour of the consumers.

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## A STUDY ON PROMOTING RENEWABLE ENERGY AND GREEN TECHNOLOGIES

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### Abstract

Energy has been an important component to meet the day to day need of human beings. Renewable energy is an umbrella term that stands for energy production using a renewable energy source like solar, wind, water. Renewable energy derived from natural sources that are replenished at a higher rate than they are consumed. Green technologies refer to a type of technology that is considered environmentally friendly based on its production process or its supply chain. Green technology encompasses a wide area of scientific research, including energy, atmospheric science, agriculture, material science, and hydrology.

In this paper we study about promoting renewable energy and green technology. Promoting renewable energy and green technologies involves educating, leading by example and advocating for policy change. Encourage energy conservation, engage in community efforts, and invest in renewable energy and green technology projects.

**Keywords-** Renewable energy, Green technology, promoting, natural

### Introduction

#### a).Renewable Energy

Renewable energy and Green technologies are interconnected pillars that impact economies and societies. Renewable energy (or green energy) is energy from renewable natural resources that are replenished on a human timescale. Renewable energy is also often called sustainable energy.

#### b)There are five major renewable energy sources:

##### a. Solar Energy -

Our country is blessed with abundant supply of solar radiation. By adopting suitable gadgets solar energy can be used not only in agricultural sector but also for domestic and industrial applications. Solar dryers, solar water heaters, solar cookers etc are some of the solar based thermal appliances.

##### b. Wind Energy

Wind energy has a potential of 45000 MW in India. Wind mills are commercially used for power generation, which is technically and economically viable and is a suitable alternate for fossil fuel power generation.

##### c. Biomass energy

resources are organic matter available on a renewable basis for energy generation. Forest thinning, agricultural crop residues, wood and wood wastes, animal wastes, aquatic plants, municipal waste etc. are all various available biomass.

##### d. Thermo Chemical Conversion

Thermo chemical conversion can be classified into three major processes based on the supply of air viz. combustion, gasification and pyrolysis. Direct combustion in excess air (incineration) is the best understood and most widely used energy conversion process today. However, direct combustion in excess air has several problems, especially for general large-scale use.

### **e. Biochemical Conversion**

These processes utilize microorganisms for the conversion of biomaterial into different end products such as biogas, ethanol, compost etc. In standardizing and optimization of these processes, biochemical engineering concepts such as reaction rates, kinetics, design of reactors, transport phenomenon etc. play a major role. Based on physiological conditions of the process, biochemical conversion processes are classified into aerobic and anaerobic.

### **f. Biodiesel**

Biodiesel is a chemical process, by which vegetable oils can be converted into biodiesel. This is the best alternative to diesel and can be used in engines and automobiles. The raw vegetable oils are subjected into chemical and thermal processes and by removing the by product (glycerol), biodiesel is segregated. The suitable crops for the production of biodiesel are oil bearing seeds producing trees such as Jatropha, Pongamia etc.

### **g). Advantages Of Renewable Energy**

- a) These sources of energy are renewable and there is no danger of depletion. These recur in nature and are inexhaustible.
- b) The power plants based on renewable sources of energy don't have any fuel cost and hence negligible running cost.
- c) Renewable are more site specific and are used for local processing and application. There is no need for transmission and distribution of power.
- d) Renewable have low energy density and more or less there is no pollution or ecological balance problem.
- e) Most of the devices and plants used with the renewable are simple in design and construction which are made from local materials, local skills and by local people. The use of renewable energy can help to save foreign exchange and generate local employment.
- f) The rural areas and remote villages can be better served with locally available renewable sources of energy. There will be huge savings from transporting fuels or transmitting electricity from long distances.

### **d) Green Technology**

Green technology can also refer to clean energy production, the use of alternative fuels, and technologies that are less harmful to the environment than fossil fuels. Many green technologies aim to reduce emissions of carbon dioxide and other greenhouse gases in order to prevent climate change.

Green tech refers to a type of technology that is considered environmentally friendly based on its production process or its supply chain. Green tech—an abbreviation of "green technology"—can also refer to clean energy production, the use of alternative fuels, and technologies that are less harmful to the environment than fossil fuels. Green technology encompasses a wide area of scientific research, including energy, atmospheric science. . Green technology is a term that describes a form of technology that is deemed eco-friendly due to its manufacturing process or supply chain. Green technology's mission is to protect the earth and, in some situations, also to undo previous environmental harm.

### **e) Types Of Green Technologies**

#### **a) Alternative energy**

In order to provide a viable alternative to fossil fuels, many businesses are seeking to engineer alternative sources of energy that do not generate atmospheric carbon. Solar and wind power are now among the most inexpensive sources of energy.

**b) Electric vehicles**

However, electric vehicles require a host of innovations in other spheres, such as high-capacity rechargeable batteries and charging infrastructure. In addition, the benefits of electric vehicles are limited by the fact that many power grids still rely on fossil fuels.

**c) Sustainable agriculture**

Farming and livestock have a substantial environmental footprint, from the high costs of land and water usage to the ecological consequences of pesticides, fertilizers, and animal waste. As a result, there are many opportunities for green technology in the area of agriculture. For example, organic farming techniques can reduce the damage due to soil exhaustion, innovations in cattle feed can reduce methane emissions, and meat substitutes can reduce the consumption of livestock.

**f) Recycling**

Recycling seeks to conserve scarce resources by reusing materials or finding sustainable substitutes. While plastic, glass, paper, and metal waste are the most familiar forms of recycling, more sophisticated operations can be used to recover expensive raw materials from e-waste or automobile parts.

**g) Carbon capture**

Carbon capture refers to a group of experimental technologies that seek to remove and sequester greenhouse gases, either at the point of combustion or from the atmosphere. This technology has been heavily promoted by the fossil fuel industry, although it has yet to deliver on those expectations.

**Objectives Of The Study**

The main objectives of the study are as follows.

1. To study the concept of renewable energy..
2. To study the concept of green technology.
3. To study the various ways to promote renewable energy and green technologies.

**Methodology Of Study**

The data which is collected in this paper is secondary in nature. In this paper exploratory or descriptive method is used. The data is collected from various journals, newspapers, research papers, magazines, books, and use of internet.

**Significance Of The Study**

The main significant of the study is study the concept of renewable energy and green technologies as well as various ways to promote Renewable energy and green technologies.

**Limitations Of The Study**

In this study the original data is not used. Here only secondary data is used. Time limitation is one of the major limitations of this study.

**Promotion Of Renewable Energy And Green Technologies**

One of the most effective ways to promote renewable energy and green technology is to create a supportive policy and regulatory environment that favors its development and deployment. This can include setting ambitious targets and standards for renewable energy share, carbon emissions reduction, and energy efficiency. It can also involve providing subsidies, tax credits, feed-in tariffs, or net metering schemes that make renewable energy more affordable and competitive.

Additionally, it can require phasing out fossil fuel subsidies, imposing carbon taxes, or implementing cap-and-trade systems that reflect the true environmental and social costs of conventional energy sources.

#### **a). Education and awareness**

The most important way to promote renewable energy and green technology is to raise awareness and educate the public and the stakeholders about its benefits and potential. This can include providing accurate and reliable information, data, and examples of successful renewable energy projects and initiatives. It can also involve engaging and empowering the communities, consumers, and investors to participate in the energy transition and decision-making process. Furthermore, it can foster a culture of innovation and entrepreneurship that supports the development and dissemination of renewable energy technologies and solutions

#### **b). Innovation and research**

A third key way to promote renewable energy and green technology is to invest in innovation and research that can improve its performance, efficiency, reliability, and integration. This can include developing new and advanced renewable energy technologies, such as offshore wind, floating solar, or concentrated solar power. It can also involve enhancing the existing renewable energy technologies, such as improving the storage, transmission, and distribution of electricity from variable sources. Moreover, it can support the creation and adoption of smart grids, micro grids, or hybrid systems that can optimize the use and management of renewable energy resources.

#### **c).Incentives and rewards**

A fourth essential way to promote renewable energy and green technology is to offer incentives and rewards that can motivate and attract more users and producers of renewable energy. This can include providing financial and non-financial benefits, such as grants, loans, prizes, or recognition. It can also involve creating and expanding the markets and opportunities for renewable energy products and services, such as green certificates, carbon credits, or green bonds. Additionally, it can encourage and facilitate the collaboration and partnership among the different actors and sectors involved in the renewable energy value chain, such as governments, utilities, businesses, NGOs, or academia.

#### **d).Behavior and lifestyle**

A fifth crucial way to promote renewable energy and green technology is to influence and change the behavior and lifestyle of the energy consumers and producers. This can include promoting and adopting energy-saving and energy-efficient practices and habits, such as switching off appliances, using smart meters, or upgrading insulation. It can also involve increasing and diversifying the demand and supply of renewable energy sources, such as installing rooftop solar panels, buying green electricity, or joining a renewable energy cooperative. Furthermore, it can inspire and educate the next generation of energy leaders and innovators, such as teaching and learning about renewable energy in schools, colleges, or online platforms.

#### **e).Challenges and solutions**

A sixth and final way to promote renewable energy and green technology is to acknowledge and address the challenges and barriers that hinder its growth and development. This can include identifying and overcoming the technical, economic, social, and political obstacles that limit the access and availability of renewable energy resources and technologies. It can also involve finding and implementing the best practices and solutions that can enhance the quality and sustainability of renewable energy projects and programs. Moreover, it can involve learning and sharing the lessons and experiences from the successes and failures of renewable energy initiatives around the world.

### **Findings Of The Study**

The main purpose of this study is to promote sustainability and minimize environmental degradation through innovative technical solutions. Renewable energy and Green technologies have drawn significant interest and investments in recent years, driven by increasing concern over climate change and the depletion of natural resources around the world. Green tech involves the creation and use of alternative fuels and less-harmful

technologies, aiming to protect the environment, repair environmental damage, and conserve the Earth's natural resources. One of the most appealing facets of green technology is that it consents individuals to live their life in a more environmentally friendly manner.

The goal is to fulfil current demands without sacrificing quality, so the focus is now on creating materials that can be entirely recycled or re-used. As one of the major priorities of renewable energy and green technology, efforts are being taken to minimize waste and emissions by shifting manufacturing and usage habits. Alternative solutions must be developed to determine more health disruption, as well as the benefits and drawbacks of green technology. Green technology spans a wide range of appliances, making it possible to be more environmentally conscious in daily life. In this research paper we study about various promotional ways used to promote renewable energy and green technology.

## Conclusion

The utility of renewable energy and green technology also minimizes the dependency on fossil fuels in the era of global development. This review highlights the various forms of green energy that we have at our disposal. Though we look at green energy as an alternative source of energy for us in the future, in reality, it might be the only source of energy left for us to explore. The utility of renewable energy and green technology also minimizes the dependency on fossil fuels in the era of global development. Green technology encompasses a vast variety of gadgets, allowing people to be more concerned about the environment in their real experiences. Hence in future this technology has always come up with better solutions and implemented in very efficient ways. The shift to green technology should help to stabilize global movements toward improving people's well-being and social prosperity thereby reducing environmental concerns. we suggest how innovations can be made more efficient by incorporating renewable components, preventing environmental deterioration and converting them to new technologies, ensuring a unpolluted planet for future groups.

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# IMPLEMENTATION E-GOVERNANCE AND SMART CITY INITIATIVES IN INDIA

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## Abstract

This paper explores the implementation of e-governance and Smart City initiatives as pivotal strategies for urban development and governance. E-governance facilitates efficient, transparent, and accountable governance through the integration of information and communication technologies, while Smart City initiatives leverage these technologies to enhance the quality of life for citizens. The paper delves into the theoretical frameworks, technological foundations, challenges, case studies, and best practices associated with these initiatives. It concludes with recommendations for policymakers to effectively implement e-governance and Smart City projects. Despite the popular appeal of Public-Private Partnerships (PPPs), urban administrations must judiciously evaluate available options using a method such as Multi-Attribute Utility Analysis. This approach involves prioritizing assessment criteria tailored for smart city projects and assessment of procurement options in fulfilling these criteria. A questionnaire survey that engages both public and private sector practitioners. The methodology of MAUA is used for analysis. The findings highlight that not all projects are ideally suited for PPPs, indicating potential disparities between public sector and private sector viewpoints. This underscores the importance of reaching a compromise that accommodates the preferences of both sectors in decision-making. This smart city study has been conducted by synthesizing existing literature and government reports, conducting surveys, analysing the findings, and suggesting modifications based on them.

## Introduction

Urbanization is accelerating globally, with over 55% of the world's population residing in urban areas. This rapid urbanization presents both challenges and opportunities for city governments. E-governance and Smart City initiatives have emerged as innovative solutions to address these challenges, enhancing the efficiency, transparency, and responsiveness of urban governance.

## Background

E-governance refers to the use of ICT to improve the delivery of government services, engage citizens, and make government operations more efficient and transparent. Smart City initiatives extend this concept by integrating advanced technologies to optimize urban infrastructure and services, aiming to improve the overall quality of life for citizens.

## Objectives

- To analyze the role of e-governance in modern urban administration.
- To explore the components and technologies underlying Smart City initiatives.
- To assess the challenges and best practices in implementing these initiatives.
- To provide recommendations for successful implementation.

## Literature Review

The current wave of urbanization is fundamentally transforming societies worldwide, with more than half of the global population now living in urban regions, and forecasts suggest this figure will exceed six billion by 2050. This swift urban growth presents cities with a myriad of opportunities and obstacles. Urban areas embracing technologies to address urban challenges are termed "smart cities." However, smart cities are not just technological progress but are also seen as a strategy to address urban issues and promote innovation within urban landscapes. Even as smart cities gain traction, a consensus on their definition remains elusive, with some regarding them as

transient phenomena. However, a smart city is "an interconnected and multifaceted system designed to tackle urban issues through cooperative endeavours among diverse stakeholders". The fusion of smart technology and social innovations is deemed essential for the advancement of smart cities. The beginning of smart cities has sparked a surge in the field of research, with various global case studies underscoring the multifaceted nature of smart city endeavors, their goals, and the intricate power dynamics among stakeholders. Nevertheless, establishing a smart city demands substantial resources, rendering it unfeasible for any single entity to single-handedly provide all required resources. Studies reveal that merely 16% of cities worldwide possess the financial capacity to autonomously finance smart city initiatives. Smart city evolution commonly encompasses diverse undertakings such as bike-sharing platforms, initiatives for open data, and e-government portals, rendering it a multifaceted process in technology dissemination situated in a dynamic interface intersecting the public sector and the private sector. Consequently, involving the private sector in the advancement of smart cities has emerged as a widespread approach to leverage supplementary expertise, distribute risks, and introduce inventive solutions. Public-Private Partnerships (PPPs) are pivotal in fostering such collaboration. Nevertheless, the concept of PPPs in smart cities remains nebulous and subject to intense debate. Despite their widespread adoption, there is an urgent need to clarify insights drawn from existing literature, which predominantly relies on case studies. To scrutinize the current landscape of PPPs in smart cities in India, assess emerging themes of interest, and contribute to both academic discourse and practical implementation, this study has been conducted. Through a thorough literature review and data analysis of existing studies, this research endeavours to offer insights and remedies for shaping future research agendas in the realm of cross-sector collaboration and the development of smart cities.

### Methodology

The research methodology begins with gathering data from relevant government and private organizations. This is followed by collecting data through questionnaires from citizens residing in smart cities. Subsequently, the collected data is analysed and categorized. Finally, based on the analysis, recommendations are formulated for enhancing Public-Private Partnerships (PPPs) in delivering development projects.

### E-Governance Models

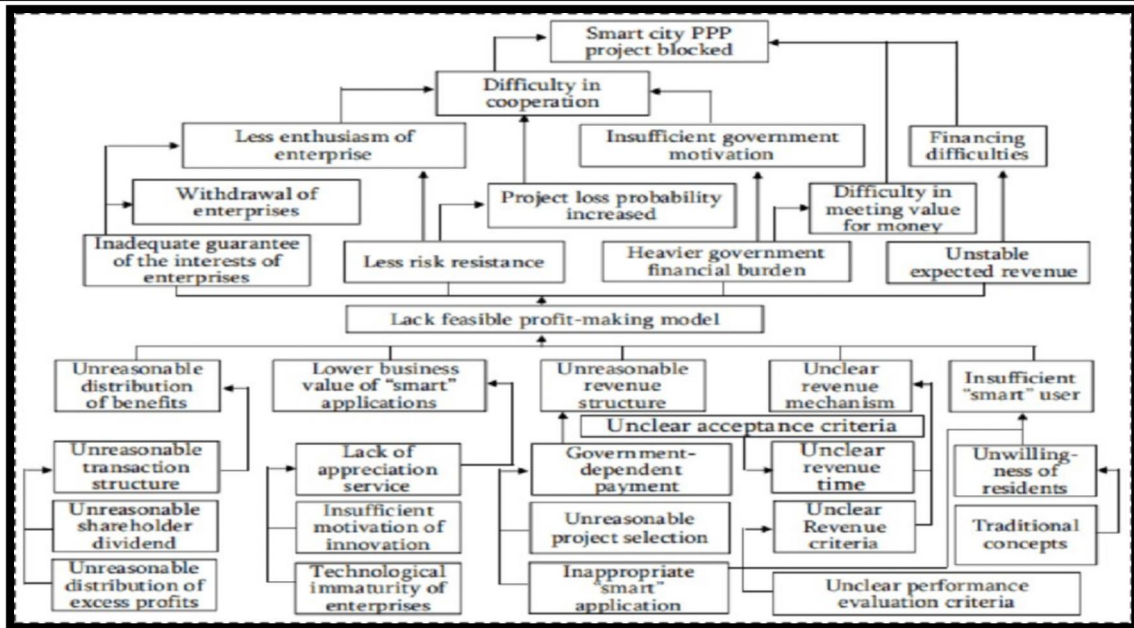
E-governance can be categorized into several models, including:

- **Government to Citizen (G2C):** Enhances public access to government services.
- **Government to Business (G2B):** Facilitates business interactions with the government.
- **Government to Government (G2G):** Streamlines inter-governmental operations.
- **Government to Employees (G2E):** Improves internal government processes.

### Smart City Conceptualization

A Smart City integrates multiple ICT solutions to manage a city's assets. Key components include:

- **Smart Infrastructure:** Intelligent management of utilities, transportation, and public services.
- **Smart Governance:** Utilizing data and digital tools to enhance decision-making.
- **Smart Economy:** Fostering innovation and sustainable economic growth.
- **Smart Environment:** Promoting sustainability through efficient resource use.
- **Smart Living:** Improving quality of life through healthcare, education, and safety services.
- **Smart Mobility:** Efficient and sustainable transportation systems.



## Technological Foundations

### ICT in E-Governance

The backbone of e-governance is ICT, which enables:

- **Digital Platforms:** For service delivery and citizen engagement.
- **Data Analytics:** For informed decision-making.
- **Cloud Computing:** For scalable and accessible government services.
- **Cyber security:** For protecting sensitive data and ensuring privacy.

### Technologies in Smart Cities

Key technologies driving Smart City initiatives include:

- **Internet of Things:** Connecting devices to gather and analyze data.
- **Artificial Intelligence:** For predictive analytics and automation.
- **Big Data:** To analyze vast amounts of information for better decision-making.
- **5G Networks:** Enabling high-speed data transmission and real-time services.
- **Block chain:** For secure and transparent transactions.

### Challenges in Implementation

#### Technical Challenges

- **Integration of Legacy Systems:** Existing infrastructure may not support new technologies.
- **Interoperability:** Ensuring different systems and technologies work together.
- **Data Privacy and Security:** Protecting citizen data from breaches and misuse.
- **Scalability:** Managing growing urban populations with evolving technologies.

## Organizational Challenges

- **Change Management:** Transitioning from traditional to digital processes.
- **Capacity Building:** Training government employees to use new technologies.
- **Resistance to Change:** Overcoming reluctance among stakeholders.
- **Funding:** Securing adequate resources for technology investments.

## Societal Challenges

- **Digital Divide:** Ensuring equitable access to digital services across all demographics.
- **Public Awareness and Engagement:** Educating citizens about new services.
- **Trust and Transparency:** Building trust in digital government services.

## Case Studies

### Singapore: A Leading Smart City

Singapore is often cited as a model Smart City, with its comprehensive Smart Nation initiative. The country has integrated ICT into every aspect of urban life, from transport and healthcare to housing and governance. The use of AI, IoT, and big data has enabled the city-state to optimize resource use, reduce congestion, and improve public services.

### Estonia: Pioneer in E-Governance

Estonia's e-governance framework is one of the most advanced in the world. The country has implemented a digital identity system that allows citizens to access a wide range of government services online, from voting to tax filing. The success of Estonia's e-governance is attributed to strong political will, a robust legal framework, and a focus on cybersecurity.

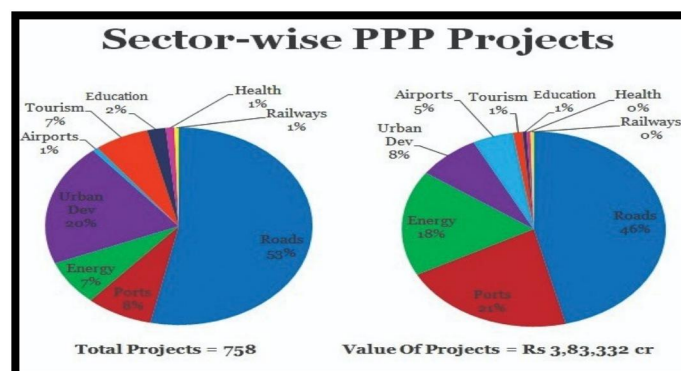
### India: Smart Cities Mission

India's Smart Cities Mission aims to develop 100 smart cities across the country. The initiative focuses on improving urban infrastructure, ensuring sustainable development, and enhancing citizen services. Despite the challenges of scale, the mission has made significant progress in areas such as smart governance, waste management, and digital infrastructure.

## Best Practices

### Public-Private Partnerships

Collaboration between government, private sector, and academia is crucial for successful implementation. Public-Private Partnerships (PPPs) can drive innovation, share risks, and provide the necessary investment for large-scale projects.



## Citizen-Centric Approach

Involving citizens in the planning and implementation process ensures that the initiatives meet their needs and gain public support. Regular feedback mechanisms and participatory governance can enhance the effectiveness of e-governance and Smart City projects.

## Phased Implementation

Implementing initiatives in phases allows for testing, feedback, and adjustment before full-scale deployment. Pilot projects can serve as learning platforms, reducing the risk of large-scale failures.

## Focus on Cyber security

Robust cyber security measures are essential to protect sensitive data and maintain public trust. Governments must invest in advanced security technologies and regularly update their systems to counter emerging threats.

## Recommendations

- **Policy Framework:** Governments should establish a clear and comprehensive policy framework that supports the integration of e-governance and Smart City initiatives.
- **Capacity Building:** Continuous training and capacity building for government employees and citizens are essential to ensure effective use of new technologies.
- **Sustainable Funding Models:** Governments should explore innovative funding models, such as PPPs, to ensure sustainable financing of Smart City and e-governance projects.
- **Inclusive Design:** Initiatives should be designed to be inclusive, addressing the needs of all citizens, including marginalized and vulnerable groups.
- **Regular Monitoring and Evaluation:** Continuous monitoring and evaluation of projects can help identify issues early and allow for timely interventions.

## Conclusion

E-governance and Smart City initiatives are transformative strategies that can significantly enhance urban governance and improve the quality of life for citizens. However, their successful implementation requires careful planning, strong political will, and collaboration among various stakeholders. By addressing the challenges and adopting best practices, cities around the world can harness the potential of technology to create more sustainable, efficient, and livable urban environments. Smart city development benefits from advances in technology, particularly in ICT. However, before initiating such projects, it's essential to evaluate their costs and benefits, as well as consider where the funding will come from. Public-Private Partnerships (PPPs) have emerged as viable options for implementing smart city initiatives, especially when there is input from citizens through consultations. This study delves into identifying factors that make PPPs suitable for smart city projects through a thorough literature review and survey weighting process, which revealed similar rankings across sectors. Additionally, a focus group was convened to assess utility values for procurement options across various pilot projects, shedding light on sector preferences. The study also introduces the Multi-Attribute Utility Analysis as a method for objectively evaluating different procurement approaches, showing potential for compromise between the public and private sectors. While PPPs show promise, their suitability varies depending on the specific characteristics of each project. Therefore, further research, including citizen involvement, is necessary for informed decision-making in the realm of smart city development.

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## INCLUSIVE FINANCIAL SYSTEMS: IMPORTANCE AND BARRIERS

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### Abstract

Inclusive financial systems are crucial for fostering economic empowerment, especially in developing economies. These systems ensure that all segments of society, particularly the marginalized and low-income groups, have access to financial services that are affordable and appropriate to their needs. By promoting financial inclusion, economies can drive growth, reduce poverty, and promote economic equality. This article explores the concept of inclusive financial systems, their importance for economic empowerment, and the barriers to achieving financial inclusion. It also examines successful case studies and the role of technology in enhancing financial inclusion. The article concludes with recommendations for policymakers, financial institutions, and stakeholders to create a more inclusive financial environment.

**Keywords:-** Inclusive financial systems, Economic empowerment

**Research Methodology:-** This Paper is based on secondary data which is collected from various Books, Journals, News Papers, Websites etc.

### Introduction

Financial systems are the backbone of any economy, serving as the conduits for capital flows, investments, savings, and consumption. However, not everyone has equal access to these systems. Financial exclusion, particularly in developing countries, has been a significant barrier to economic development and empowerment. Inclusive financial systems aim to address these disparities by ensuring that financial services are accessible to all individuals, regardless of their socio-economic status, geographic location, or gender.

Inclusive financial systems are not just about providing access to financial services but also about ensuring that these services are affordable, reliable, and appropriate to the needs of diverse populations. Financial inclusion is a critical enabler of economic empowerment as it allows individuals and businesses to invest, save, and insure against risks, thereby improving their livelihoods and contributing to economic growth.

This article delves into the components of inclusive financial systems, the barriers to financial inclusion, and the role of various stakeholders in promoting financial inclusion. The discussion is supported by a review of some relevant case studies from around the world.

### Concept of Financial Inclusion

Financial inclusion refers to the process of ensuring access to financial services, such as banking, credit, insurance, and investment opportunities, for all individuals, especially those who are traditionally excluded from the financial system. According to the World Bank, financial inclusion is a key driver of economic growth and poverty reduction. It enables individuals to participate more fully in the economy, increases their ability to save and invest, and provides them with tools to manage financial risks.

### Importance of Inclusive Financial Systems

Inclusive financial systems contribute to economic empowerment in several ways:

1. **Poverty Reduction:** By providing low-income individuals with access to financial services, inclusive financial systems help reduce poverty. Access to savings, credit, and insurance can enable poor households to invest in education, health, and businesses, leading to improved living standards.
2. **Economic Growth:** Financial inclusion drives economic growth by mobilizing savings, facilitating investments, and enabling the efficient allocation of resources. When more people have access to financial services, it leads to increased economic activity and productivity.

3. **Gender Equality:** Women, who are often disproportionately excluded from financial systems, can benefit significantly from financial inclusion. Access to financial services empowers women by giving them control over their finances, enabling them to invest in their businesses and families.
4. **Social Inclusion:** Financial inclusion fosters social inclusion by providing marginalized groups with opportunities to participate in the formal economy. This, in turn, reduces inequality and promotes social cohesion.

### Barriers to Financial Inclusion

Despite the benefits, several barriers hinder the achievement of inclusive financial systems:

1. **Geographic Barriers:** In many developing countries, financial services are concentrated in urban areas, leaving rural populations underserved. The lack of physical infrastructure, such as banks and ATMs, in remote areas makes it difficult for people to access financial services.
2. **Economic Barriers:** High levels of poverty and unemployment limit individuals' ability to participate in the financial system. The cost of financial services, including account fees and interest rates, can be prohibitive for low-income individuals.
3. **Regulatory Barriers:** Stringent regulations, such as strict identification requirements, can exclude individuals without proper documentation from accessing financial services. In addition, the lack of consumer protection regulations can discourage people from using financial services.
4. **Cultural Barriers:** Social norms and cultural practices can also hinder financial inclusion. For example, in some cultures, women may be discouraged from managing finances or engaging in economic activities, leading to their exclusion from the financial system.
5. **Technological Barriers:** While technology has the potential to enhance financial inclusion, the digital divide remains a significant barrier. Limited access to the internet, mobile devices, and digital literacy can prevent people from using digital financial services.

### Case Studies

Several countries have made significant strides in promoting financial inclusion through innovative approaches and policies:

1. **Kenya – Mobile Money Revolution:** Kenya's mobile money platform, M-Pesa, has been a game-changer in promoting financial inclusion. Launched in 2007, M-Pesa allows users to perform financial transactions using their mobile phones. The service has brought millions of previously unbanked individuals into the financial system, particularly in rural areas.
2. **India – Jan Dhan Yojana:** Launched in 2014, India's Pradhan Mantri Jan Dhan Yojana (PMJDY) is one of the world's largest financial inclusion initiatives. The program aims to provide every household with access to a bank account, credit, insurance, and pension services. By the end of 2020, the program had successfully opened over 400 million bank accounts, many of which belonged to previously unbanked individuals.
3. **Mexico – Financial Inclusion Strategy:** Mexico's National Financial Inclusion Strategy, launched in 2016, focuses on improving financial literacy, expanding access to financial services in rural areas, and promoting the use of digital financial services. The strategy has led to significant improvements in financial inclusion, particularly among women and low-income groups.

### The Role of Technology in Financial Inclusion

Technology plays a crucial role in enhancing financial inclusion. Digital financial services, such as mobile banking, digital wallets, and online lending platforms, have the potential to reach underserved populations at a lower cost than traditional banking services. The proliferation of mobile phones and internet access has enabled millions of people in developing countries to access financial services for the first time.

1. **Mobile Banking:** Mobile banking services, such as Kenya's M-Pesa, have revolutionized the way people access financial services. These services allow users to deposit, withdraw, transfer money, pay bills, and access credit using their mobile phones.
2. **Digital Wallets:** Digital wallets, such as PayPal and Alipay, provide users with a convenient and secure way to store and transfer money. They have been particularly successful in reaching young and tech-savvy populations.
3. **Online Lending Platforms:** Online lending platforms, such as Kiva and Lending Club, connect borrowers with lenders through the internet, bypassing traditional banks. These platforms have made it easier for small businesses and individuals with limited credit history to access loans.
4. **Block chain Technology:** Block chain technology has the potential to further enhance financial inclusion by providing secure and transparent financial transactions. It can also reduce the cost of cross-border payments and remittances, which are critical sources of income for many low-income households.

### Challenges and Risks

While technology offers significant opportunities for promoting financial inclusion, it also presents challenges and risks:

1. **Cyber security Risks:** The increasing use of digital financial services has led to a rise in cyber security threats, such as hacking and identity theft. Protecting users' data and ensuring the security of financial transactions are critical for maintaining trust in digital financial services.
2. **Digital Divide:** The digital divide, particularly in terms of access to the internet and digital literacy, remains a significant barrier to financial inclusion. Efforts to promote digital financial services must be accompanied by initiatives to improve digital infrastructure and literacy.
3. **Regulatory Challenges:** The rapid pace of technological innovation in the financial sector has outpaced regulatory frameworks in many countries. Policymakers must strike a balance between encouraging innovation and ensuring consumer protection and financial stability.

### Conclusion

Creating inclusive financial systems is essential for economic empowerment, particularly in developing countries. Financial inclusion enables individuals and businesses to participate more fully in the economy, leading to poverty reduction, economic growth, and social inclusion. While significant progress has been made in promoting financial inclusion, barriers such as geographic, economic, regulatory, cultural, and technological challenges remain.

Technology has played a pivotal role in advancing financial inclusion, particularly through mobile banking, digital wallets, and online lending platforms. However, to fully realize the potential of inclusive financial systems, it is necessary to address the challenges and risks associated with digital financial services.

Policymakers, financial institutions, and stakeholders must work together to create a more inclusive financial environment. This includes developing regulatory frameworks that promote innovation while protecting consumers, investing in digital infrastructure and literacy, and designing financial products that meet the needs of diverse populations.

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## FOSTERING ENTREPRENEURSHIP AND START-UP ECOSYSTEM FOR SELF-RELIANT INDIA

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### Introduction:

There has never been a more important time to pursue economic self-sufficiency and resilience in the quickly changing global environment. In order for India—a country with a diverse population and great economic potential—to realize its goal of being self-sufficient, it is essential to promote entrepreneurship and a thriving startup ecosystem. As India sets itself up to become a major player in the world economy, there is a greater emphasis than ever on supporting domestic innovation and business. As the primary force behind job creation, technical advancement, and sustainable growth, entrepreneurship is the cornerstone of economic dynamism. In this situation, it's critical to foster an atmosphere that supports the expansion of startups. This entails not just providing new companies with the infrastructure and resources they need, but also cultivating an environment that values creativity and taking calculated risks.

A Self-Reliant India hopes to meet its demands at home and maintain its competitiveness in the international arena by utilizing its skill and resources. India can promote inclusive growth, diversify its economy, and lessen its reliance on outside funding by fostering start-ups and entrepreneurial endeavors. This strategy seeks to address both local and global concerns by promoting innovation in addition to achieving economic self-sufficiency.

In short, achieving the goal of an independent India requires promoting entrepreneurship and a strong start-up ecosystem. Building a robust and vibrant economy is a multifaceted endeavor that calls for cooperation between the public and private sectors as well as academic institutions. India may realize its full potential through these coordinated efforts, opening the door for long-term sustainable growth and self-sufficiency.

### Objectives of the study:

1. To assess the impact of government policies and initiatives, such as the "Startup India" campaign and various funding schemes, on the development of the start-up ecosystem in India.
2. To identify the primary challenges faced by start-ups in India, including regulatory hurdles, access to finance, and talent shortages, and to analyze their impact on the growth and sustainability of new ventures.
3. To examine the role of start-ups in contributing to India's economic self-reliance, including their impact on job creation, innovation, and the reduction of dependency on foreign resources.

### Review of Related Literature:

#### 1. Government Policies and Initiatives

##### A. Startup India Campaign

The "Startup India" initiative launched in January 2016 has been a significant policy shift aimed at creating a conducive environment for start-ups. According to the Department for Promotion of Industry and Internal Trade (DPIIT), the campaign includes measures such as tax benefits, easier compliance norms, and access to funding. Research by **Bhardwaj et al. (2019)** indicates that these measures have led to a noticeable increase in start-up registrations and funding opportunities.

##### B. Financial Support and Incentives

Government-backed funding schemes like the Fund of Funds for Start-ups (FFS) have been critical in addressing the capital constraints faced by new ventures. **Sharma and Singh (2020)** discuss how these financial incentives have helped bridge the funding gap, particularly for early-stage start-ups, fostering a more robust entrepreneurial ecosystem.

## 2. Challenges Faced by Start-Ups

### A. Regulatory and Bureaucratic Hurdles

Despite progressive policies, regulatory and bureaucratic challenges remain significant obstacles. The work of **Sharma and Sharma (2021)** highlights that complex compliance requirements and slow bureaucratic processes often impede the growth of start-ups. Addressing these issues is crucial for a more supportive ecosystem.

### B. Access to Skilled Talent

Research by **Kapoor and Sinha (2022)** points to the scarcity of skilled talent as a critical challenge for Indian start-ups. The mismatch between industry needs and educational outcomes underscores the need for better alignment between educational institutions and entrepreneurial requirements.

## 3. Impact on Economic Self-Reliance

### A. Job Creation and Economic Growth

Studies by **Nair and Reddy (2019)** have shown that start-ups are significant drivers of job creation and innovation. By focusing on local problems and leveraging domestic resources, start-ups contribute to economic self-reliance and reduce dependency on foreign technology and goods.

### B. Enhancing Global Competitiveness

**Singh et al. (2020)** argues that fostering a vibrant start-up ecosystem can enhance India's global competitiveness. Successful start-ups not only address domestic needs but also position India as a hub for innovation and technology on the global stage.

## 4. Successful Case Studies

### A. Unicorn Start-ups

The rise of Indian unicorns such as Paytm, Zomato, and Byju's highlights the potential of a well-nurtured start-up ecosystem. Research by **Mukherjee and Das (2023)** examines these case studies to identify best practices and strategies that contributed to their success, offering valuable lessons for emerging ventures.

### B. Incubators and Accelerators

The role of incubators and accelerators, such as those run by NASSCOM and the Indian Angel Network, has been pivotal in supporting start-ups. According to research by **Gupta and Kapoor (2022)**, these organizations provide essential resources, mentorship, and networking opportunities that accelerate start-up growth and viability.

## 5. Future Directions and Recommendations

### A. Strengthening Support Mechanisms

Future research should focus on strengthening support mechanisms, including better regulatory frameworks and enhanced access to venture capital. Recommendations by **Sinha and Patel (2024)** suggest creating more sector-specific incubators and fostering collaborations between academia and industry to address skill gaps.

### B. Promoting Inclusive Growth

Promoting inclusive growth by supporting start-ups from diverse backgrounds and regions can further bolster economic self-reliance. The work of **Jain and Verma (2023)** emphasizes the importance of targeting underserved areas and marginalized communities to ensure equitable growth.

### Status of Start-up and Entrepreneurship in India:

The start-up and entrepreneurship ecosystem in India has been rapidly evolving and expanding in recent years. Here's a brief summary of the current status:

- **Development and Advancement:** India is home to a thriving beginning up biological system, with great many new pursuits arising every year. The nation has turned into a critical center point for development, especially in areas like innovation, fintech, wellbeing tech, and web-based business.
- **Government Support:** The Indian government has acquainted different drives with reinforce business venture, for example, the Startup India program, which offers impetuses like tax breaks, more straightforward



consistence standards, and financing support. The Atal Development Mission and Public Development Chamber likewise plan to cultivate a culture of advancement.

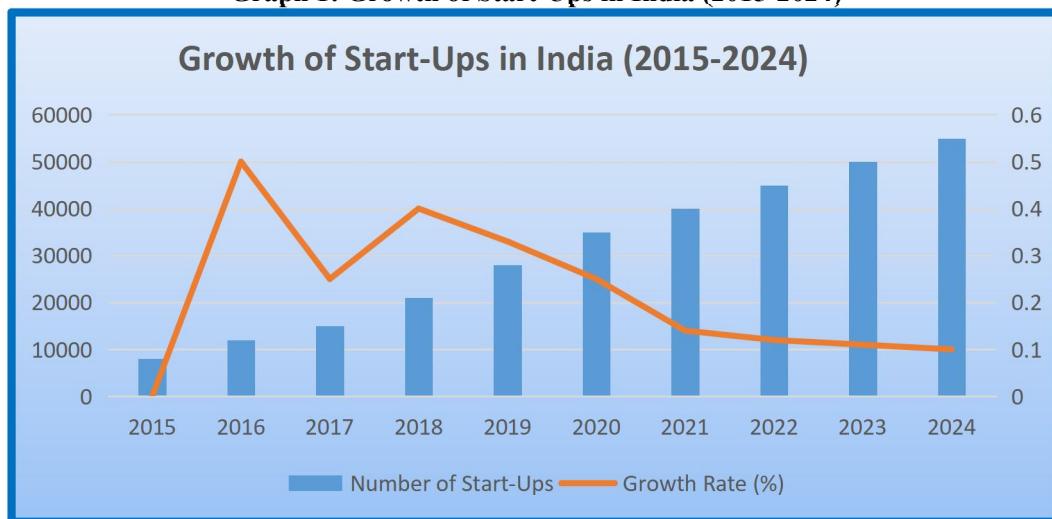
- **Financing and Speculation:** Interest in Indian new companies has seen significant development, with critical interest from both homegrown and global financial speculators. Significant urban communities like Bengaluru, Mumbai, and Delhi are driving the speculation inundation, in spite of the fact that level 2 and level 3 urban communities are additionally turning out to be progressively alluring for new companies.
- **Challenges:** In spite of the positive turns of events, Indian new businesses face difficulties like administrative obstacles, subsidizing access, and foundation limitations. Moreover, the serious scene can be extraordinary, expecting organizations to ceaselessly enhance and adjust.
- **Ability and Training:** India benefits from an enormous pool of talented experts and a developing accentuation on pioneering schooling. Foundations and projects devoted to fire up brooding and business are progressively pervasive.
- **Examples of overcoming adversity:** India has delivered various effective new businesses and unicorns (organizations esteemed at more than \$1 billion), mirroring the developing development and capability of the biological system. Organizations like Flipkart, Paytm, and Zomato have earned global respect.

#### Start-Up Statistics

**Table 1: Number of Start-Ups in India (2015-2024)**

Year	Number of Start-Ups	Growth Rate (%)
2015	8000	-
2016	12000	50%
2017	15000	25%
2018	21000	40%
2019	28000	33%
2020	35000	25%
2021	40000	14%
2022	45000	12%
2023	50000	11%
2024	55000	10%

**Graph 1: Growth of Start-Ups in India (2015-2024)**

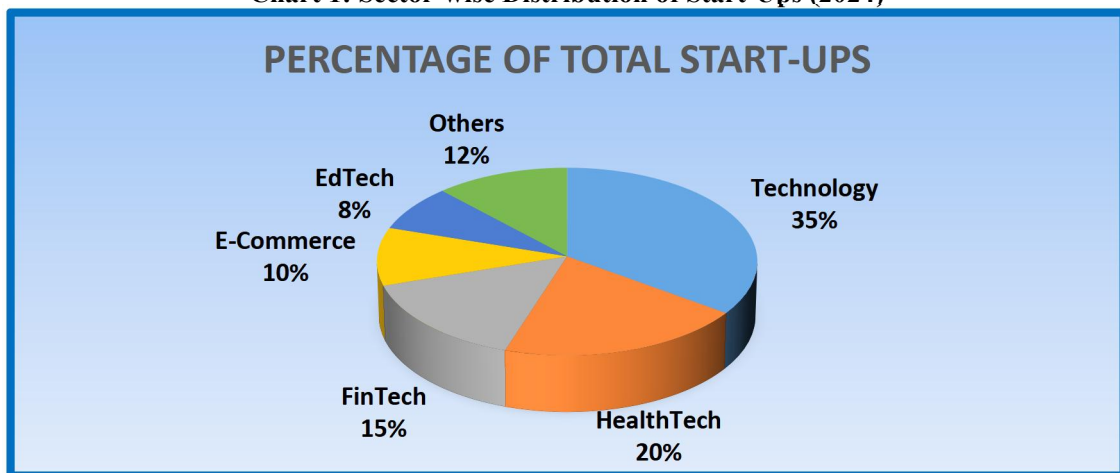


## Sector-wise Distribution

Table 2: Sector-wise Distribution of Start-Ups (2024)

Sector	Percentage of Total Start-Ups
Technology	35%
HealthTech	20%
FinTech	15%
E-Commerce	10%
EdTech	8%
Others	12%

Chart 1: Sector-wise Distribution of Start-Ups (2024)

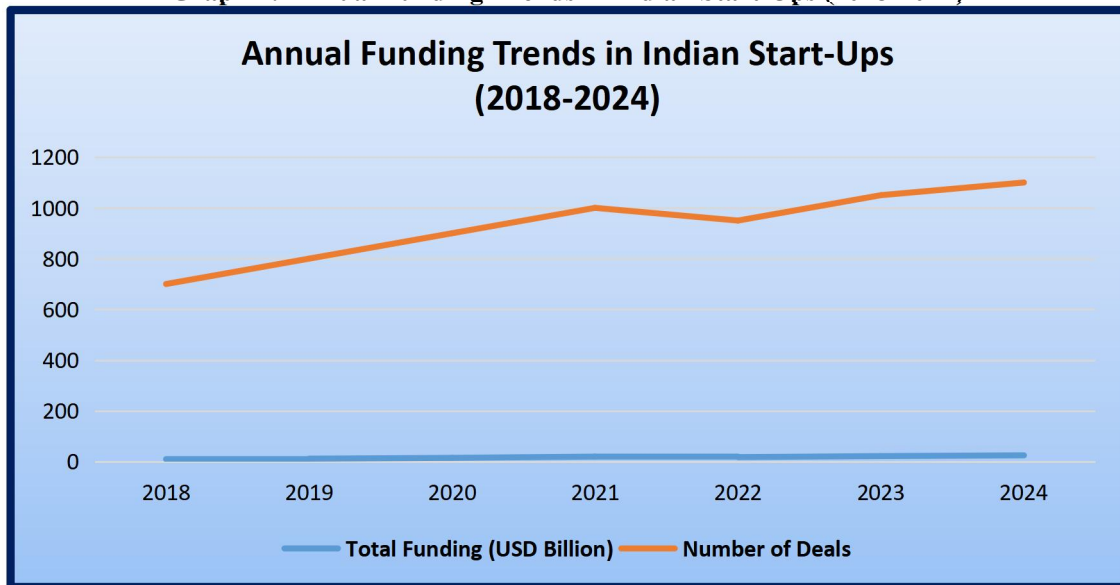


## Funding and Investment

Table 3: Total Funding in Indian Start-Ups (2018-2024)

Year	Total Funding (USD Billion)	Number of Deals
2018	10	700
2019	12	800
2020	15	900
2021	20	1000
2022	18	950
2023	22	1050
2024	25	1100

**Graph 2: Annual Funding Trends in Indian Start-Ups (2018-2024)**

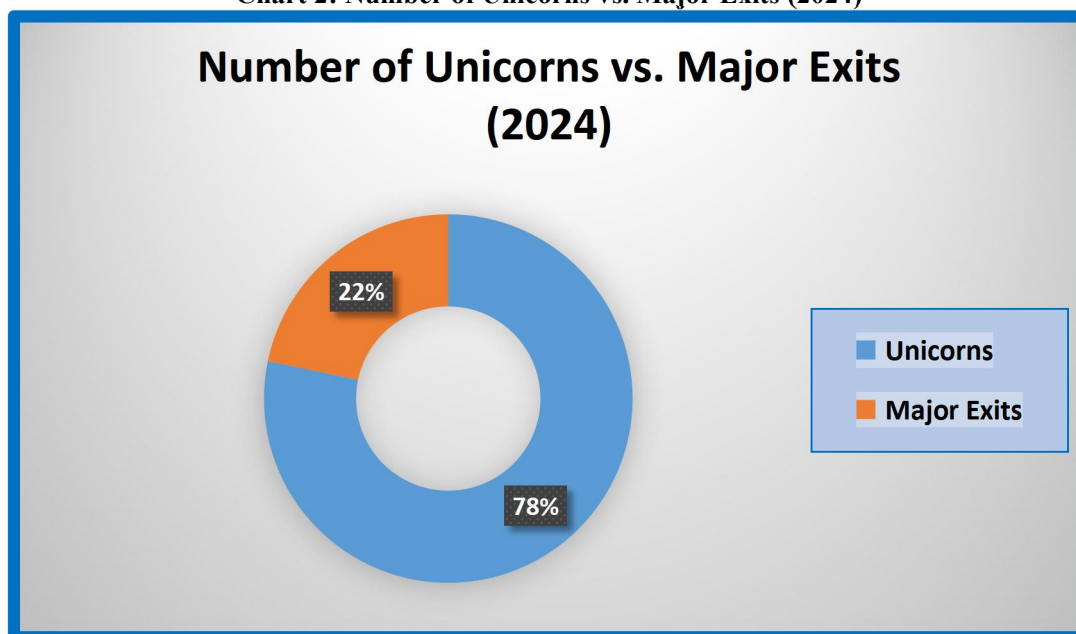


### 3.2 Unicorns and Exits

**Table 4: Number of Unicorns and Major Exits (2024)**

Type	Count
Unicorns	90
Major Exits	25

**Chart 2: Number of Unicorns vs. Major Exits (2024)**



### 4. Government Policies and Initiatives

The Government perceives the significance of new businesses in driving development and financial development. Different services and offices have acquainted plans with give monetary, infrastructural, and administrative help to

new businesses. The recorded plans cover areas like innovation, production, farming, medical care, and that's just the beginning.

Each plan's subtleties, including goals, qualification measures, application cycle, and advantages, are given. Kindly note that the data might change, so it's fitting to allude to the authority sites for the most recent updates.

The Focal Government Plans segment fills in as a significant asset for businessman to investigate government support measures. Influence these plans to move your startup towards progress and add to the lively startup biological system in India.

#### 4.1 Key Government Initiatives

**Table 5: Overview of Major Government Initiatives**

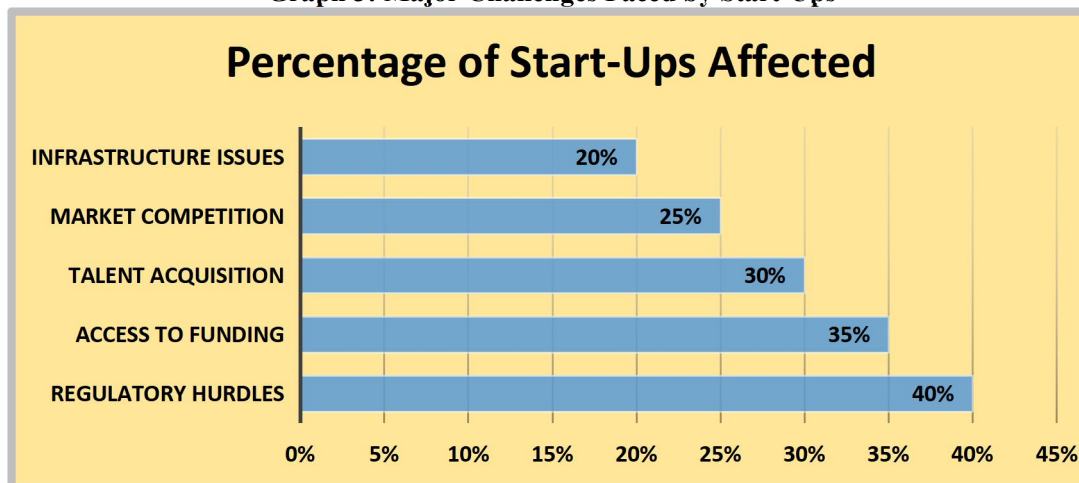
Initiative	Description	Year Launched
<b>Startup India</b>	Tax benefits, regulatory ease, and funding support	2016
<b>Atal Innovation Mission</b>	Promoting innovation and entrepreneurship in schools	2016
<b>Fund of Funds for Start-ups (FFS)</b>	Financial support for early-stage ventures	2016
<b>Digital India</b>	Digital infrastructure and skills development	2015

#### 5. Challenges Faced by Start-Ups

**Table 6: Major Challenges for Indian Start-Ups**

Challenge	Percentage of Start-Ups Affected
<b>Regulatory Hurdles</b>	40%
<b>Access to Funding</b>	35%
<b>Talent Acquisition</b>	30%
<b>Market Competition</b>	25%
<b>Infrastructure Issues</b>	20%

**Graph 3: Major Challenges Faced by Start-Ups**



## 6. Opportunities and Future Outlook

**Table 7: Emerging Trends in the Start-Up Ecosystem**

Trend	Description
Rise of Deep Tech	Growth in advanced technology sectors
Increased Foreign Investment	More international investors entering the market
Sustainability Focus	Greater emphasis on eco-friendly and sustainable solutions

### Conclusion:

In conclusion, fostering entrepreneurship and nurturing the start-up ecosystem is crucial for advancing a self-reliant India. By leveraging government initiatives, encouraging innovation, and addressing key challenges such as regulatory hurdles and funding gaps, India can accelerate its transformation into a global hub for entrepreneurship. Supportive infrastructure, educational programs, and strategic investments will play pivotal roles in empowering start-ups and entrepreneurs. Ultimately, a robust and dynamic start-up ecosystem will drive economic growth, create job opportunities, and contribute to India's vision of self-reliance and sustainable development.

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## NEP-2020: EDUCATION FOR EMPLOYMENTS

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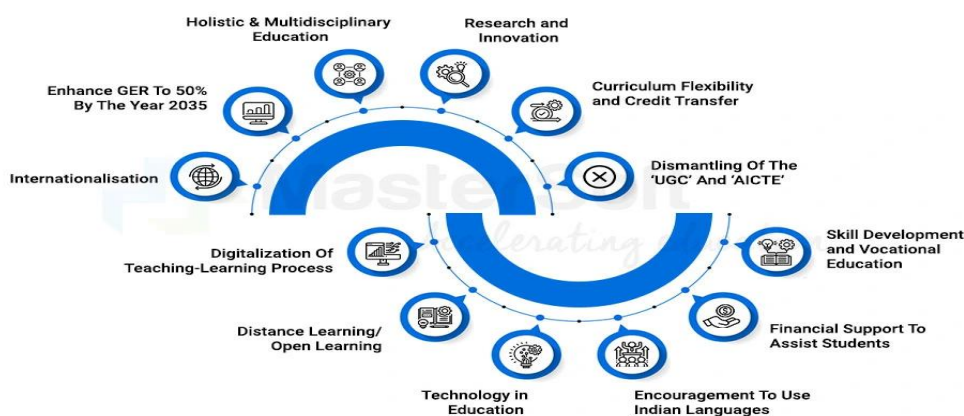
### Abstract:

Employment and employability have now become prime concerns for the world's second-largest higher education system in India. The Government of India adopted a new education policy, NEP, in July 2020 that is likely to transform the country's higher education system. This perspective chapter reviews and compares the current NEP 2020 with the previous two educational policies, 1968 and 1986, with regard to how far each policy could fulfill the employability goals. It also brings out the gaps between industry and academia envisioned in NEP 2020 and recommends transformational solutions to bridge those. Major findings are presented graphically to inform future employability policy and study. India's higher education system is the world's third-largest, and the University Grant Commission is its primary regulating body. Distance learning and open education are critical components of the Indian educational system. Indira Gandhi National Open University is the largest university in the world with more than 3.5 million students. All Indian institutes like IITS, IIMS, NITS, and Jawaharlal Nehru University have international recognition in terms of their standard of education. However, India has still not been able to produce any world-class university like Harvard or Oxford. The MHRD is of the view that another 30 million additional institutions can be added only through the contribution or involvement of the private sector, international education providers, increased distance learning, and an expansion of this online learning format.

**Keywords:** NEP 2020, Higher Education, Employments.

### Introduction:

Employment and employability are two critical concerns that require urgent redressal in India. Employability is usually described as knowledge, attitudes, and skills that enhance career prospects. It is considered an attribute that can include everything from obtaining a graduate job to the skills of career planning, job search, and interview skills. However, there are twinges of anxiety over concerns with employment among educated youth who are bereft of the requisite skills. The India Skills Report shows that in 2019, only 46.21% of the country's educated youth were found to be employable. So, this is a grave question to current policy. Direct job creation has been ineffective in addressing global concerns over unemployment. In fact, due to the harsh lockdown in the post-COVID periods, the employment rate in India surged to 23.5% in April and May; hence, the stated gaps in this system of education necessarily need to be worked on. The widening skill gap in India's higher education sector presents a huge problem for graduates, forcing them to struggle to adapt to changing industry standards, complicated surroundings, and stakeholder requirements.



Employers struggle to identify graduates with the necessary skill set, necessitating the development of a comprehensive National Education Policy (NEP) with a realistic vision as well as a macroeconomic and sectoral



policy roadmap. On July 29, 2020, the Ministry of Human Resource Development adopted the new NEP, which aims to expand job opportunities for young people and replaces the 34-year-old National Policy on Education. The policy also intends to make adjustments to the school and higher education structures. Researchers underline the need of using a multidisciplinary approach to curriculum design in order to build creative and adaptable learning environments. The requirements of the stakeholders, in terms of information and competence sought, are more than what the present Indian education system can deliver. Skills such as decision-making, solving problems, effective communication, and critical thinking are the ones which children need to acquire if they have to emerge successful. A full-fledged fully integrated platform could be made available with a comprehensive education system in order to fast-track the learning process. However, many voices have been raised regarding the present system of education not being able to deliver an employable workforce. With its provision for a complete and comprehensive educational system, the NEP 2020 can bridge this gap. The authors present a critical analysis of the NEP 2020 by comparing the elements of the three educational policies 1968, 1986, and 2020 to understand the Indian educational system more accurately.

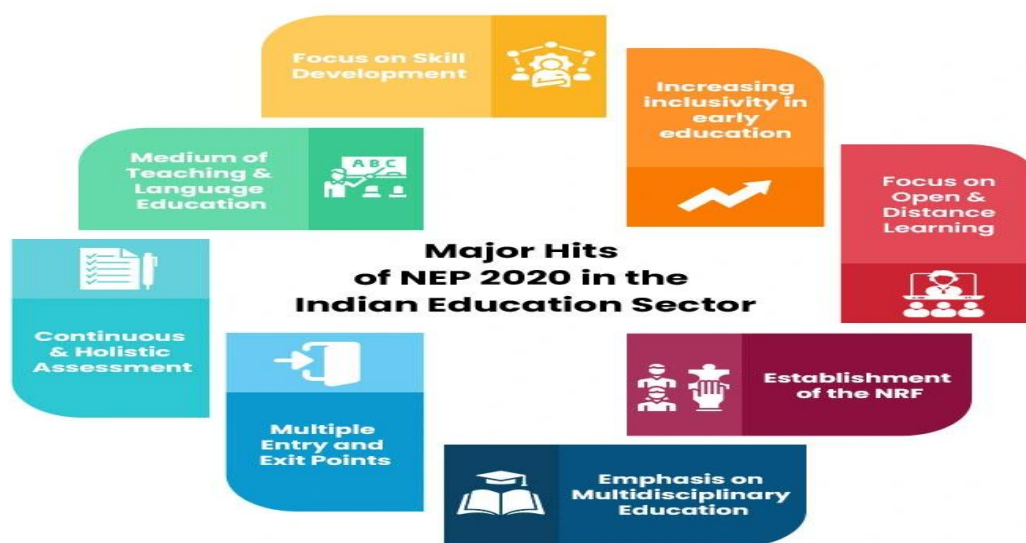
### Objective of the study:

- To study critically India's new Education Policy 2020
- To study the impact of NEP 2020 on higher education
- To study the Role of NEP 2020 in employability.

### Sources of data collection:

The data has been collected through the secondary sources. The secondary data collected from Internet, Journals, Newspapers, Articles, Magazines, Research papers etc.

### Highlights of NEP 2020:

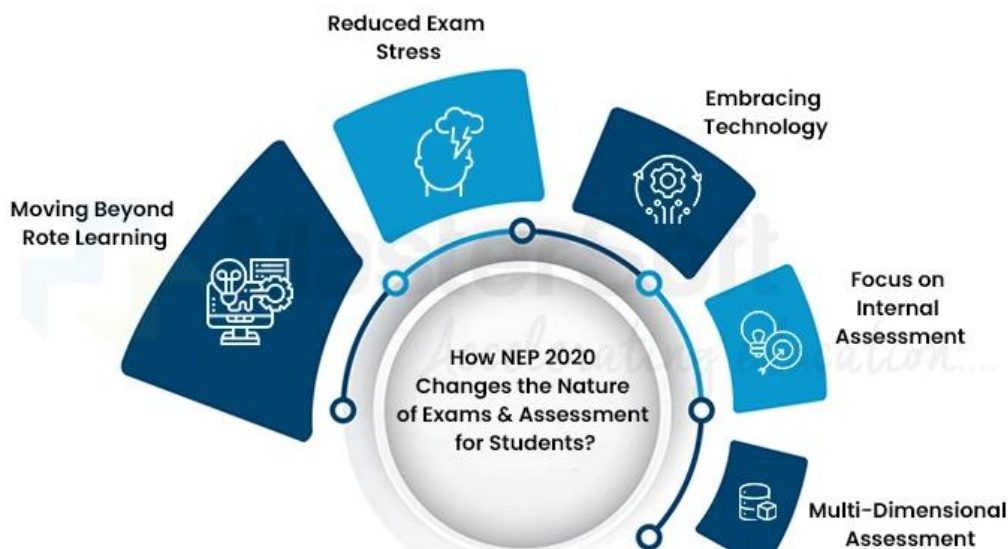


Being a liberal country for educational changes, India has now 845 universities and 40,000 education institutions causing HEIs, severe fragmentation, and large number of tiny heis. Education seems to be largely regarded as a private good conferring direct benefits upon the purchasers. It is also seen to have an advantage over the spillover effects. Their schools are technically free, yet they are ill-maintained and have grown into ghost schools. The NEP, or National Education Policy, aims at making quality education available to all Indians at an affordable price. The simple reason for the success of NEP 2020 is that it realized that there is a need for fewer rules and more autonomy, better methods of teaching, training of teachers, and more relevant tests. Still, on the private college's front, there lies no feasible method to collect finances to meet their students' demands. Implementation of the New Education Policy 2020 would be highly challenging at the state levels, particularly because education is a concurrent subject. ASER reports continuously show that rural India had been suffering from children having low reading and

arithmetic abilities, and the trends reveal that even 15 years ago, half of all students in Standard V could not read a Standard II level text. As a result of the Corona epidemic, this issue will be exaggerated even further, to the point that each additional year of school brings less value to successive cohorts of students. Strong roots in the early years are necessary if youngsters are to be able to "leap forward." The widespread phenomenon of "falling behind" these days is a consequence of failing to do the right things at the right time.

### Key Changes in Education System:

The entire system of education has undergone a sea change in India, with teaching starting from age three in the form of Anganwadi or kindergarten. Even the structure of education has been shifted to 5+3+3+4 from 10+2, which no longer draws a line between science, arts, and commerce. Students from the sixth grade onwards can gain exposure as well as social skills through internships or vocational education courses. It has also changed board exam formats to be more core topic knowledge evaluation-oriented rather than curriculum-oriented. Bringing back the model of a four-year undergraduate program. Major reforms aim to attain a Gross Enrollment Ratio of at least 50% by 2035. There will be a Common College Entrance Test for all graduate programs. The government will regulate college fees and there will be a different council dealing with the issue of fees.

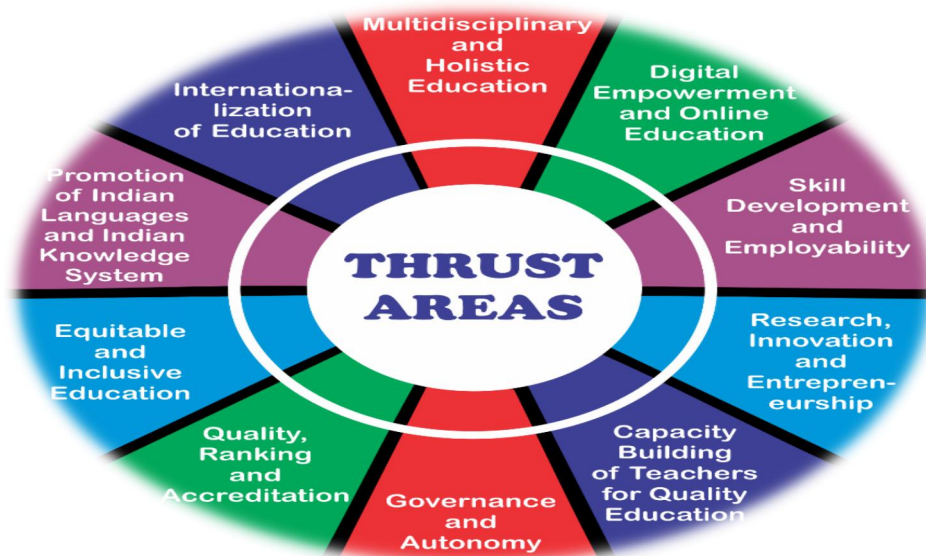


### Kinsey's 7 Framework model:

- Strategy
- Structure
- System
- Shared values
- Style
- Staff
- Skill

The NEP 2020 puts forward a national education policy that seeks to design a system where students can pick the path they want to choose as their preferred study line. The policy stands on the four pillars of access, equity, quality, and accountability. The current 10+2 structure will be replaced by a 5+3+3+4 framework with 12 years of schooling and 3 years of Anganwadi/pre-schooling. The Right to Education (RTE) has also been extended to three years to eighteen years. The policy also included five universal values: truth, peace, nonviolence, love, and righteous conduct, which were written in official publications before. The National Education Policy 2020 laid emphasis on the use of the mother tongue or the local language as the medium of instruction till Class 5, with the recommendation that this shall continue up to Class 8 and beyond. Sanskrit and other languages shall also be given prominence.

### Strengths of NEP 2020:



It has remapped the school curriculum with holistic development accounting for 80 per cent of cognitive growth. The policy will also introduce multiple entrance and departure points from courses. Thereafter, the students will be provided with a basic certificate, two diploma certificates, and a degree sans missing years. Breaking boundaries across arts, sciences, curricular, co-curricular, extra-curricular activities, sports and vocational crafts is another objective. The share of GDP for the education sector has been increased from 4.43 percent to 6 percent, with aims to increase the Gross Enrollment Ratio in higher education to 50 percent by 2035 and to achieve universal literacy at the elementary level by 2025. Progress towards formative assessment based on higher-order thinking abilities, critical thinking, and conceptual clarity shall be emphasized. In NEP 2020, equal attention is given to infrastructural development and equity in classrooms.

### Weakness of NEP 2020:

The RTE Act has been a great challenge before the whole educational system in India. With the pandemic that has shaken the world, the worries regarding it being worried have either been rejected or shown by the NEP. Time, effort, and funds of the government will have to be wisely invested in training the teachers in service. In the India Internet 2019 Report, 99 percent of the internet users use mobile phones. Only 2 and 1% of the population in rural regions use laptops and desktop computers. The penetration, as a share of the total rural population, comes to just 27%; over 40% of villages have yet to be connected under the Bharat Net plan. Therefore, country youth stand to lose out.

### Opportunities under NEP 2020:

The NEP 2020 aims at creating a comprehensive report card that shall address the cognitive, psychomotor, and emotional learning areas of students. It will help students understand the world from multiple perspectives. This move also encourages international institutions to build campuses within the country and offers research-based opportunities which will reduce the brain drain. Academic credit will be saved in a digital locker, much like bank credit, that will enable students to come back to school after vacations. This will ensure that the drop-outs re-enter the academic stream. National Educational Technology Forum NETF shall be established to encourage an open exchange of ideas on technology for improving learning, assessment, planning and administration in schools and higher education. The best innovation of the policy is 'Pairing Schools', in which one government school is paired with one private school for varied learning perspectives.

### Challenges under NEP2020:

The NEP 2020 aims at bringing a sea change in India's education system by tapping the potential of every student, universalizing education, and building capacities. However, its implementation will require a shared sense of responsibility between all stakeholders at the state and district levels and including the private sector. The chief ministers of opposition-ruled states have strongly opposed the key elements of NEP. To be specific, India has to increase public spending in the education sector from the present 3.7% to 6% of GDP as part of attaining policy objectives. With some 1,000 odd universities already in existence in India, opening one every week is no mean task. Building a large pool of qualified teachers certainly becomes an uphill task for multidisciplinary higher education. Another important issue in this context is the reform in the school system.

### Expected Outcomes under NEP 2020:

India's system of education should attain a gross enrolment ratio of 100% by the year 2030, and board exams would become more practical and accessible. Extracurricular activities in music, fine art, and literature would be made compulsions at colleges with stipulated departments in languages, literature, art, dance, and theatre. The three-language program in the National Education program is part of NEP 2020, with Sanskrit being the prime language up to class 8. The postgraduate degrees are to be abandoned. The children will also be taught occupational skills of their choice, including coding from VI class onwards. There will be a 10-day internship with a local trade or skill compulsory from VI class onwards. NTE would conduct a common entrance test for admission to all higher education colleges, but it will be optional. Multiple entrance and exit will enable students to start and exit education at different times and will also be able to re-enter without losing credits. NEP 2020 also addresses the overseas study destinations as it makes it mandatory to have an international student office in the university so that it accommodates foreign students. Foreign college campuses can be established in India subject to some norms and restrictions.

### Suggestions:

Reformulation of the school curriculum to integrate early childhood care and education. Reducing drop-out rates to ensure universal access to education. By 2035, gross enrolment in higher education will attain 50 percent. Research Foundation to be established for the promotion of research in institutions of higher education. Improvement in quality and social inclusiveness of public schools. Enhancement in financial allocation to education in the budget. This training enhances skills, intelligence, and efficiency of the students. Develop skills in understanding and responding to reality. The learner can learn throughout life. Students cherish creativity more than adherence to the rules.



### Conclusion:

NEP 2020 aims at structurally changing the educational system and strengthening the same, but with a focus on student well-being. It is outcome-based, and the new policy is focusing more on the child's outcomes while introducing more choices. The NEP 2020 focuses on students and institutional educational objectives set course and program objectives and offers a plan to achieve these objectives; this paper focuses on learning designed to help acquire information and expertise through teaching-learning methods. The permanent learning approach is encouraged among students within the paper and gives the students the potential to attain the challenges in the real world. To ensure the effective learning process, it should be driven by relevant projects that work to satisfy students' learning outcomes. Also, it should encourage doing and applying rather than just memorizing theoretical subjects besides making the outcome of learning very crystal clear. The student-centered learning techniques should be emphasized rather than a teacher-centered one. This helps the pupils to learn and understand the concepts that are relevant in a given context before acting upon them. Emphasize passing relevant knowledge to others; the final goals of learning are personal growth in terms of knowledge, abilities, and production to society.

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## IMPLEMENTATION OF THE NATIONAL EDUCATION POLICY 2020

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### Abstract

This research paper conducts a comprehensive comparative analysis of rural education reforms in India, with a focus on the changes implemented before and after the introduction of the National Education Policy (NEP) in 2020. The primary objective of this study is to assess the impact of the NEP 2020 on rural education by examining the key policy shifts, implications, and outcomes in rural educational settings. The pre-NEP 2020 era witnessed a multitude of challenges in rural education, including inadequate infrastructure, limited access to quality education, and significant disparities in learning outcomes between rural and urban areas. The NEP 2020 aimed to address these issues through a series of transformative reforms. To achieve this, the study employs a qualitative interview with key stakeholders in rural education. The analysis will encompass various aspects, including curriculum reforms, teacher training, infrastructure development, and the integration of technology in rural classrooms. Findings from the research will provide insights into the effectiveness of the NEP 2020 in bridging the rural-urban education divide. Furthermore, it will shed light on the challenges and barriers encountered in the implementation of these reforms and offer recommendations for refining and enhancing rural education policies. The study's outcomes are expected to contribute to the ongoing discourse on education reform in rural India and provide valuable insights for policymakers, educators, and advocates working towards inclusive and equitable education systems in rural areas. Ultimately, this research aims to inform evidence-based policy decisions that can catalyse positive transformations in rural education and empower rural learners to participate fully in India's socioeconomic development.

**Keywords:** NEP 2020, Higher Education

### Introduction:

Rural education in India has long been a subject of concern, characterized by numerous challenges stemming from inadequate infrastructure, limited access to quality education, and significant disparities in learning outcomes when compared to their urban counterparts. The need for comprehensive reforms in rural education has been recognized as a critical imperative to ensure inclusive and equitable development across the nation. In response to this urgency, the National Education Policy (NEP) of 2020 was introduced as a landmark effort to bring about transformative changes in the education landscape of India. This research paper seeks to undertake a rigorous comparative analysis of rural education reforms, differentiating the policies and outcomes in the pre- and post-NEP 2020 eras. The context of rural education in India is marked by the coexistence of multiple challenges and opportunities. Rural areas account for a substantial portion of India's population, making up the majority of the country's demographic. The children residing in these regions are not only the future workforce but also integral to the nation's social fabric. However, their educational experiences have often been marred by resource constraints, underqualified teachers, and curricula that do not adequately cater to their needs and aspirations. Historically, initiatives to address these issues have been sporadic and often lacked the comprehensive vision required to effect meaningful change. The introduction of the NEP 2020, therefore, signifies a significant shift in the approach to rural education reform. It seeks to provide a holistic and forward looking framework that can potentially restructure rural education systems, enhance educational access and quality, and bridge the rural-urban education divide.



# National Education Policy 2020

## Reforming Higher Education through Multidisciplinary Approach



### New Education Policy 2020 Phase

The phases of the new education policy are divided into four phases. In the new policy, it has been completely abolished. The old education policy was organized on a 10 + 2 formula, but the new education policy is based on the 5 + 3 + 3 + 4 formula. The new pattern includes 3 years of schooling and 12 years of schooling. It has been made mandatory for government and non-government institutions to follow the new policy. Four steps of new education policy

Foundation Stage- Foundation Stage of New Education Policy for 3 to 8 years children are included. The Foundation Stage has been fixed for 5 years. In which 3 years of pre-school education will be done in Anganwadi and class 1, 2 school education under which the language skills and skill level of the students will be evaluated and focused in its development.

Preparatory Stage - The time of this stage is kept for 3 years. This stage includes children from 8 to 11 years. In which he will have children up to class 5. In this stage of the new education policy, special attention will be focused on strengthening the numerical skills of the students. At the same time, all children will also be given knowledge of the regional language. Along with this, children will be taught science, art, mathematics, etc. through experiments.

Middle Stage – The period of this stage has been fixed for 3 years. In This stage Children from 6th grade to 8th grade have been included in which subject-based curriculum will be taught and coding will also be started from the children of 6th grade. At the same time, all the children will be given opportunities for vocational testing as well as vocational internship.

### Suggestions :

- The initial 5 years are included in early childhood care education. It will be implemented through Anganwadi. First, Anganwadi should be converted into Kids Zone so that the child can get an education in sports. Also, one of the two Anganwadi workers should be replaced by an ASHA worker and physiotherapy so that both education and health will work together. It is said that 85% of brain development takes place in this period. Therefore, to prepare a strong and capable generation in this, skilled training will have to be made available to the children in this period.
- Will receive education from class 3 to class 5 in the primary stage. Children between 8 and 11 years of age come. In this class, the child has to reduce the burden of books. In this phase, children should get an education through moral stories so that the round development of the child is possible. Bagless education should be imparted at this stage.
- In the secondary stage, the child develops knowledge about his environment. The government not only distributes bicycles, mid-day meals to children, as well as the facility of de-warding like Navodaya. Because

of the economic problem in rural areas of India, they are unable to get an education by engaging in agricultural work and leave their education in between.

- Also, 50% evaluation textbook and 50% evaluation should be based on local arts promotion, culture and small cottage industries only then the concept of employment education will come true.
- In the presence of parents in addition to the provision of custom education in the higher secondary stage abstain from sexual education also.

### Features of the NEP 2020:

1. **Holistic and Multidisciplinary Education:** The NEP 2020 aims to provide a holistic and multidisciplinary education that focuses on the overall development of students, including cognitive, social, emotional, and physical development.
2. **Early Childhood Care and Education:** The NEP 2020 recognizes the importance of early childhood care and education and aims to provide universal access to high-quality early childhood education for all children up to the age of 8.
3. **Curricular and Pedagogical Reforms:** The NEP 2020 aims to bring about major curricular and pedagogical reforms, including reducing the emphasis on rote learning and promoting experiential and inquiry-based learning.
4. **Skill-Based Education:** The NEP 2020 emphasizes the need for skill-based education and vocational training, with a focus on developing skills that are relevant to the needs of the 21st-century workforce.
5. **Use of Technology:** The NEP 2020 recognizes the importance of technology in education and aims to integrate technology in all aspects of the education system, from teaching and learning to assessment and governance.
6. **Flexibility in Education:** The NEP 2020 aims to provide flexibility in education, allowing students to choose their own learning pathways and giving them the freedom to select courses across disciplines.
7. **Teacher Training and Professional Development:** The NEP 2020 emphasizes the need for teacher training and professional development, with a focus on continuous learning and up-skilling.
8. **Higher Education Reforms:** The NEP 2020 aims to bring about major reforms in higher education, including the establishment of a single higher education regulator, the introduction of a four-year undergraduate degree with multiple exit options, and the integration of vocational education with mainstream education.
9. **Multilingualism and Language Education:** The NEP 2020 recognizes the importance of multilingualism and language education, aiming to promote the use of mother tongue or local language as the medium of instruction in primary education, while also encouraging the learning of other languages.
10. **Equity and Inclusion:** The NEP 2020 emphasizes the need for equity and inclusion in education, with a focus on addressing disparities based on gender, socio-economic status, geography, and disability. The policy aims to provide access to quality education to all students, including those from disadvantaged backgrounds.
11. **Assessment Reforms:** The NEP 2020 aims to bring about assessment reforms, with a focus on promoting formative assessment and reducing the emphasis on high-stakes examinations. The policy also aims to use technology-based assessments to promote continuous learning and feedback.
12. **Research and Innovation:** The NEP 2020 aims to promote research and innovation in education, with a focus on developing a culture of inquiry and fostering collaboration between academic institutions and industry.
13. **Governance and Funding:** The NEP 2020 aims to improve governance and funding in education, with a focus on decentralization and empowering local communities. The policy also aims to increase public investment in education to 6% of GDP, with a greater emphasis on quality and outcomes. The NEP 2020 represents a

comprehensive vision for the development of education in India, with a focus on providing a more inclusive, flexible, and relevant education system that prepares students for the challenges of the 21st century.

### **Conclusion :**

The new National Education Policy, 2020, which has been approved by the central government to change the Indian education system to meet the needs of 21st century India, if it is implemented successfully, this new system will make India one of the world's leading countries. Equivalent Under the new education policy, 2020, children from 3 years to 18 years have been placed under the Right to Education Act, 2009. The aim of this new education policy, which came after 34 years, is to provide higher education to all students, which aims to universalize pre-primary education (age range of 3-6 years) by 2025.

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## IMPROVING INFRASTRUCTURE FOR SUSTAINABLE DEVELOPMENT: OPPORTUNITIES AND CHALLENGES

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### Abstract

India is a developing nation. India stood first in large population before china, India is known as largest younger population in the world. All developed countries are in olden age then India stood as largest younger population before china. So it see the dream of became super power nation in the world, for achieving this goal Indian govt: establish the Sustainable development goals. But these goals were depends upon the infrastructure development in the nation. From olden day - India's infrastructure were not developed due to various reasons. Most of the population depends upon the agriculture and related activities for day to day needs as well as for employment purpose so industrial development also not in more proportion. Agriculture also based on old pattern so its productivity also very less as compare to other developed nations.

India got full healthy environment for agriculture and industrial purpose but due to technological and other barriers these two main sources did not achieve their targets. So now days also India is stood in developing stage. Now a days only the most useful and beneficial thing for becoming developed country is its largest younger Population.

**Keywords** - sustainable development, younger population, infrastructure.

### Introduction

India needs infrastructure development in various sectors for achieving the target of sustainable development set by the govt. Infrastructure in road, rail, electricity, communication, water management and many other things for achieving the development goal's. After getting the natures gift of healthy environment for human being and animals India's biodiversity is very useful and good for human being. India's geographical place on earth is in between hot and cold tropics. So here we see the very healthy environment for human being. India set a target of Sustainable development up to 2047. For achieving this target India gone from a very difficult situation. Because for - achieving these goals firstly the development of basic infrastructure was needed. The Concept of Sustainable development firstly present and developed in 1980 by United Nations Environment and development commission. But now days also this concept does not accept and proceeds in the world. For Indian govt. also accept and proceed the SD's goals from 2016 and achieve these targets till 2047, there are 17 goals in SD 'Goals, when these 17 goals were achieved by all nations then there were no problems in the world for human being. But achieving these goals by every nation is very difficult because in most of the nation's basic infrastructure were not developed. Like Road, rail, air transport. Electricity, communication, media, agriculture, Industrial development, Water facility, etc.

### Objectives of the study

- 1) To know what is sustainable development
- 2) To know what is infrastructure development
- 3) To see the relation between infrastructure and sustainable development
- 4) To see what is opportunities and challenges for achieving the Sustainable Development Goals.

### Hypothesis of the study

- 1) There is a strong relationship between infrastructure and Sustainable Development .
- 2) Infrastructure Sustainable Development gets importance day by day.

## Research methodology

For writing this paper secondary sources of data were used. In these reference books, conference proceedings, newspapers were used.

Improving living standards for mankind has been the single minded goal of all nations, and world bodies. After defining development in numerous ways for last 2 decades there seems to be a consensus on human development, while a large population on earth is still to get the base minimum for development. Sustainable development means the social, economic and environmental planning that attempt to balance the social and economic needs of present and future human generation with the imperative of preserving or preventing undue damage to the natural environment. Infrastructure development is the process of improving physical and organizational structures to support economic activities. It is considered vital to a country's growth and can include,

- i) Improving existing facilities, systems and services
- ii) Developing foundational product and services
- iii) Increasing efficiency.
- iv) Providing access to basic services like communication, health care and electricity.

Some examples of infrastructure development is railways, irrigation, water supply and sanitation, ports and airports, storing facility, oil and gas pipelines, telecommunications, power and energy, In India the govt. has developed the various policies and schemes to address its infrastructure needs. In this in 2023-24 budget of 75000 cores were allocated for 100 projects to improve multimodal logistics infrastructure, pm Gati-shakhti master plan for focus on improving logistic network, National Infrastructure pipeline (NIP) introduced in 2019 for the project of energy, roads, railways, and urban development, After knowing the meaning of Infrastructure and sustainable development we know that these two concepts are the two - sides of one coin. They are depend upon each other without one another is not completed. when infrastructure is not developed, Sustainable Development goals are not achieved and Sustainable Development goals were achieved then there is automatically infrastructure were developed. Infrastructure is a part of Sustainable Development Goals so there is a strong relationship between the Infrastructure and Sustainable Development Goals. But for achieving these targets there are various obstacles / hindrance in improving the infrastructure.

## Opportunities

- 1) Renewable energy - Advances in renewable energy the technology i.e., solar, wind, hydro and storage systems are making sustainable energy infrastructure more viable and cost effectively. In India these sources of energy available in whole year.
- 2) Private sector involvement - Public-private partnership (PPP) can attract private involvement "bring capital on large scale, bring expertise from various fields.
- 3) Growth of Green bonds- The rise of green bonds and other sustainable finance instruments offers new avenues for funding sustainable infrastructure projects.
- 4) Smart city -The integration of digital technology into urban planning can lead to more efficient effective and sustainable cities.
- 5) Nature based solution - Incorporating natural system in to infrastructure design such as using wetlands for water management can enhance sustainability.
- 6) Climate resilient infrastructure- Developing disaster infrastructure that can with stand climate impacts is essential for long term sustainability. This includes materials and designs that are resilient to extreme weather and natural disaster.
- 7) Education and training - Investing in education and training can build local expert in sustainable Infrastructure reduce dependency on foreign expert.
- 8) International collaboration - Global organisation provides platforms for sharing knowledge, ideas, technologies, best practices in Sustainable development of infrastructure.

## Challenges

- 1. High cost** - Developing sustainable Infrastructure requires. large investments, many developing countries also struggle for the necessary funding
- 2. Lack of advanced technology** - many regions lack to access the advanced technology required for sustainable infrastructure such as renewable energy, efficient transportation network, smart grids, etc.
- 3. Limited access to capital** - The nation which is weaker credit rating may find difficulty to attract private investment or getting loan at favourable terms.
- 4. Weak Governance** – corrupt or inefficient institution can hide the development and maintenance of sustainable infrastructure.
- 5. Conflicts of land use** - Infrastructure projects requires land on large scale, but conflicts between local community and bio- diversity arises.
- 6. scarcity of Resources** - The use of natural resources like minerals, water, energy is increasingly difficult to going demand.
- 7. Resilience** - excising infrastructure in many regions is not flexible to the impact of climate change, weather events.
- 8. Inequality and Displacement-** Project at large infrastructure can displace community, social tension and increase inequality.

## Conclusion

These are some of the opportunities and challenges for improving infrastructure. Infrastructure and Sustainable Development. are the two parts of one coin. They depends upon each other. without both the goals which are set by the nation are not achieved. There is a very strong relationship between the infrastructure and & Sustainable Development goals. Our govt. also set a target up to 2047 to achieve these goals. Infrastructure development were necessary. Achieving these 17 Goals SD Goals is not an easy task. It's very difficult. But every govt./ nation try these targets with its resources as well as capacity, so the infrastructure and Sustainable Development goals are the two friends and it move or walk with by taking hand in hand of each other. without infrastructure development sustainable development did not possible.

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## ROLE OF INCUBATION AND INNOVATION CENTERS IN COLLEGES WITH REFERENCE TO UNDERGRADUATE STUDENTS IN THE KALYAN- AMBERNATH AREA

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### Abstract:

This research paper explores important role and impact that incubation and innovation centers play on the undergraduate (UG) students in colleges for their academic and professional development. Higher education institutions are also increasingly prioritizing entrepreneurship and innovation for students so these centers have taken step and become a vital resource for nurturing students' entrepreneurial aspirations, problem-solving skills and creativity. The study aims to assess the impact of these centers on students' academic achievements, enhance various skills and career development.

Entrepreneurship empowers individuals, improves standard of living and contributes to the wealth, jobs and innovation to the society. The start-ups help the students to build their own business and achieve perceived growth in entrepreneurial skills.

**Key Words:** Incubation & Innovation, Higher education, Entrepreneurship and Career Development.

### Introduction :

Innovation is not limited to technology; it can also include novel approaches to business models, education, and social challenges. Incubation & Innovation center is the platform that provides students a supportive ecosystem that bridges the gap between academic knowledge and real-world application, promoting entrepreneurship as a viable career path and enhance skills for better other career development opportunities. It also offers various resources, technical support, funding, mentorship and network connections for growth especially within colleges and universities.

The aim of incubation and innovation center is to help new enterprise to develop, stabilize and eventually becoming self-sustaining. In an educational context, these centers encourage students and faculty to think creatively, enabling brainstorming ,experimenting with new technologies and develop solutions to real-world problems that contributes to economic growth, job creations and society. Even universities provide the physical space, infrastructure, and resources necessary for startups and innovators to thrive. The higher education institutions offer courses and programs in entrepreneurship, competitions, pitch contests and start up challenges. It also leads to funding opportunities for students in colleges and universities. The important role in translating research into commercial products is played by higher education institutions by protecting intellectual properties and secure patents through technology transfer offices, thereby supporting commercialization in research for new start- ups.

Also, Entrepreneurship is not just for new business startups; it is required also in every career. They encourage creativity, initiative, and a proactive mentality that may propel success in a range of contexts, from social businesses to corporate employment. Early acquisition of these abilities by students can result in more opportunities, regardless of whether they decide to start their own businesses or succeed in their chosen professions.

### Components of Incubation:

- **Mentorship:** Advice from experts and specialists in the field of business.
- **Networking:** Building connections and network with investors, parties and others.
- **Training:** Courses and seminars on marketing, company development, and other important topics.
- **Resources:** The availability of technology, physical space, and other necessary instruments.

- **Funding:** Help in obtaining grants or investors for financial support.

**Key elements of Innovation:**

- **Problem-Solving:** Recognizing and resolving unfulfilled requirements or obstacles.
- **Creativity:** Encourage to think differently & produce fresh concepts.
- **Collaboration:** Bringing together various viewpoints and skill sets through work with varied teams.
- **Commercialization:** It is the process of introducing novel concepts to the public or putting them into action.

**Objectives:**

1. Importance of incubation and innovation centers for under graduate students.
2. To study the benefits gained by UG students.
3. To study impact of activities or events on students' professional and academic growth.

**Research Methodology :**

- **Survey Method:** Questionnaire (closed ended).
- **Data Collection :** 100 responses gathered from Under Graduate students.
- **Primary Data :** Data is collected by survey method done through google form.
- **Techniques of Data Analysis:** Quantitative research technique is used for data analysis.

**Scope :**

This study paper's exclusive audience is under graduate students of commerce, self- finance, B. Arts, BSc. and Humanity. Furthermore, it enables the impact of incubation and innovation centers as better learning platform , providing insights in students skills enhancement and enthusiasm to build new start-ups which lead to employment opportunities, economic growth and also better lifestyle of individuals. Overall, it improves effectiveness of such centers in the institutions and for students taking initiative for their better career.

**Data Analysis And Interpretation:****1. Gender**

Male	64.2%
Female	35.8%

Table 1.1

Gender  
151 responses

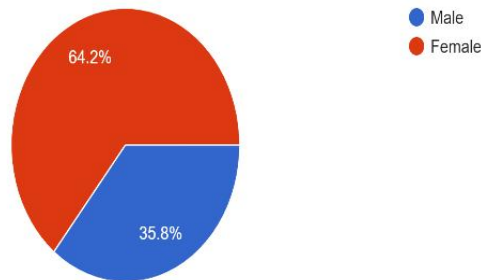


Fig 1.1

**Interpretation:** It indicates that the majority of respondents are female, comprising 64.2% of the total, while males account for 35.8%.

2.

Program	B.Com	BAF	BMS	BBI	B. Sc	B. Arts	Humanity
%	17.2	13.2	45.7	17.9	4.6	0.7	0.7

Table 1.2

Program of study  
151 responses

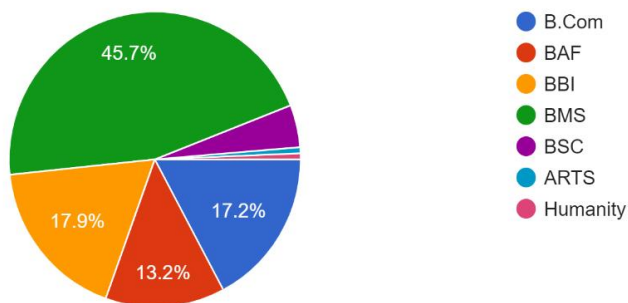


Fig. 1.2

**Interpretation:** A majority, comprising 45.7% of the respondents are students of BMS, 17.9% are from BBI. 17.2% students belong to B.Com, 13.2% to BAF and 4.6% to B.Sc., lastly 0.7% belongs to Arts and Humanity each.

3.

Respondents	
Yes	86.8%
No	13.2%

Table 1.3

Are you aware of incubation & innovation center in your college/university.

151 responses

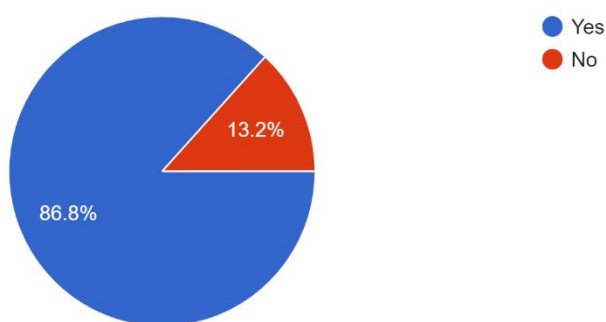


Fig. 1.3

**Interpretation:** The data suggests that the majority of respondents are aware of about incubation & innovation center.

4.

Respondents	
Yes	72.2%
No	27.8%

Table 1.4

Have you ever participated in any programs, events or activities that the Innovation and Incubation Center offers?

151 responses

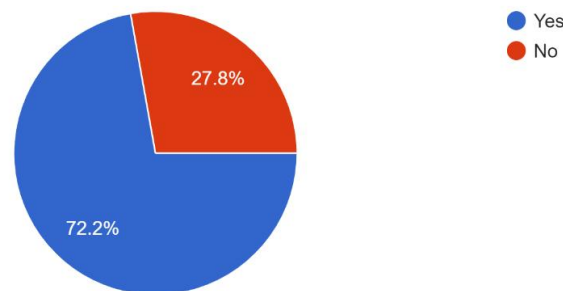


Fig. 1.4

**Interpretation:** Based on the provided data, it seems that majority of respondents (72.2%) have participated in the activities or events offered by incubation & innovation center than 27.8% which are very low.

5.

Activities	Seminar/workshop	Start-up Competition	Research projects	Mentorship programs	Technical events	Any other
Percentage	55%	20.5%	13.2%	44.4%	19.2%	9.9%

Table1.5

If yes, what type of activities/programs/events did you participate in? (Select all that apply)

151 responses

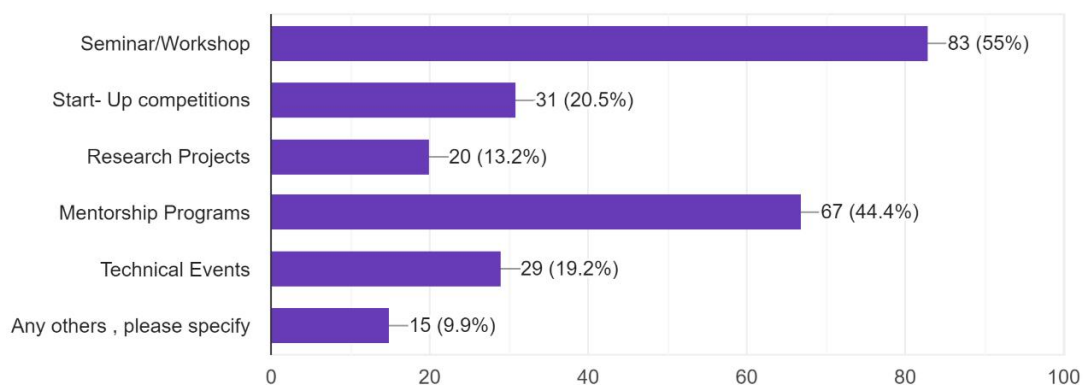


Fig.1.5

**Interpretation:** The above chart represents the percentage of activities in which students participated. The maximum (55%) participation is in the Seminar/Workshops organized by college in incubation and innovation center.

6.

Respondents	Percentage
Positively	72.2%
Negatively	12.6%
Nothing	15.2%

Table 1.6

How has the incubation and innovation center has affected your academic and professional growth?

151 responses

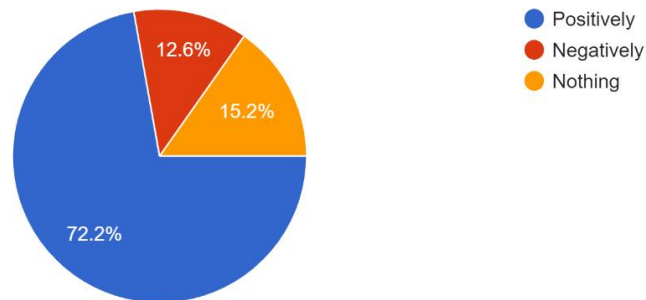


Fig 1.6

**Interpretation:** 72.2% of respondents has positive impact their professional & academic growth than 12.6% which are saying to have negative impact and 15.2 % has not been affected.

7.

Respondents	Percentage
Access to experienced Mentors/ Knowledgeable Experts	21.2%
Improved Entrepreneurship skill	31.1%
Enhanced Research Capabilities	9.9%
Networking Opportunities	15.9%
Technical Guidance	10.6%
Support of new start ups	3.3%
Ant other, specify	7.9%

Table1.7



What advantages/benefits have you gained from being involved in incubation and innovation center?  
151 responses

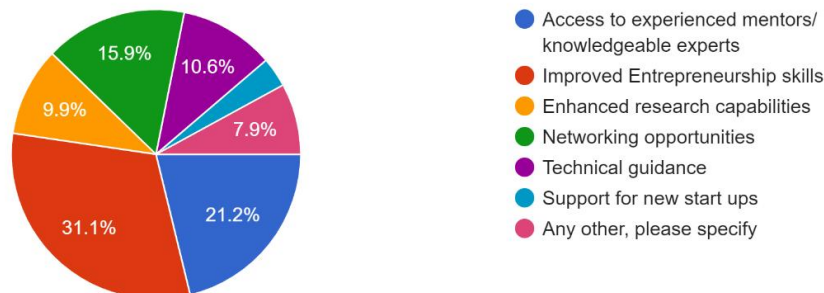


Fig. 1.7

**Interpretation:** The chart indicates the percentage of benefits gained by students from which majority (31.1%) is improved entrepreneurship skills to lowest (3.3%) support for new start-ups.

#### Findings And Suggestions:

1. The finding reveals that the students are positively engaged with the incubation and innovation centers for regular activities/ events and their perceived growth in skill development.
2. Also, it has been found that there are some challenges such as limited resources availability, insufficient time and lack of support for new start- up.
3. Students have benefited in various ways by such a great initiative of incubation and innovation center in colleges.
4. It is suggested that incubation and innovation centers should be more effective and focus on improving availability of resources, student participation and engagement and also strengthening institutional support.

#### Conclusion:

The above study shows that how the incubation and innovation center play effective role in colleges and also pivotal in bridging a gap between academic learning and real - world application also providing an environment where UG students can come up with new ideas, collaborate and translate their knowledge to excel in their chosen career and launch own ventures.

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## WOMEN EMPOWERMENT THROUGH SELF HELP GROUPS : A STUDY OF LATUR DISTRICT

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### Abstract

Self-help groups (SHGs) have been widely studied as a tool to enhance the effectiveness of women-owned businesses, promoting mutual trust, thrift, and group cohesion. Empirical studies have shown that SHGs contribute significantly to improving the socio-economic status of women, particularly in rural India. SHGs are crucial in developing communication skills among poor women in India, leading to better access to banking services, the growth of successful micro-entrepreneurs, and the empowerment of women to become self-reliant. The SHG model is recognized as a powerful scheme for poverty alleviation and the promotion of women's entrepreneurship and financial independence in India. This paper examines the impact of SHGs on women's empowerment in Latur district, utilizing simple statistical tools. The study concludes that SHGs have a positive effect on women's empowerment in Latur district.

**Keywords:** Women, empowerment, self-help groups, entrepreneurship, poverty alleviation, Telangana State.

**Introduction:** Self-Help Groups (SHGs) are village-based financial intermediaries typically consisting of ten to twenty local women. Latur district hosts near about 20000 SHGs under various government programs, with the majority being Women's Self-Help Groups (WSHGs). Despite women's significant contributions to economic development, their potential often remains unrecognized. Recently, women's entrepreneurial activities have gained attention, and this study focuses on the awareness and functioning of registered SHGs among women in rural Latur District

SHGs are a form of village banking, where 10 to 20 members, primarily women, initially save and lend among themselves, building financial discipline and group cohesion. After demonstrating financial stability for six months, these groups become eligible for bank loans up to four times their savings. The loan management is collectively decided by the group. Over time, as savings increase, the group gains access to larger loans.

The SHG program engages with the poor through Self-Help Group Promoting Institutions (SHPIs), which include NGOs, banks, and government officials. The program typically features small loans, regular meetings, frequent repayments, and savings, supplemented by SHG-led training in areas such as healthcare, literacy, family planning, and vocational skills. However, it's crucial to recognize that empowerment is multifaceted, existing across multiple domains and dimensions. Control over economic decisions doesn't necessarily translate to power over reproductive or domestic decisions. Thus, other initiatives like political quotas, awareness campaigns, and property rights are equally vital for empowering women.

Empowerment is a dynamic, multidimensional process that enables women to realize their identity and power in all life aspects. It provides greater access to knowledge and resources, more autonomy in decision-making, the ability to plan their lives, control over circumstances, and freedom from restrictive customs and beliefs.

### Obstacles for Women in India

Women's traditional roles in India have significantly constrained their activities at home, in the workplace, and the economy. They face disadvantages in accessing resources like food, transportation, education, technology, and financial services, including entrepreneurial financing. These interconnected issues—social, legal, educational, and economic—mean that reforms in one area, such as business, can lead to broader improvements in women's status and access to resources, further enhancing their economic position.

## Efforts to Increase Entrepreneurship in India

### Role of Multinational Corporations (MNCs)

MNCs have historically struggled in countries like India due to insensitivity to local needs, lack of recognition of their products' negative impacts, and failure to involve local businesses. However, some MNCs have adapted by tailoring products and marketing strategies to local contexts, hiring local employees, and using local enterprises as suppliers and distributors.

### Role of Government

The Indian government has long aimed to boost local entrepreneurship, starting with programs in the 1950s offering reservations and subsidies for university graduates. However, these efforts have been criticized for their inefficacy and focus on patronage rather than fostering a robust small business sector. Additionally, the government has been faulted for regulatory bottlenecks and insufficient infrastructure improvements.

### Microcredit Programs and Economic Development

Microcredit programs extend banking services to the poor, offering small loans and deposit facilities, which are otherwise inaccessible. These programs play a crucial role in economic development, particularly for women entrepreneurs.

### Role of NGOs

NGOs have been instrumental in promoting entrepreneurship in India, especially among women, through initiatives like microcredit programs, training, technology transfer, and direct assistance with small business startups. These programs often target women specifically, given their limited access to more generalized development programs.

### Review of Literature

Amita Rani and Pawan Kumar Dhiman (2012): Their study on SHGs in Haryana revealed that conservative family culture and poor education hinder SHG effectiveness. Although SHG activities led to income increases for some members, many did not experience significant financial improvement.

Kappa Kondal (2014): In Gajwel Mandal, Andhra Pradesh, the study found a positive impact of SHGs on women's empowerment, particularly in terms of social status, economic empowerment, and decision-making within families.

Eswaraiah (2014): This study in Ananthapuramu district, Andhra Pradesh, demonstrated that SHGs positively impact women's empowerment, especially in social status, economic empowerment, and family decision-making.

Munivenkatappa (2014): The study in Mysore, Karnataka, highlighted the relationship between women's empowerment and environmental management, showing how women can promote environmental sustainability.

Paltasingh (2014): This study discussed the SHG-bank linkage and the challenges in implementing these initiatives, recommending policy measures for enhancing women's empowerment.

### Statement of the Problem

Poverty and unemployment are pervasive issues in developing countries like India. Financial institutions often fail to reach the rural, unorganized sector, where women play a crucial role as risk managers and drivers of development, especially in poverty-stricken areas. SHGs have emerged as a supplementary mechanism for providing credit to the rural poor, fostering financial inclusion. However, women face significant challenges, including illiteracy, lack of awareness, poor healthcare, and unemployment, particularly in rural areas and among marginalized communities. While women contribute significantly to economic development, their potential often goes unrecognized, especially in entrepreneurship. Empowering women is essential to addressing these challenges not only in India but in other developing nations.

### Significance of the Study

India remains classified as a developing country due to factors like poverty, illiteracy, malnutrition, unemployment, and lack of awareness among women. Despite their substantial contributions to economic development, many women are unaware of their potential. Recently, women have increasingly engaged in entrepreneurial activities. This study focuses on the awareness of registered SHGs among rural women in Latur district. The findings will help the government understand the proportion of women aware of financial assistance provided through SHGs, enabling them to succeed in entrepreneurship.

### Objectives of the Study

1. To assess the level of awareness of registered SHGs among rural women in Latur district.
2. To determine the employment rate generated through SHGs in rural Latur district..
3. To evaluate the contribution of women entrepreneurs to the growth of rural areas in Latur district..

### Scope of the Study

The study aims to measure women's empowerment through SHGs in rural Latur district, focusing on income generation, employability, and rural economic development. It also seeks to gauge the awareness of SHGs among rural women in TS. Primary and secondary data were collected from SHG members in Latur district for this study.

### Research Methodology of the Study

Type of Research: Descriptive.

Primary Source of Data: Data was collected using structured schedules distributed to SHG members in Latur district. Interviews were also conducted to gather additional information.

Secondary Source of Data: Data was sourced from reports of the State Planning Commission Board of Maharashtra, municipal offices, NABARD and RBI websites, and relevant books and journals

Sampling Design: Convenience sampling was used, with schedules distributed to 300 SHG members across Latur districts. After rejecting incomplete responses, 290 valid responses were analyzed.

### Findings

1. The majority (62%) of respondents were aged 20-40 years.
2. Despite a considerable portion having basic education, many members were illiterate, lacking even high school education.
3. Seventy-two percent of respondents had been SHG members for over Five years.
4. Of the respondents, 70 were employed, and 37 had taken up entrepreneurship as their primary occupation.
5. Many housewives joined SHGs for additional family income and quicker, cheaper financial assistance.
6. Sixty-four respondents joined SHGs to raise income levels, 53 for educational financial assistance, and 48 to improve living standards.
7. There was a significant income increase among women after joining SHGs.
8. Women in these districts were aware of SHGs and their benefits.
9. Employment rates among women increased significantly after joining SHGs.
10. Over 90% of women reported improved living standards post-SHG membership.

11. Some women felt empowered both economically and socially, with increased self-esteem and awareness of global issues.
12. A significant relationship existed between SHG membership and financial assistance.
13. SHGs encouraged saving habits among members, with average weekly savings of Rs.200-500.
14. Thirty-seven entrepreneurs emerged from SHGs, empowering themselves and their communities, serving as role models.

### Suggestions

1. SHGs should provide basic education to uplift illiterate members.
2. Government and NGOs should expand SHG programs to foster entrepreneurship among rural women in Latur district.
3. SHG programs should extend to illiterate women in urban areas to increase employment and income.
4. Financial schemes should be made more accessible for women to educate their children, aiding in eradicating illiteracy.

### Conclusion

The core SHG philosophy is in women empowerment through increasing employability, self-sufficiency and inculcating a habit of saving among the rural women of Latur district. Empowerment in micro-credit will inevitably involve a significant change in attitude, change in work practices and challenging vested interests. For women's empowerment to be addressed, women need to be enabled to define their priorities and demand their rights. Micro finance can be an effective strategic instrument for poverty alleviation only if it used for income generating microenterprise development. Self Help groups as per the research is successful in rural areas, especially among women. These programs have uplifted the rural woman economically and socially in the society. Women are an integral part of the economic development of the country, therefore the government should give equal importance to the women contributors and their well-being in the society

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## “WOMEN STARTUPS: INITIATIVES & CHALLENGES”

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### Abstract

Job creation has been very challenging task in developing countries, and country like India is not at all different therefore Government of India has always Supported and Motivated Entrepreneurship in the country. India is a land of Diversity and with its unique demographic characteristics India has always been centre of attraction for Entrepreneurs. Not only business houses shown interest but also government has supported this culture of business. Youth, businesses, Women everyone has got support and motivation from the govt. in the form of various schemes and financial support which enables them to avail the opportunity. This study is conducted to know where the women entrepreneurship stands, how the growth of women entrepreneurs is, what challenges they are facing in new start-ups and how they can be motivated and inspired to work and come-up with their best. This paper aims at Women Entrepreneurship in New Businesses, their challenges and tentative solutions because in the present times scenario is like; you name it, they own it. Women today is educated, self-made, decision makers, courageous. There is no field where they have not left their marks. This paper will help in identifying factors that will encourage women to showcase their talent of being entrepreneurs.

**Keywords:** Business Women, Entrepreneurship, Start-ups, Indian Economy, Women Entrepreneurs.

### Introduction:

Startup venture is defined as new businesses that are in their initial stages of operation, striving to grow and are typically financed by individual investors or capitalists. According to DPIIT (Department for promotion of industry and internal trade), ‘An entity will be recognized as a startup for up to 10 years of existence and up to Rs.100 crore of turnover. Earlier, the existence period was five years and the turnover limit was Rs.25 crore. The Indian startup ecosystem has evolved dynamically over the last few decades.

The Startup India campaign, which is a flagship initiative of government of India was launched in 2014 by Modi Government, to catalyze the startup culture and build strong entrepreneurial ecosystem in the country. Also, the Indian startups face its own set of challenges and stellar opportunities. The failure may occur due to cultural diversity, improper mentoring, lack of government policies and many more complexities. For attaining specific objectives, various programs are implemented by the Government under the said initiative. Sustained efforts by the Government have led to an increase in the number of Department for Promotion of Industry and Internal Trade (DPIIT) recognised startups to 1,17,254 as on 31st December 2023. These recognised startups are reported to have created over 12.42 lakh direct jobs creating significant economic impact. There is at least one recognised startup in every State and Union Territory (UT) spread across over 80% of the districts across the nation. (Source: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2002100>)

The increasing presence of women as entrepreneurs has led to significant business and economic growth in the country. Women-owned business enterprises are playing a prominent role in society by generating employment opportunities in the country, bringing in demographic shifts and inspiring the next generation of women founders. With a vision to promote the sustainable development of women entrepreneurs for balanced growth in the country, Start-up India is committed towards strengthening women entrepreneurship in India through initiatives, schemes, creation of enabling networks and communities and activating partnerships among diverse stakeholders in the start-up ecosystem.

### Objectives Of The Study:

- To Analyze and find problems faced by women in this journey at personal and professional levels.
- To Study about Schemes initiated by Government for Women Entrepreneurs
- To provide and find best possible solutions through analyzing already research done in different areas.

**Research Data:**

Data for this research paper is purely taken from all secondary data available on various platforms.

**Review Of Literature:**

**Baporikar, 2014** in her research paper “youth entrepreneurship in Indian scenario” discusses about the role of youth entrepreneurship with a focus on Indian scenario by integrating it to several other factors such as business models for YE, barriers affecting YE and its impact on reducing unemployment.

**Kshetri & Kshetri, 2016** in their research article “Fostering startup ecosystem in India” have mentioned out the factors and consequences responsible for fostering the growth of startup ecosystem in India. The research paper explains the determinants of entrepreneurship factors that affect entrepreneurial performance in terms of a) Regulatory framework, b) Values, culture and skills, c) Access to finance, market, R&D and technology.

**Andaleeb & Singh, 2016** in their research report titled as “A study of Financing Sources for Start-up Companies in India” have described the stages of startups and modes of financing available to startups at each stage. The stages through which a startup has to pass consists of 6 phases of investment; Self-Funding or Bootstrapping, Friends and Family, Seed, Growth (also known as the ‘Early Stage’) and Expansion.

**Adhana, 2016** in his research paper “Start-Up India, Stand-Up India: India Turning into a Start-Up Hub by Prospering Entrepreneurial Culture” clearly explains the startup ecosystem in Indian scenario. The entrepreneurial culture, the funding sources, types of investors and reasons of success and failures of startups have also been stated.

**Manshani & Dubey, 2017** have conducted the research study on Women entrepreneurs in India and have concluded several factors that promotes & encourages women empowerment in entrepreneurial development.

**Jha, 2018** in her research article “Entrepreneurial ecosystem in India- Taking stock and looking ahead” had stated the role of education & training and other socio-cultural issues responsible for building the startup ecosystem in India.

**Kalyanasundaram et al., 2021** in their paper titled ‘Tech Startup Failure in India: Do Lifecycle Stages Matter?’ have determined the causal factors and attributes which causes the failure of tech startup, against the successful ones.

**Chillakuri et al., 2020** in their research article ‘Linking sustainable development to startup ecosystem in India - a conceptual framework’ have provided the conceptual framework for linking the startup ecosystem to environmental sustainability. They have stated that sustainability is not just about reducing carbon emissions, but is a fundamental principle that guides the organization and society.

**Garg & Gupta, 2021** in their research work titled as ‘startups and the growing entrepreneurial ecosystem’ have discussed about the role of startups in enhancing the economic growth, role of incubators in developing these startups and the importance of Intellectual Property(IP) protection and different stages of series funding for startups.

**Programs Implemented To Promote Women Entrepreneurship:**

1. To promote flow of both equity and debt to women led startups, 10% of the fund in the Fund of Funds for Startups Scheme operated by Small Industries Development Bank of India (SIDBI) is reserved for women-led startups.
2. Women Capacity Development Programme (WING) is a unique Capacity Development Program for women-led startups, to identify and support both aspiring and established women entrepreneurs in their startup journeys. The workshops are open to variety of business sectors including Tech, Construction, Product, Machine, Food, Agriculture, Education, etc. The workshops serve as a platform for emerging women entrepreneurs and other stakeholders to discuss the key challenges facing women entrepreneurs. WING workshops create a conducive environment to share best practices and experiences in overcoming challenges and to gain insights learned from the business models adopted in the Indian context.

3. A Virtual Incubation Program for Women Entrepreneurs was conducted in collaboration with Zone Startups to support women-led tech startups with pro-bono acceleration support.
4. Startup India Hub: A webpage dedicated to women entrepreneurs has been designed on the Startup India portal. The page includes various policy measures for women entrepreneurs by both Central and State Governments.
5. ASCEND Startup Workshop Series and Women for Startups Workshops: The Government organized a series of startup workshops - ASCEND (Accelerating Startup Calibre & Entrepreneurial Drive), for the entrepreneurs, aspiring entrepreneurs, and students from North-eastern region. In addition, the workshops are conducted with a specific focus on women entrepreneurs across the north-eastern states. The workshops have witnessed participation from ecosystem stakeholders such as government officials, startups, aspiring entrepreneurs, investors, academic institutions, etc.
6. Women Entrepreneurship Platform (WEP): The Government launched WEP in 2018 as an aggregator platform with the aim to overcome information asymmetry in the women entrepreneurial ecosystem. By showcasing all existing initiatives and providing domain knowledge it works towards empowering both prospective and present women entrepreneurs.
7. SuperStree Podcast: With a vision to inspire a greater number of women across all regions in India to become entrepreneurs, the SuperStree video podcast series has been launched on women in the Indian Startup Ecosystem. The podcast spreads awareness related to innovations from women and to further strengthen women entrepreneurship in the country.
8. Through various awareness programmes and capacity building programmes organized by the Government, and through print media and social media platforms, the Government also creates awareness about the existing schemes which support micro, small and medium entrepreneurs, including women entrepreneurs.
9. BIRAC (under BioNEST and EYUVA schemes) has set up dedicated Bioincubation centres for women entrepreneurs that provide incubation space and mentoring (business, Intellectual Property, legal) specifically to women students/scientists/entrepreneurs as well as support women Self Help Groups (SHGs).
10. BIRAC's WInER Award fellowship (Women In Entrepreneurial Research), in partnership with TiE-Delhi NCR: Under this award programme, women entrepreneurs working on ideas that impact large sections of the society are provided financial support along with other benefits including mentoring, handholding, an opportunity to go through an intensive accelerator programme.
11. Under the Start-up Accelerators of MeitY for Product Innovation, Development and Growth (SAMRIDH) scheme, the Ministry of Electronics and Information Technology (MeitY) supports a dedicated women-led accelerator program hosted by Zone Start-ups.
12. Under the Technology Incubation and Development of Entrepreneurs (TIDE) Scheme of MeitY, financial assistance is provided to Institutions of Higher Learning to strengthen their Technology Incubation Centres for enabling young entrepreneurs to create technology start-up companies for commercial exploitation of technologies developed by them.
13. The States' Start-up Ranking on support to start-up ecosystems is primarily an exercise to identify good practices across all the Indian states. The evaluation includes a specific provision to gauge the formulation and implementation of policies and special incentives to promote women-led start-ups in each state. The particular action point has witnessed active engagement and thereon reporting of measures undertaken by participating States and UTs.
14. To identify the depth, quality and spread of innovation, inclusivity and diversity, and entrepreneurship in country, the Government instituted the National Start-up Awards (NSA). NSA recognizes and promotes start-ups across 20 sectors and special categories. All four editions of the NSA (2020, 2021, 2022 and 2023) have featured a special category and award for women-led start-ups.

15. Ministry of MSME has taken several steps to support women owned Micro, Small and Medium Enterprises (MSMEs) in the country to increase women's participation. The details of the programs implemented in this direction are as under:
  - a) Special drives for registration of women owned MSMEs under Udyam Registration Portal have been undertaken.
  - b) Various fiscal incentives are provided to women entrepreneurs under the Credit Guarantee Scheme for Micro and Small Enterprises.
  - c) To encourage entrepreneurship among women, the Ministry also implements a number of programs such as:
16. 'Skill Upgradation & Mahila Coir Yojana' under Coir Vikas Yojana, which is an exclusive training program aimed at skill development of women artisans engaged in the Coir sector.
17. The Ministry also implements Prime Minister's Employment Generation Programme (PMEGP), which is a credit-linked subsidy programme aimed at generating self-employment opportunities through establishment of micro enterprises in the non-farm sector by helping traditional artisans and rural/urban unemployed youth. Under the scheme, women are provided higher subsidy vis-à-vis non special category.
18. Participation of women entrepreneurs in trade fairs under Procurement & Marketing Support Scheme is subsidized.

#### Following Data Shows The Growth Of Startups And Direct Jobs During Last Five Years In Maharashtra

Number of recognized startups:

Year	2019	2020	2021	2022	2023
<b>Maharashtra</b>	<b>1,987</b>	<b>2,531</b>	<b>3,552</b>	<b>4,763</b>	<b>5,801</b>

Direct jobs (self-reported) created by recognized startups during the last five years

Year	2019	2020	2021	2022	2023
<b>Maharashtra</b>	<b>21979</b>	<b>29133</b>	<b>38354</b>	<b>50913</b>	<b>64974</b>

#### Prominent Top Women Entrepreneurs From Start-Up In Maharashtra



### Challenges Of Women Entrepreneurs:

- **Capital:** Merely 3% of the women surveyed had accessed external funding, such as bank loans or equity investments, to start or expand their businesses. This starkly underscores the financial barriers women entrepreneurs face in securing the capital necessary for growth.
- **Data:** In the absence of gender-disaggregated data, stereotypes abound. Lack of data hampers the ability to present compelling business cases to investors or lenders and hinders the development of effective policy interventions and evaluation of program impacts.
- **Visibility:** Women entrepreneurs frequently confront societal undervaluation of their work, often stereotyped by their roles within the family or judged by their age or level of ambition. This systemic oversight diminishes their visibility. Often, expectations are set too low and multiple awards are doled out, with little or no differentiation or goal setting.
- **Safety:** There's a noticeable trend that cities deemed safer for women see a higher propensity for them to take entrepreneurial risks and establish businesses. Enhancing women's safety can directly contribute to fostering a more vibrant entrepreneurial ecosystem.
- **Network Gap:** Marriage is the primary factor behind women's migration with 87% women's migration being due to marriage, in contrast to men who predominantly move for job opportunities, women face the challenge of rebuilding their social networks. This disruption often leads to slower career progression, as rebuilding networks takes time and effort.
- **Care:** Women entrepreneurs are more likely to experience pauses in their careers due to caregiving responsibilities, including maternity leave and other family care needs. These 'slow phases' are a significant factor in the delayed success or growth of their businesses, further complicating their entrepreneurial journey

### Summing Up:

First and foremost, gender-disaggregated data is needed at a granular level to counter stereotypes, create interest in this segment and make effective policy interventions based on data. Majority of women entrepreneurs still set up businesses with low entry barriers because of ease of setting up and ability to fund with their own or family capital. To venture into more innovative fields, women do not lack expertise or ambition. However, this is often not possible because few are able to access risk and growth capital. We found women inheriting businesses from parents as well as joining family businesses after marriage and migration. Families are important stakeholders in their success. Fiscal incentives to female owned businesses for childcare leave and expenses is a potential solution. Many women are not able to expand their enterprises because they operate from home and often limit their operations for as long as possible. Providing co-working and co-building space can help. Most importantly, there is a need to make the financial system responsive to care gaps, late success, and low asset ownership. Going beyond PSL targets and setting KPIs for more inclusive investing and credit can be an effective policy approach. The whitepaper articulates a vision for Middle India where gender-responsive policies, education, capital, skill development, and strong community networks converge to create an inclusive and prosperous entrepreneurial landscape. This commitment to fostering women's entrepreneurship is pivotal not only for inclusive development, but also for overall economic growth and achieving the national goal of becoming a five trillion-dollar economy

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## INDIA'S VISION FOR VIKSIT BHARAT: 2047

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### Introduction

The term 'Viksit Bharat' means 'Developed India'. Viksit Bharat 2047 represents the government's vision to transform the country into a developed entity by its 100<sup>th</sup> independence in 2047. The four pillars of Viksit Bharat are Yuva (Youth), Garib (Poor), Mahilayen (Women) and Annadata (Farmers). The finance minister Nirmala Sitharaman made the following announcements in the Budget 2024 to achieve the goal of Viksit Bharat 2047: The government will formulate a plan, Purvodaya, for the all- round development of the eastern region of India, covering Jharkhand, Bihar, Odisha, West Bengal and Andhra Pradesh. This will cover infrastructure, human resource development, and the generation of economic opportunities to make the region an engine to attain Viksit Bharat.

The role of nuclear energy is expected to be very important in Viksit Bharat. For this, the government will partner with the private sector to set up Bharat Small Reactors, research and development of newer technologies for nuclear energy.

**Key words:** Viksit Bharat, Developed India, Prosperous Bharat.

**Objectives of the Paper:** The present paper aimed to focus on the following-

1. Vision of Viksit Bharat.
2. Different Aspects of Viksit Bharat.
3. Priorities of Viksit Bharat.
4. Suggestions to implement the policy of Viksit Bharat.

### Vision of Viksit Bharat:

The vision of Viksit Bharat is that of a Prosperous Bharat in harmony with modern infrastructure and nature and giving opportunities for all citizens of all regions to reach their potential.

### Different Aspects of Viksit Bharat:

The Viksit Bharat encompasses various factors of development, such as economic growth, environmental sustainability, social progress and good governance, to make India a developed nation by 2047.

- **Economic Growth:** A Viksit Bharat should have a resilient and strong economy that can provide opportunities and a high standard of living for all its citizens. The economy should be able to cope with the challenges of the 21<sup>st</sup> century based on entrepreneurship, innovation and competitiveness.
- **Environmental Sustainability:** A Viksit Bharat should have a clean and green environment to preserve India's biodiversity and natural resources. The environment should be able to mitigate the impacts of climate change based on restoration, conservation and resilience.
- **Social Progress:** A Viksit Bharat should have an inclusive and harmonious society that ensures the dignity and well-being of all its citizens. Society should be able to celebrate and respect India's cultural heritage based on justice, equality and diversity.
- **Good Governance:** A Viksit Bharat should have an agile governance with sound policies and accountability. A good governance system is where there is provision to collect credible data, analyse areas for correction and act swiftly to improve the country based on teamwork, reflection, empathy and consultation.

### Priorities of Viksit Bharat:

The following are the 9 priorities of Viksit Bharat-

1. Productivity and resilience in Agriculture.

2. Employment and Skilling.
3. Inclusive Human Resource Development and Social Justice.
4. Manufacturing and Services.
5. Urban Development.
6. Energy Security.
7. Infrastructure.
8. Innovation, Research and Development.
9. Next Generation Reforms.

### Suggestions:

Apart from the above 9 priorities India should focus on the following for Viksit Bharat 2047-

- **Shift to Renewable Energy:** One of the major aspects of this vision is the widespread adoption of renewable energy sources. Solar panels and wind turbines will be common, providing clean and efficient energy for households and businesses. This shift towards clean energy will reduce our carbon footprint and create jobs and stimulate the economy.
- **Advance Transportation:** Another important aspect is the implementation of advanced infrastructure. High-speed trains and efficient public transportation systems will connect major cities, reducing road pollution and congestion.
- **Technology:** Smart cities will be equipped with state-of-the-art technology to optimize resource management and enhance the quality of life for citizens.
- **Education Hub:** In addition, I envision India as a hub for education and research. Our universities will attract top talent from around the globe, and our scientists and engineers will make groundbreaking discoveries in fields such as artificial intelligence and biotechnology.
- **Thriving Infrastructure:** One of the most striking features of India in 2047 will be the rapid development of infrastructure. The country will have a well-connected network of roads, railways, and airports, making it easy for people to travel within and abroad. The government will have also invested heavily in developing smart cities.
- **Thriving Economy:** The country will have a diverse range of industries, including manufacturing, agriculture, and services, contributing to its rapid growth. Many successful businesses will operate in the country, and the government will implement policies that encourage entrepreneurship and innovation.
- **Strong International Relations:** In terms of international relations, India in 2047 will be a respected member of the global community. The country will have strong diplomatic ties with many countries and will be a key player in regional and international organisations. It will have also taken a leading role in addressing and tackling major global challenges, such as climate change and terrorism. It will be working closely with other nations to find solutions to these pressing issues.
- **Accessible Healthcare:** In terms of healthcare, India 2047 will be home to some of the best hospitals and medical facilities in the world. The government will have prioritized healthcare and implemented policies that make it accessible to all citizens. Many trained medical professionals, including doctors, nurses, and specialists, will work in the public and private sectors to provide top-quality care to patients.

### Conclusion:

A Nation with Full of Potential- In conclusion, India in 2047 will be a country that is full of potential and will have the potential to become a global leader in the 21<sup>st</sup> century. It will be a nation that has embraced technology, innovation, and education to drive its growth and development and will be well-positioned to take on future challenges. Overall, my vision for India in 2047 is to be a country that is environmentally conscious and socially progressive. We will lead the way in creating a sustainable and equitable future for all.

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## AN ANALYSIS OF SOCIAL MEDIA'S INFLUENCE ON ENTREPRENEURIAL GROWTH IN INDIA'S ECONOMY

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### Abstract

The research paper "An Analysis of Social Media's Influence on Entrepreneurial Growth in India's Economy" investigates the transformative impact of social media on entrepreneurship in India. With over 470 million active social media users, platforms such as Facebook, Instagram, and YouTube have become vital tools for Indian entrepreneurs, providing unprecedented opportunities for marketing, customer engagement, and sales. This study explores how small and medium enterprises (SMEs) leverage these platforms to compete with larger companies, thereby democratizing access to market resources. The paper analyses the strategies employed, challenges faced, and opportunities available to Indian entrepreneurs on social media, highlighting the platforms' role as a catalyst for economic growth and innovation. Using a mixed-methods approach that combines quantitative data from surveys with qualitative insights from interviews and content analysis, the study reveals a positive correlation between social media usage and business growth. The findings suggest that a strategic and active presence on visual-centric platforms like Instagram and Facebook significantly enhances business visibility and performance. The paper concludes with recommendations for leveraging social media to optimize entrepreneurial success in the rapidly evolving digital landscape of India.

**Keywords:** Indian Economy, Social Media Marketing, Entrepreneurial Growth, Digital Transformation, Small and Medium Enterprises (SMEs), Social Commerce.

### Introduction:

Social media platforms have revolutionized the way businesses operate and grow, particularly in emerging economies like India. This research paper, titled "A Study of Social Media Platforms as Catalysts for Entrepreneurial Growth in the Indian Economy," explores the significant impact of social media on entrepreneurship. With over 470 million active social media users, India represents a vast and dynamic market where digital platforms play a crucial role in business development. Platforms such as Facebook, Instagram, and YouTube offer entrepreneurs unparalleled opportunities to reach wide audiences, engage with customers, and drive sales. The rise of social commerce and digital marketing strategies has enabled small and medium enterprises (SMEs) to compete with larger companies, democratizing access to market resources. This paper examines the strategies, challenges, and opportunities presented by social media for Indian entrepreneurs, highlighting its potential as a catalyst for economic growth and innovation. By analyzing user engagement, content trends, and platform-specific data, the study provides insights into how businesses can leverage these tools to enhance their competitive edge in a rapidly evolving digital landscape.

### Literature Review:

Indian scholars such as Rajeev Kumar and N.P. Singh have emphasized the pivotal role social media platforms play in expanding market reach and enhancing customer engagement. Their studies highlight that platforms like Facebook, Instagram, and LinkedIn provide cost-effective marketing channels for businesses, particularly SMEs, allowing them to compete with larger corporations (Kumar & Singh, 2019).

The effectiveness of digital marketing strategies on social media has been a focal point in the literature. Researchers like Pooja Sharma and R.K. Sahay (2019) have explored how Indian businesses use targeted advertising, influencer partnerships, and content marketing to attract and retain customers. Their work underscores the importance of understanding platform-specific algorithms and audience preferences to optimize engagement and conversion rates.

Several Indian authors have identified significant challenges faced by entrepreneurs in utilizing social media. According to Sharma and Sahay (2019), barriers such as limited digital literacy, high competition, and resource constraints often hinder effective social media adoption. Additionally, Kaur and Singh (2021) discuss the

challenges of measuring the return on investment (ROI) from social media activities, which can be particularly problematic for small businesses with limited analytical capabilities.

The rise of social commerce is a critical development in the Indian entrepreneurial landscape. Mittal and Gupta (2020) have detailed how social media platforms facilitate direct sales and customer interactions, bypassing traditional retail channels. Their research indicates that social commerce is particularly popular among younger consumers, who are more likely to make purchases based on social media recommendations and influencer endorsements.

The role of government policies in promoting digital entrepreneurship has been widely discussed by Indian authors. Verma and Mishra (2022) highlight the impact of initiatives such as Digital India and Startup India, which aim to provide the necessary infrastructure and support for businesses to thrive in the digital age. These programs have been instrumental in encouraging digital literacy and providing financial assistance to startups.

Empirical studies and case analyses by various Indian researchers provide practical insights into how businesses have successfully leveraged social media. For instance, case studies from S. Gupta (2021) illustrate how startups in sectors like fashion and technology have used Instagram and YouTube to build brand identity and drive sales. These examples underscore the importance of a well-executed social media strategy in achieving business success.

### Social Media Platforms and Entrepreneurial Growth in India: 2023-2024

**1. Overview of Social Media Usage:** As of early 2024, India has approximately 470.1 million active social media users, reflecting a 4.2% growth from the previous year. The major platforms include WhatsApp, Facebook, Instagram, and YouTube, each playing a significant role in the social media landscape. <sup>\*1</sup>

#### 2. Platform-Specific Data:

- **Facebook:** India leads globally with the largest number of Facebook users, reaching 378 million as of early 2023. The platform continues to dominate with high engagement rates, especially for posts with images. <sup>\*2</sup>
- **Instagram:** The platform had 362.9 million users in early 2024, with a notable increase of 133 million users from 2023. The growth is fueled by the popularity of features like Instagram Reels, which are particularly favored by younger demographics. <sup>\*3</sup>
- **YouTube:** With 462 million users, YouTube reaches 61.5% of India's total internet user base. It remains a crucial platform for content consumption and advertising. <sup>\*4</sup>

**3. Impact on Entrepreneurial Growth:** Social Media has become a vital tool for entrepreneurs in India, offering a platform for marketing, customer engagement, and sales. The rise of social commerce is a significant trend, with the market expected to grow at a compound annual rate of 55-60% between FY 2020 and FY 2025, potentially reaching \$16-20 billion. <sup>\*5</sup>

**4. User Engagement and Content Trends:** Engagement rates vary across platforms, with Instagram nano-influencers (1,000-10,000 followers) achieving a 2.19% engagement rate, higher than the average across all influencers. This highlights the value of niche influencers in engaging specific audiences. <sup>\*6</sup>

The data underscores the growing influence of social media in India's economic landscape, particularly for entrepreneurial ventures. As platforms evolve and user bases expand, the opportunities for leveraging social media in business continue to grow.

#### Research Methodology:

**A) Objective:** The primary objective of this research is to analyze how social media platforms act as catalysts for entrepreneurial growth in the Indian economy. The study aims to explore the strategies utilized by Indian entrepreneurs on social media, the challenges they face, and the opportunities available. It seeks to provide insights into how these digital tools can be leveraged to enhance business performance and drive economic innovation.

**B) Research Design:** The study will employ a mixed-methods approach, combining quantitative and qualitative research methods.

**a. Quantitative Analysis:**

- **Data Collection:** A survey will be conducted targeting a sample of Indian entrepreneurs across various industries. The survey will include questions on social media usage, business performance metrics, challenges faced, and demographic information.
- **Data Analysis:** Statistical methods will be used to analyze the survey data, including correlation analysis to explore the relationship between social media use and business growth indicators.

**b. Qualitative Analysis:**

- **Interviews:** In-depth interviews will be conducted with selected entrepreneurs to gain deeper insights into their experiences with social media platforms. These interviews will focus on strategies employed, challenges encountered, and perceived benefits.
- **Content Analysis:** A qualitative content analysis of social media posts and engagements will be carried out to understand the types of content that are most effective in driving engagement and sales.

**C) Sampling:** The study will include a diverse sample of Indian entrepreneurs from various sectors, including retail, technology, fashion, and services. Both urban and rural entrepreneurs will be considered to provide a comprehensive view of the social media landscape.

**D) Data Sources:** Data will be collected from primary sources (surveys and interviews) and secondary sources (reports, articles, and platform-specific analytics). Social media analytics tools will also be used to gather data on engagement metrics, such as likes, shares, and comments.

**Data Sample Size**

- **Total Respondents:** 500 Indian entrepreneurs
- **Geographic Spread:** Across various regions of India (North, South, East, West, Central)
- **Industry Representation:** Diverse sectors including retail, technology, service, manufacturing, etc.
- **Business Stages:** Start-ups, growing businesses, and established enterprises

**E) Limitations:** The study may face limitations such as the self-reporting bias in surveys and the rapidly changing nature of social media platforms. Additionally, the findings may not be generalizable to all sectors or regions within India.

**Analysis and Interpretation of Data**

The collected data helped the research work to analyze the correlation between social media usage and business growth, identify the most effective platforms, and understand the challenges entrepreneurs face. This analysis is crucial for formulating strategies to leverage social media for economic development in India.

**Data Collection Table**

Region	Industry	Business Stage	Social Media Platform	Frequency of Use (hours/week)	Revenue Growth (%)	Customer Base Growth (%)	Marketing Strategy Effectiveness (1-10)
North	Retail	Start-up	Facebook	15	20	30	8
South	Technology	Growing	Instagram	20	25	40	9
East	Service	Established	LinkedIn	10	15	20	7
West	Manufacturing	Start-up	Twitter	12	18	25	6
Central	Retail	Growing	Facebook	18	22	35	8



## 1. Impact of Social Media Platforms on Revenue Growth

Table 1. Revenue Growth vs. Social Media Platform

Platform	Avg. Growth
Facebook	22%
Instagram	25%
LinkedIn	15%
Twitter	18%

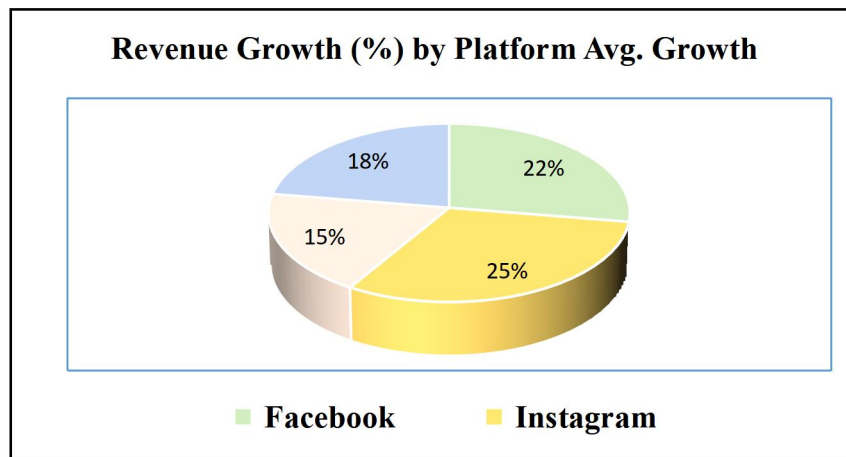


Chart 1: Impact of Social Media Platforms on Revenue Growth

- Observation: Entrepreneurs using Instagram reported the highest average revenue growth of 25%, followed by Facebook with 22%.
- Interpretation: Visual-centric platforms like Instagram may offer better engagement for customers, leading to higher revenue growth.

## 2. Frequency of Social Media Use and Business Growth

Table 2. Frequency of Social Media Use and Business Growth

Frequency of Use (hours/week)	Avg. Growth (%)
10-15	15%
16-20	22%
21-25	30%
26-30	35%

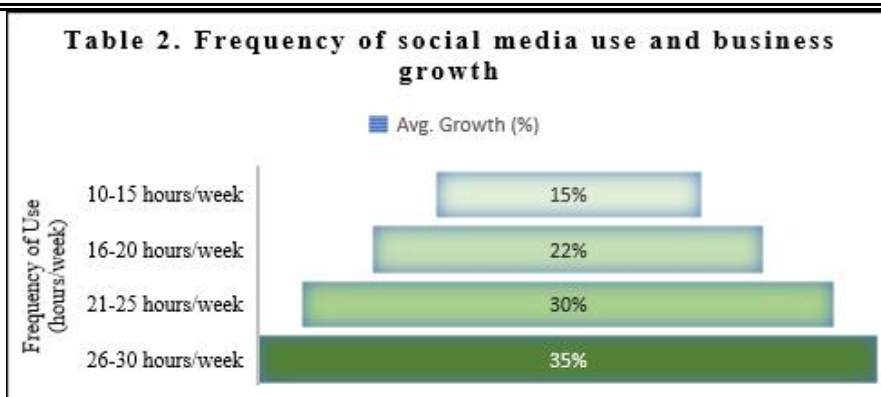


Chart 2: Frequency of Social Media Use and Business Growth

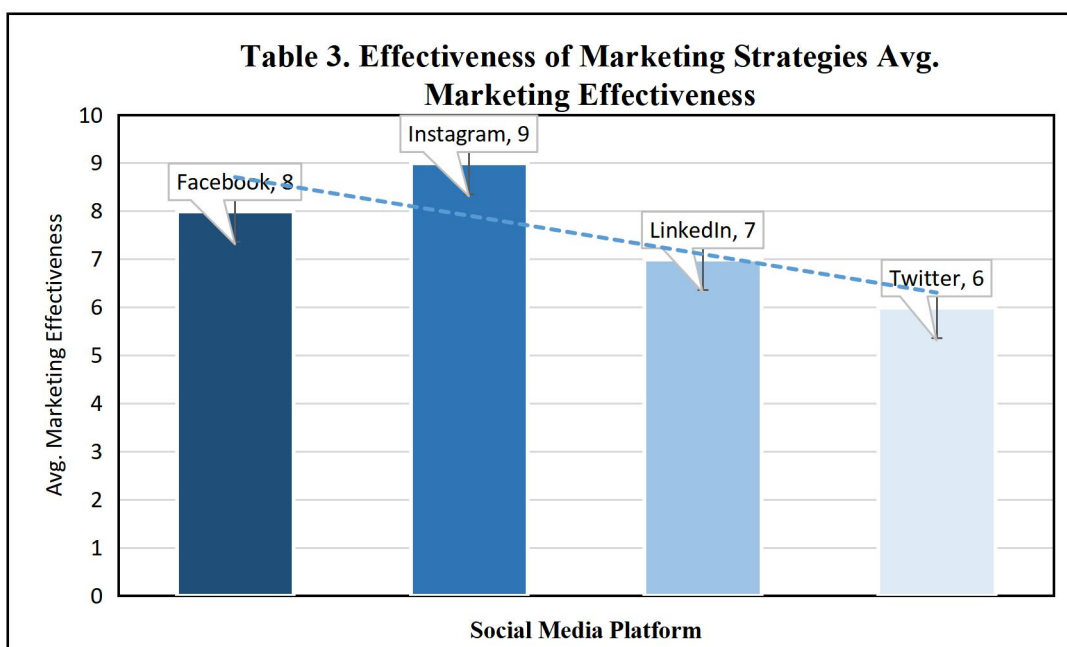
- Observation: Higher frequency of social media use correlates with greater revenue and customer base growth.
- Interpretation: Consistent and active presence on social media platforms can significantly enhance business visibility and growth.

### 3. Marketing Strategy Effectiveness by Platform

Table 3. Effectiveness of Marketing Strategies

Platform	Avg. Marketing Effectiveness
Facebook	8
Instagram	9
LinkedIn	7
Twitter	6

Chart 3. Effectiveness of Marketing Strategies



Observation: Entrepreneurs rated Instagram marketing strategies the highest in effectiveness (average rating of 9), followed by Facebook (average rating of 8).

Interpretation: Targeted and visually appealing marketing strategies on platforms like Instagram are more effective in engaging customers.

The research data suggested that social media platforms significantly impact entrepreneurial growth in the Indian economy. Platforms like Instagram and Facebook are particularly effective in driving revenue and customer base growth, primarily due to their visual-centric and engaging nature. Consistent and frequent use of these platforms, coupled with effective marketing strategies, enhances business visibility and success.

## **Recommendations**

### **1. Leverage Visual-Centric Platforms:**

Entrepreneurs should prioritize using visual-centric platforms like Instagram and Facebook, which have shown higher revenue growth rates. These platforms enable better engagement with customers through visual content such as images, videos, and stories.

### **2. Increase Social Media Activity:**

A higher frequency of social media use correlates with greater business growth. Entrepreneurs should aim to maintain an active presence, posting regularly and interacting with their audience to enhance visibility and engagement.

### **3. Implement Effective Marketing Strategies:**

Focus on crafting targeted and visually appealing marketing campaigns. Utilizing features like Instagram Stories, Facebook Ads, and live videos can increase customer interaction and boost marketing effectiveness.

### **4. Diversify Social Media Presence:**

While Instagram and Facebook are highly effective, maintaining a presence on other platforms like LinkedIn and Twitter can still be beneficial. LinkedIn, for example, is valuable for B2B businesses and professional networking.

### **5. Monitor and Analyze Performance:**

Regularly analyze social media metrics to understand what content performs best and refine strategies accordingly. Tools like Facebook Insights and Instagram Analytics provide valuable data on audience engagement and campaign effectiveness.

### **6. Invest in Social Media Training:**

Entrepreneurs should consider investing in social media marketing training for themselves and their teams. Understanding the latest trends, tools, and best practices can enhance their ability to utilize these platforms effectively.

### **7. Engage with Customers:**

Direct engagement with customers through comments, messages, and interactive content can foster a loyal customer base and improve brand reputation.

## **Conclusion:**

The study on "Social Media Platforms as Catalysts for Entrepreneurial Growth in the Indian Economy" reveals a significant impact of social media on the growth of Indian businesses. This research may include:

**Revenue Growth:** Instagram and Facebook are associated with higher revenue growth rates compared to LinkedIn and Twitter.

**Frequency of Use:** Regular and frequent use of social media platforms is correlated with greater business growth.

**Marketing Effectiveness:** Targeted and visually engaging marketing strategies on platforms like Instagram are perceived as more effective.

These findings highlight the importance of social media as a powerful tool for entrepreneurial growth in India. By leveraging the strengths of various social media platforms and employing effective strategies, Indian entrepreneurs can enhance their business growth, reach a wider audience, and stay competitive in the digital age.

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## NEED OF SKILL DEVELOPMENT AND VOCATIONAL TRAINING FOR RISING INDIA

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### Introduction

Most of the population in India lives in rural part with unemployment and need of work in hands. Most of the farm related and other works too need skills to regulate and speed up the economy of RISING INDIA.

Education, skills development and technical training are central to agricultural and rural employment. They prepare mostly young people for work in the formal and informal sector in rural areas and thus play an important role in poverty reduction. The better the training and the more refined the skills are in terms of human capital, the higher the income and returns and the better the rural livelihoods. In many projects the targeting of "youth" is based on the common misconception that boys and girls are a homogeneous group. Too often, the gender neutral use of the word "youth" implies that programmes do not cater for the different needs of young women and reach mostly young men, who are more visible in public. Public and private providers of education and training poorly serve rural youth especially in when comparing opportunities available to urban youth. or provide. About 130 million young people in developing countries (15-24 years) are classified as 'illiterate' with women representing 59 per cent (UNESCO 2008). The high number of illiterate youth and those with low schooling are mostly living in rural areas and are badly prepared for productive work (Atchoarena&Gasparini 2003.)

India's demographic profile is helping the country to aim for an accelerated economic growth. India is expecting a huge growth in the labour market by having 64.8 percent of the population as the working population. It gives a lot of benefit to the country in the labour market.

Most of the economies in the world are ageing fast, their contributions adding to the global workforce will be reduced to a great extent While, India will be an exception to it, with a major dominance in the global workforce in the years to come. India will be enjoying dominance in the global workforce by being the biggest provider of skilled labour to the world.

### Objectives of the Study :-

To study how the man power in rural area get bread butter without migrating in urban areas.

To study how to regulate and give opportunities to school and educational institutions to increase number of skill empowered man power.

- To study the present system of regulation of the Vocational Education, Training and Skill Development sector in India .
- To know the challenges with respect to the skill development in India
- To study geographical environmental and social needs of specific area.

### Skill Development System in India

India experiences a huge advantage by having a young workforce, which means it high scope of providing manpower to the labour market. After assessing the high demand for the skilled workforce in the world, the Ministry of Skill Development and Entrepreneurship was formed. The ministry was announced in June 2014. The Prime Minister of India, Shri Narendra Modi felt the need to focus on skill development considering the changes happening in the labour market and hence the ministry was established. It focused on working in close collaboration with other ministries to meet the huge demand of skilled workforce. It aimed at establishing and lying down of consistent and common standards of teaching and collaborating the efforts of the organization aiming at development of skills<sup>2</sup> . It also focuses on bringing all the other ministries to come together and function in a

unified manner towards skill development. It lays down the objectives and the expected outcomes and also ascertains the different institutions that will ensure that the expected outcomes are achieved. The set-up of Skills Development with major parties involved in appropriately designed. It includes a lot of parties involved in the skill development in the country (Refer Figure 4). The Ministry works in close collaboration with the National Skill Development Corporation (NSDC). It helps training institutes map the skill sets, involves in the market research and design the relevant curriculum. It aims at bridging the gap between the skills demand and supply by boosting the skill development initiatives<sup>2</sup>. In India, the skill acquisition is by through two channels which include both formal and informal methods. Both the Public and Private Sector aims at imparting the formal training. In addition to this, the government is also looking at the Public and Private Partnership known as the PPP model. The Industrial Training Institutes known as ITIs are run by government and is a major channel of gaining Vocational training in the country. Apart from this, there are privately run Industrial Training Centres known as ITCs and vocational schools. In India, the Labour Laws also ensures that the students going for technical education are trained through the Apprenticeship training provided by the Industry. Though there is a lot of participation from the private sector on skill development but the public sector dominates the skill development programs in the country. The informal channel is more unstructured and can be imparted through working on the job or through experiential learning. The government of India designed a policy framework which aimed at developing the skills in the country. The skill development eco system includes the Apprentices Act, 1961, a formal way of skills acquisition. It also includes, The National Skill Policy, which lays down the policies and procedures for skill enhancement and the National Skills Qualification Framework (NSQF)<sup>3</sup>. The Apprentice Act, 1961 ensures that there is participation from the Industry in the skill development of the students undergoing a formal technical education. The Industry professionals are well equipped to train the students on skill development. The Act aims at making it mandatory

for establishments in the private and the public sector to train the students. The Industry has to provide on the job training to the students hence giving them a real world exposure to skills and processes and making them employable in the labour market. The National Policy on Skill Development was framed in 2009 with an aim to strengthen the skill development initiatives of the country. It is a Public Private Partnership model which falls under the Ministry of Skill Development and Entrepreneurship. It was established in order to promote skill development by creating large and exceptional quality vocational institution with the appropriate training infrastructure. India has a lot of aspirants but it doesn't have the required infrastructure to meet the requirements of vocational education and training and hence the government involved more of such partnership to ensure the model is successful in imparting the vocational training

### **Challenges:-**

India is facing a lot of challenges keeping in view the current infrastructure and the policy framework. The challenges faced in skill development have been discussed below:

#### **1. Insufficient Scale and Restricted Capability:-**

The current infrastructure facility available in the educational institutions is inadequate considering the huge demand of labour. There aren't many trained and highly skilled trainers available. It reflects the inappropriate and insufficient infrastructure not only in big cities but also in small towns and villages. The faculty needs to be motivated and skilled to take up higher responsibilities. The training infrastructure too needs to be made adequate keeping in mind the number of aspirants to be skilled. Another crucial aspect in skill development is the 'Train the Trainers'<sup>16</sup>. The knowledge and experience brought in by the faculty ensures that the student has picked up the appropriate skills and has had a phenomenal learning experience. The trainer should be able to assess the needs of the students considering the labour market situation. It also requires that there is an ideal mix of both theoretical as well as practical learning experience. Hence, training of the trainer has become a major challenge.

#### **2. Mobilization:-**

The enrolment of the students for vocational education and training has become an extremely challenging task. The outlook of the people associated with the skill development is still very traditional. The students would move on to managerial roles as the technical trades positions are associated with low salaries and lack of recognition. There are students who are not able to pay for the fee and may not be aware of the schemes run by the government which also



leads to a low mobility towards such programs. Skilling has always been branded as a blue collar job, which is further associated with low pay scales, limited growth and less challenging roles. Like Singapore, our government needs to focus a lot on the branding strategies for skill development which may ensure a high mobility towards such programs.

### 3. Employer's buy-in :-

The industry doesn't distinguish whether the person has acquired the skills through on the job training or has gone through a formal training. Many companies make their own skill centres through which they develop the people. Though the Skill Development also focuses on the Public Private Partnership Model but it needs a lot of effort from both the players in development of skills.

### 4. Scalability:-

Any model to be successful needs a lot of support from stakeholders too. Since there is very limited buy-in from the corporate sector the progress of such initiatives is reduced. Skill development had not been a priority of the government earlier and hence this area has always been ignored<sup>16</sup>. Since the model requires high capital investments, the people are not very willing to support such a model. The challenges associated with unavailability of infrastructure, slow processing of bank loans seldom demoralizes the budding entrepreneurs to come up with their. In rural region, it becomes more challenging because the people aren't aware of the credit facility and the different schemes supported by the government and any other financial bodies. The urban areas face issues like high operational cost which discourages such entrepreneurs to come forward.

### 5. Skills Mismatch :-

There is a lot of issue related to the skills needed by the industry and the skills imparted through the educational and training institute. There is a lack of industry-faculty interaction because of which the skill set doesn't suit the employer. Though the people may be skilled but they are not employable. It becomes extremely important that the industry professionals are also included during the

No focus on Non-Technical Skills The Vocational Training Centres in India is focusing on developing technical skills only whereas the employers feel the need of having Behavioral Skills also. According to the India Hiring Intent Survey, the employers also focus on Skills like Domain Expertise, Communication, a culturally fit person, values on Honesty and Integrity, Adaptability, focused on Result, Interpersonal skill and Learning attitude. These skills are not covered as an integral part of the skill development. This is a major challenge as it results to a lot of unemployed skilled workforce.

### Opportunities:-

1. Paramedical courses like MRI Nursing care, Blood sampling; Emergency support, Optometry and dialysis for students under science stream.
2. Beauty and wellness growing fastly covers hairdressing spa management and beauty therapy.
3. Digital marketing covers social media marketing ,content marketing and lot more which gives practical knowledge and skills and lead to high pay jobs in the digital marketing .
4. Tradesman course denotes general mechanic ,handyman and contractor .It covers home improvement , carpentry , craftsmanship , and furniture building etc

### Conclusion

India has large number of population which needs Skill development .For the RISING INDIA important aspect needs a coordinated effort from all the agencies, stakeholders and the students to make it a successful program. And our honourable Prime minister's dream will be fulfilled The policies, if are able to reach a larger audience will make a difference in the employment scenario of the country. It will not only add value to the economy of the country but will be supporting the 'Make in India' campaign by providing the skilled workforce in the country. Our vocational training programs should be included at the school level itself. The Public Private Partnership plays a key and an important role in the development and enhancement of skills. NSDC has made some progress in

improving the training infrastructure in the private sector by having more and more Public Private Partnership. There has been a growth in such partnership over a few years. It becomes extremely important to strengthen the tie-ups with the training institutes to ensure that the quality is maintained and the model is sustainable too.

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# A STUDY OF THE ECONOMIC EMPOWERMENT POTENTIAL OF COST ACCOUNTING IN THE CITY OF MUMBAI

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## Abstract

The concept of cost accounting is fundamental to financial management and provides businesses with the tools to track, analyze, and manage their costs. The purpose of this research paper is to provide an overview of the principles, methodology, and applications of cost accounting, emphasizing its importance in decision-making and strategic planning. This paper examines a variety of cost accounting techniques, including the job order costing technique, the process costing technique, the activity-based costing technique, and the standard costing technique, in order to highlight how these methods contribute to the improvement of operational effectiveness and profitability. Additionally, the paper discusses the role of cost accounting in budgeting, performance evaluation, and cost control, providing insights into its pivotal role in contemporary business management.

**Keywords:** Cost Accounting, Budgeting, Economic empowerment.

## Introduction

Cost accounting in modern accounting systems is one of the most important elements of accounting due to the fact that it identifies the total cost of production by taking into account both variable and fixed costs related to each step of the production process. This fact is important for internal management in their ability to make informed decisions and formulate strategies. The purpose of cost accounting is primarily to make decisions that can help internal management make better economic decisions, as opposed to financial accounting, which provides information for external stakeholders.

## Literature Review

Lukka, K., & Granlund, M. (1996), The distribution of different overhead costs among goods is one of the major areas of concern in cost accounting. Since none of the responding units reported using the so-called new cost accounting procedures, it appears that they are only rarely used. On the other hand, there was evidence of the widespread interest in creating activity-based costing systems and their current application.

Umeji, A. U., & Obi, C. A. (2014), The study discovered that although the operators thought record-keeping, inventory control, and price determination skills were crucial, the levels of possession were still below expectations. The study suggested that a training program be established for small business owners in the state to teach them the record-keeping and inventory management skills necessary for running a firm, based on these findings.

Kaplan, R. S., & Atkinson, A. A. (2015), A process's expenses are recorded, categorized, analyzed, summarized, and allocated using a number of concepts in cost accounting. Subsequently, several strategies are developed to control the costs. These guidelines support companies in determining product costs, keeping expenses under control, and making wise business decisions.

## Objectives

To understand the fundamental principles of cost accounting.

To explore various cost accounting methodologies and techniques.

To examine the practical applications of cost accounting in business management.

To analyze the role of cost accounting in budgeting, performance evaluation, and cost control.

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## Methodologies and Techniques

### Job Order Costing

Job order costing is used when products are manufactured based on specific customer orders. Each order is treated as a unique job, and costs are tracked individually. This method is commonly used in industries like construction, printing, and custom manufacturing.

### Process Costing

Process costing is suitable for industries where production is continuous, and the products are indistinguishable from each other. Costs are accumulated for each process or department over a period. This method is prevalent in chemical manufacturing, oil refining, and food production.

### Activity-Based Costing (ABC)

Activity-based costing allocates overhead costs to products based on the activities required to produce each product. This method provides more accurate cost information by identifying the cost drivers associated with each activity. It is useful in complex production environments with diverse products and services.

### Standard Costing

Standard costing involves assigning expected costs to products and services. These standard costs are then compared with actual costs to determine variances. Standard costing helps in budgeting, performance evaluation, and cost control by highlighting areas of inefficiency.

## Research Methodology

### Research Design

This study uses a quantitative research design, employing a survey method to collect data from cost accountants in various industries. The survey aims to evaluate the perceived importance of cost accounting in business management.

### Sampling

A stratified random sampling method is used to ensure representation from different industries, including manufacturing, service, and retail. The sample consists of 100 cost accountants in Mumbai.

### Data Collection

Data is collected through a structured questionnaire using a Likert scale to measure the importance of cost accounting. Respondents rate statements on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

### Data Analysis

Descriptive statistics and inferential analysis are used to interpret the data. The Likert scale responses are analyzed to determine the overall perception of the importance of cost accounting.

### Likert Scale Responses

Respondents were asked to rate the following statements on a Likert scale from 1 to 5:

- Cost accounting is essential for budgeting and financial planning.
- Cost accounting helps in performance evaluation and identifying inefficiencies.
- Cost accounting is crucial for cost control and reduction.
- Cost accounting provides valuable insights for strategic decision-making.
- The implementation of cost accounting improves overall business efficiency.

**Table showing Likert Scale Analysis**

Statement	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Mean	Standard Deviation
1	0	2	8	50	40	4.28	0.70
2	1	3	10	55	31	4.12	0.75
3	0	1	9	47	43	4.32	0.68
4	0	0	12	48	40	4.28	0.67
5	1	4	14	52	29	4.04	0.76

The mean scores for all statements are above 4, indicating a high level of agreement on the importance of cost accounting among the respondents. The standard deviations are relatively low, showing a consensus among cost accountants regarding the critical role of cost accounting in various business functions.

### **Applications in Business Management**

#### **Budgeting**

Cost accounting plays a vital role in the budgeting process by providing detailed cost information that helps in preparing accurate budgets. By analyzing past cost data and forecasting future costs, businesses can create budgets that align with their strategic objectives.

#### **Performance Evaluation**

Cost accounting provides benchmarks and standards against which actual performance can be measured. By comparing actual costs with standard costs, businesses can evaluate their performance, identify inefficiencies, and take corrective actions.

#### **Cost Control**

One of the primary objectives of cost accounting is to control costs. By tracking costs and identifying variances, businesses can implement cost-saving measures and improve operational efficiency. Techniques like variance analysis and activity-based costing are particularly useful in cost control.

### **Conclusion**

Cost accounting is an indispensable tool for modern business management, providing critical insights into cost behavior, efficiency, and profitability. By employing various cost accounting methodologies, businesses can make informed decisions, control costs, and enhance their overall performance. As businesses continue to evolve in a competitive environment, the importance of cost accounting in strategic planning and operational management cannot be overstated.

A key component of economic empowerment is effective cost management. Controlling costs, conducting analyses, and developing budgets help businesses and individuals achieve better financial health, make more informed decisions, and enhance their economic stability and growth. Thus, economic empowerment is enhanced as individuals are able to control economic resources and opportunities for advancement.

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## IMPLEMENTING E-GOVERNANCE AND SMART CITY INITIATIVES (SPECIAL REFERENCE TO LATUR MC)

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### Abstract

India is much populous country. However it can be both harmful as well as beneficial since its most of population is it's youth. So any project which is to be implemented is focusing majorly at youth population, because majority of responsibilities are shouldered on these people only.

As India has projected smart city initiative in 2015, with a view that India should mirrored into a more powerful, sustainable country. But is it possible in a country like India where most of the population is likely to be poor and is always in a condition to feed their livelihood. From early morning to the time they go to bed they are in worry that today's over what about next day. But hopefully Govt. is engaging new protective and sustainable measures at the interest of the society.

### Introduction

Latur a city in Maharashtra state got the status of Municipal corporation by the state of Maharashtra in the year 2011 and had an earlier Municipal Council established in 1952. LMC is the Local Civic Body having five zonal areas. Population of LMC as on date is nearly 5,41,000.

Latur has an ancient history, which probably dates to the Rashtrakuta period. It was home to a branch of Rashtrakutas which ruled the Deccan from 753 to 973 AD. The first Rashtrakuta king, **Dantidurga**, was from Lattaluru, the ancient name for Latur. Ratnapur is also mentioned as an historic name for Latur. (taken from source)

Even though Latur is not currently listed to be a part of Smart City Mission but very soon it may be!!! as it shows a wide variety of potential for the same. As some of the features of LMC are stated hereunder:

Basic and Higher education, University education, Professional education, Trade and industry area, some MNC's, specialised industrial parks and expert zones, popular is '**Sugar Belt of India**', well-developed MIDC industrial area, Chamber of commerce and industry association, it also contribute a good transport system like Roads and Rail route.

### Smart City Mission :- An Government initiative

There can not be an all over accepted definition of what is mean by a smart city. It is being said it should be like a replicable model which will act like a light house to other aspiring cities. Means no one can put the concept in a fixed frame, but what should be there in a city by which one can say that it is a smart city are the infrastructural facilities such as adequate water supply, assured electricity supply, sanitation, including solid waste management, efficient urban mobility and public transport, affordable housing, especially for the poor, robust IT connectivity and digitalization, good governance, **especially e-Governance and citizen participation**, sustainable environment, safety and security of citizens, particularly women, children and the elderly, and health and education. The list can't be specific and exclusive but it can go an inclusive one. Because smartness can't be defined in one frame it goes vary from person to person, so city to city and so from country to country.

The projects is expected to run in 100 listed cities, with project cost around 1,64,289/- crores and it is being said that 90% of the projects are done and 10% are ongoing.

### Urbanization in India

There is a rapid growth in urbanization in India. By the year 2036 towns and cities will be a home to at about 40 % of India's population. Urban population is contributing to 70% of India's GDP.

India is traveling towards its goal to be a developed economy by the 100<sup>th</sup> year of its independence. In such a condition how we are able to manage such a rapid urbanization it is a question mark before all of us.

For making India smart through this transformation of smart city mission not only Government but public participation is also must. The work should be at ground level then only

### **Smart city features:-**

Use of land : in Latur (as in India) land issue is a major issue because it is a much populous country. So use of land is must be with utmost care;

Housing for all: if the dream is for smart cities then basic requirement must be accomplished. No person should sleep by roadside;

Creating walkable localities: the surrounding must be congestion free, pollution free, road safety and security measures must be there, proper signal systems, CCTV facilities, waste disposal facilities, public transport, but also for pedestrians and cyclists;

Preserving and developing open spaces: parks, playgrounds, and recreational spaces in order to enhance the quality of life of citizens, reduce the urban heat effects in Areas and generally promote eco-balance;

Making governance citizen-friendly and cost effective: increasingly rely on online services to bring about accountability and transparency, especially using mobiles to reduce cost of services and providing services without having to go to municipal offices; form e-groups to listen to people and obtain feedback and use online monitoring of programs and activities with the aid of cyber tour of worksites;

Maintaining identity of the city:- by maintaining city culture and heritage as well as to give information about culture and heritage of the city to its people by various ways like city carnivals, melas etc. if any speciality is there like in Latur Gunj-Golai is having its own identity over past period.

Applying Smart Solutions to infrastructure and services in area-based development in order to make them better. For example, making Areas less vulnerable to disasters, using fewer resources, and providing cheaper services.

The strategic components of Area-based development in the Smart Cities Mission are city improvement (retrofitting), city renewal (redevelopment) and city extension (greenfield development) plus a Pan-city initiative in which Smart Solutions are applied covering larger parts of the city

Financing of Smart Cities : The Smart City Mission will be operated as a Centrally Sponsored Scheme (CSS) and the Central Government proposes to give financial support to the Mission to the extent of Rs. 48,000 crores over five years i.e. on an average Rs. 100 crore per city per year. An equal amount, on a matching basis, will have to be contributed by the State/ULB; therefore, nearly Rupees one lakh crore of Government/ULB funds will be available for Smart Cities development. (taken from Source)

### **E-Governance:**

The success of any project as earlier stated is vested in proper implementation of the required technologies with utmost care and good governance. the capacity of municipal corporations to and run such types of missions is totally dependent on how it uses the technologies and implement the work. A smart city is a surrounding that facilitates the public and private sectors collaborations along with citizens to raise and develop innovative solutions for the urban issues. until the participation of citizen is welcomed actual goal will not be achieved. Governance through people is the main moto of Republic of India. success of e-governance can only be analyzed in terms of stakeholders' participation and satisfaction. The people of the land generally seek to choose the view or seen of tomorrow so if the discussions are being held along with them then the good results will automatically being fetched .

**Opportunities:**

Being a smart is itself a nice feeling and the same will happen with cities also. if everything is being conducted with the discipline then automatically developments will have much more scope. More sustainable Urban development will attain.

“The SCM had the potential to be a transformative program when the idea for it first gained traction, but unfortunately, it was undermined from the start by a number of harmful design flaws which rendered it less capable of meeting the most urgent needs of India’s cities. The Mission’s PPP-reliant funding and implementation mechanism undermined trust among civic partners, while failing to deliver the timely funding necessary for projects to be completed according to the program calendar. Inadequate provisions were made to build the capacity of stakeholders to engage with the data flows generated by project infrastructure, diminishing their impact, and increased collaboration and cooperation should have taken place between states to narrow the geographic skills gap. The siloed, competitive grant process prevented projects from having synergies with each other within or between cities, and ULBs were incentivized to propose projects that maximized the probability of funding, rather than those which met their core development challenges. The program also pursued development in small areas with high existing levels of development under the theory that other areas would follow suit, without doing enough to elevate the capacity of municipalities not selected under the SCM. Finally, at a semantic level, the definition of “smartness” was blurred to the point that it had little to do either with technology or with sustainability, leaving cities to propose whatever projects might maximize the possibility of new revenue streams, especially from private sources. Some have even argued that the purpose of the SCM was not to develop Indian cities, but to rather develop their credit ratings to push them to draw more on private-sector financing in the future. At the SCM’s outset, some criticized the program for allegedly promoting inequitable development despite its stated mission, such as the State Government of West Bengal, which even briefly withdrew from the SCM before returning in a limited capacity. The flaws in the program mean that to some degree, these criticisms have been borne out in the end.” (Source CSD Paper)

**Challenges:**

In a country like India the vision of smart city is likely with more challenges. As earlier stated, India is much more population dense country. Its population is increasing day by day and land is a fixed term, land is not going to increase. So while taking any decision, its implementation should be first take into consideration.

Smart leadership and vision at this level and ability to act decisively will be important factors determining the success of the Mission. Understanding the concepts of retrofitting, redevelopment and greenfield development by the policy makers, implementers and other stakeholders at different levels will require capacity assistance. Major investments in time and resources will have to be made during the planning phase prior to participation in the Challenge. This is different from the conventional DPR-driven approach. The Smart Cities Mission requires smart people who actively participate in governance and reforms. Citizen involvement is much more than a ceremonial participation in governance. Smart people involve themselves in the definition of the Smart City, decisions on deploying Smart Solutions, implementing reforms, doing more with less and oversight during implementing and designing post-project structures in order to make the Smart City developments sustainable. The participation of smart people will be enabled by the SPV through increasing use of ICT, especially mobile-based tools, but people in India are being used only as a vehicle of political parties for reaching them at their desired goals. Indian cities have struggled with ICT-driven service delivery models.

Challenges for funds is a critical challenge before the Government as we can’t produce money. There is no land under cultivations for money. So in India a developing country the management of funds is a critical task.

Even though Govt. mission such as Swachh Bharat Abhiyaan, Digital India such projects are very familiar but participation of citizens, involvement of concerned parties is somewhat neutral. So this type of smart dream to be a smart city is not possible without the participation of all.

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### Conclusion:

India has much more potential along with its vision and strength. and if these vision is informed to the local people then they will contribute their best in attaining goals. Generally participative governance gives good results as the problems and issues of ground level can't be informed to the Government as they are. Local government needs greater capacity to execute a collective vision, empowering local governments with the formal power to guide Central Government.

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# A STUDY OF EFFECTS OF SOCIAL MEDIA USE ON STUDENTS STUDYING CLASS 8-10 IN LATUR ZILLA PARISHAD SCHOOL: SPECIAL REFERENCE 2019-2024

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## Introduction

Social media has become an integral part of daily life, influencing various aspects of society, particularly among adolescents. This study aims to explore the effects of social media use on students in Classes 8-10, specifically within the context of the Latur Zilla Parishad School from 2019 to 2024. With the rapid growth of digital platforms, students' academic performance, social behaviour, and emotional well-being have been notably impacted. This research delves into the positive and negative aspects of social media exposure, focusing on its role in shaping students' cognitive development, peer interactions, and academic performance. This Study explores the impact of social media on students within a specific age group and demographic. As social media usage becomes an integral part of daily life, its influence on adolescents, especially students is a growing concern. Through this investigation, we aim to uncover patterns, correlations, and the broader societal implications of social media use within this demographic. By analyzing data from this period, the study seeks to contribute valuable insights into how educators, parents, and policymakers can better navigate the challenges posed by social media in education.

This study investigates both positive and negative effects of social media on academic performance, social behaviour, mental health, and time management among students in rural India. By focusing on the Latur Zilla Parishad School and the time period of 2019-2024, the research contextualizes the digital evolution amidst growing internet penetration in semi-urban areas. With special emphasis on students from Class 8-10, it provides a microcosm of how increased accessibility to smartphones and social platforms like WhatsApp, Instagram, and YouTube may affect learning outcomes and overall student development.

**Keywords:** Social media, Academic performance, Mental health, Adolescent behavior

## Review of Literature:

### 1. Books:

**Boyd, D. (2014).** *It's Complicated: The Social Lives of Networked Teens*. Boyd provides a comprehensive analysis of how teenagers engage with social media and how it affects their social lives, time management, and interpersonal skills. The book discusses both positive and negative consequences of this engagement.

**Palfrey, J. & Gasser, U. (2016).** *Born Digital: How Children Grow Up in a Digital Age*. This work explores the digital transformation of adolescents and discusses issues like internet addiction, learning patterns, and how it affects cognitive and social skills.

**Tufekci, Z. (2017).** *Twitter and Tear Gas: The Power and Fragility of Networked Protest*. Though not directly about education, this book explores the wider impact of social media on young people's activism, their engagement with digital platforms, and how it shapes identity.

### 2. Journals:

**Al-Menayes, J. J. (2015).** "Social media use, engagement, and addiction as predictors of academic performance". *Journal of Arab & Muslim Media Research*. This study explores the correlation between social media addiction and academic performance, particularly highlighting its negative impact on students' grades.

**Kirschner, P. A., & Karpinski, A. C. (2010).** "Facebook and academic performance". Computers in Human Behavior. This article discusses the relationship between Facebook usage and lower academic achievement, providing empirical data relevant to younger students.

**Kalpidou, M., Costin, D., & Morris, J. (2011).** "The relationship between Facebook and the well-being of undergraduate college students". Cyberpsychology, Behavior, and Social Networking. This journal article highlights both positive and negative aspects of Facebook use in relation to students' well-being, offering insight into how digital engagement affects mental health.

## Research Methodology

The study, "A Study of Effects of Social Media Use on Students Studying Class 8-10 in Latur Zilla Parishad School: Special Reference 2019-2024," employed a mixed-method approach to gather comprehensive data on the influence of social media usage on students. The methodology was designed to systematically address the research objectives while ensuring accuracy and reliability of the data.

### 1. Research Design

**Type:** Descriptive and Analytical

**Approach:** Mixed-method (quantitative and qualitative)

#### Objectives:

- a. To examine the impact of social media usage on the academic performance of students studying in Class 8-10 at Latur Zilla Parishad School between 2019 and 2024.
- b. To assess the effect of social media on students' mental health, including stress, anxiety, and self-esteem, during the study period.
- c. To identify the patterns of social media usage among Class 8-10 students in Latur Zilla Parishad School, including time spent, platforms used, and primary purposes (educational, social, entertainment).
- d. To explore the influence of social media on students' social interactions and behavior within and outside of school, especially regarding peer relationships and communication styles.

#### Hypotheses:

**H1:** There is a significant negative relationship between the time spent on social media and the academic performance of students in Class 8-10 at Latur Zilla Parishad School from 2019 to 2024.

**H2:** Excessive social media use has a significant impact on the mental health (anxiety, stress, and self-esteem) of students studying in Class 8-10 at Latur Zilla Parishad School during the period 2019-2024.

**Rationale:** A descriptive study allows us to explore the various dimensions of social media use, while an analytical approach helps in understanding relationships and patterns in the data.

### 2. Population and Sample

**Target Population:** Students studying in Class 8-10 in Latur Zilla Parishad School.

**Sample Size:** 200 students were selected using random sampling, ensuring representation from all three classes (Class 8, Class 9, and Class 10) across gender, socioeconomic background, and academic performance levels.

**Sampling Technique:** Stratified random sampling was used to ensure proportional representation from each class and avoid bias.

**Inclusion Criteria:** Students actively using social media platforms like WhatsApp, Instagram, Facebook, and YouTube for a minimum of 2 years.



**Exclusion Criteria:** Students not using social media or those with limited access to the internet.

### 3. Data Collection

#### Tools Used:

**Questionnaire:** A structured questionnaire was designed to gather quantitative data on students' social media usage patterns, time spent, and perceived effects on academic performance and mental health.

**Interviews:** Semi-structured interviews were conducted with a sub-sample of 20 students, 5 teachers, and 5 parents to gather qualitative insights into the influence of social media on students' behavior, academic focus, and emotional well-being.

**Observation:** Classroom behavior and attention levels of social media users were observed and recorded over the period of 3 months to assess real-time effects.

#### Questionnaire Structure:

**Demographic Details:** Age, gender, socioeconomic status, and academic performance.

**Social Media Usage:** Platforms used, hours spent daily, purpose (communication, entertainment, education), and frequency of use during school hours.

**Academic Performance:** Self-reported changes in academic results from 2019 to 2024.

**Behavioral Impact:** Self-reported levels of concentration, sleep quality, and social interactions.

**Mental Health:** Questions on anxiety, self-esteem, and stress attributed to social media use.

**Pilot Testing:** The questionnaire was pilot-tested on 20 students to ensure clarity, reliability, and validity before full-scale deployment.

### 4. Data Analysis

#### Quantitative Data Analysis:

Data from questionnaires were analyzed using statistical tools like Percentage and SPSS.

**Descriptive Statistics:** Frequency distribution, mean, and standard deviation were calculated for variables like time spent on social media, academic performance, and mental health parameters.

**Inferential Statistics:** Correlation and regression analyses were used to determine the relationship between social media usage and academic performance, as well as mental health issues.

#### Qualitative Data Analysis:

Thematic analysis was applied to the data from interviews and observations. Recurring themes, such as the impact on focus, peer relationships, and emotional well-being, were identified and categorized. Teacher and parent interviews were used to validate students' self-reports and provide additional insights into the behavioral changes observed over the study period.

### 5. Ethical Considerations

**Informed Consent:** Written consent was obtained from parents/guardians of all students participating in the study. Additionally, assent was sought from students.

**Confidentiality:** The identities of students were kept confidential, and their personal data was anonymized for analysis.

**Non-invasive Methods:** Only non-invasive methods like questionnaires and interviews were employed. Students were assured that participation would not affect their academic standing.

## 6. Limitations of the Study

**Sample Size:** Although 200 students provide a reasonable sample, a larger sample size could have further strengthened the findings.

**Self-reported Data:** The accuracy of self-reported data on social media use and academic performance may be subject to bias.

**Geographic Limitation:** The study was confined to one district, limiting generalizability to other rural or urban areas.

## 7. Timeline

**Duration:** The study spanned over 5 months, with 2 months allocated to data collection and 3 months to analysis and report writing.

### Data Collection Table

The data collection table summarizes the findings from a survey of 200 students and 20 teachers at Latur Zilla Parishad School regarding the impact of social media usage on academic performance, behavior, and mental health. The table captures key variables such as daily time spent on social media, changes in academic performance, and the emotional impact of social media on students. It also includes teachers' observations on student behavior and classroom distractions. These data points are essential in analyzing the relationship between social media usage and the research objectives.

The following analysis and interpretation provide insights into the effects of social media from 2019 to 2024.

**Table 1: Social Media Usage and Academic Performance**

Variable	Frequency (n = 200)	Percentage (%)
<b>1. Average Daily Social Media Usage</b>		
- Less than 1 hour	30	15%
- 1-2 hours	80	40%
- 2-4 hours	60	30%
- More than 4 hours	30	15%
<b>2. Change in Academic Performance</b>		
- Improved	40	20%
- Stayed the same	100	50%
- Declined	60	30%
<b>3. Social Media Use During School Hours</b>		
- Always	25	12.5%
- Often	50	25%
- Sometimes	80	40%
- Rarely	30	15%
- Never	15	7.5%

<b>4. Stress or Anxiety After Social Media Use</b>		
- Never	20	10%
- Occasionally	50	25%
- Sometimes	70	35%
- Often	40	20%
- Very Often	20	10%
<b>5. Impact on Peer Interactions</b>		
- Improved	90	45%
- Harmed	60	30%
- No change	50	25%

**Table 2: Teachers' Observations on Social Media Impact**

Variable	Frequency (n = 20)	Percentage (%)
<b>1. Change in Academic Performance</b>		
- Significant Decline	5	25%
- Slight Decline	8	40%
- No Change	5	25%
- Improvement	2	10%
<b>2. Distractions During Class</b>		
- Yes	15	75%
- No	5	25%
<b>3. Behavioral Issues</b>		
- Frequently	10	50%
- Occasionally	7	35%
- No	3	15%
<b>4. Impact on Emotional Well-being</b>		
- Strong Impact	8	40%
- Moderate Impact	9	45%
- No Impact	3	15%
<b>5. Impact on Communication Skills</b>		

- Positive	7	35%
- Negative	10	50%
- Mixed	3	15%

## Data Analysis and Interpretation

### 1. Social Media Usage and Academic Performance

**Analysis:** The majority of students (40%) spend 1-2 hours daily on social media, while 30% spend 2-4 hours. A small fraction (15%) spends more than 4 hours daily. Regarding academic performance, 50% of students report no change, 30% report a decline, and 20% report improvement.

**Interpretation:** The data suggests that while a significant portion of students reports increased time on social media, this does not universally translate into improved academic performance. Instead, a notable percentage of students experience a decline in academic performance, supporting Hypothesis H1.

### 2. Social Media Use During School Hours

**Analysis:** 40% of students use social media sometimes during school hours, and 37.5% use it either often or always. This indicates a considerable level of distraction during academic time.

**Interpretation:** The frequent use of social media during school hours may contribute to diminished focus and academic performance, aligning with Hypothesis H1.

### 3. Stress or Anxiety After Social Media Use

**Analysis:** 35% of students report sometimes feeling stressed or anxious after using social media, with 30% reporting frequent or very frequent feelings of stress or anxiety.

**Interpretation:** The correlation between high social media use and increased levels of stress or anxiety supports Hypothesis H2, indicating a significant impact on mental health.

### 4. Impact on Peer Interactions

**Analysis:** 45% of students feel that social media has improved their interactions with peers, while 30% believe it has harmed their interactions.

**Interpretation:** Social media's impact on peer interactions is mixed. While many students perceive positive effects, a substantial proportion also reports negative consequences, reflecting the complex role of social media in social behavior.

### 5. Teachers' Observations on Impact

**Analysis:** A significant portion of teachers (65%) observe a decline in academic performance and frequent distractions due to social media use. Additionally, 50% report behavioral issues linked to social media use.

**Interpretation:** Teachers' observations corroborate the impact of social media on academic performance and classroom behavior. This aligns with Hypothesis H1 and H2, indicating that social media usage significantly influences both academic outcomes and students' mental well-being.

Overall, the data suggests that while social media has some positive aspects, particularly in peer interactions, it generally has a negative impact on academic performance and mental health, supporting both hypotheses.

## Conclusion:

The research conducted on the effects of social media use among Class 8-10 students at Latur Zilla Parishad School from 2019 to 2024 reveals significant insights. The data suggests that while moderate social media usage can foster

positive peer interactions, excessive use has detrimental effects on academic performance and mental health. A considerable percentage of students who spend more than two hours daily on social media reported declines in their academic results, confirming the negative impact on focus and productivity. Furthermore, frequent use of social media, especially during school hours, contributes to classroom distractions and behavioural issues, as observed by teachers. The study also highlights a strong correlation between excessive social media usage and increased levels of stress, anxiety, and emotional instability among students. Thus, while social media has benefits, its overuse poses risks to both academic success and students' mental well-being, reinforcing the need for balanced usage.

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# POPULATION GROWTH AND SUSTAINABLE DEVELOPMENT TO 2047 - A POLITICAL STUDY OF INDIA

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## Introduction

As India approaches its centenary of independence in 2047, the interplay between population growth and sustainable development emerges as a defining challenge for the nation. With a current population exceeding 1.4 billion, and projected to reach around 1.7 billion by mid-century, India stands at a critical juncture. This demographic shift presents both opportunities, such as a potential demographic dividend, and significant challenges, including pressure on resources, environmental sustainability, and social infrastructure.

The growth of the population impacts various sectors, including healthcare, education, employment, and urban planning, necessitating a comprehensive political strategy to ensure that development is both inclusive and sustainable. Policymaking in India has historically been influenced by a variety of factors, including economic needs, cultural contexts, and political dynamics, making it essential to understand how these elements interact to shape the country's approach to population issues.

In this study, we will explore the political dimensions of population growth in India, focusing on how government policies, international influences, and grassroots movements contribute to shaping sustainable development. By examining historical trends and current strategies, this analysis aims to highlight the critical role of political leadership in addressing the challenges posed by population growth and steering India towards a sustainable future by 2047. Ultimately, the goal is to understand not only the implications of demographic changes but also the pathways to achieving balanced and equitable development in a rapidly evolving socio-political landscape.

## Population Growth and Sustainable Development to 2047 - A Political Study of India

India's rapid population growth presents both significant challenges and opportunities for sustainable development as the nation approaches its centenary of independence in 2047. With projections indicating a population of approximately 1.7 billion, understanding the implications of this demographic shift is crucial for policymakers. This study explores the political dimensions that influence the intersection of population dynamics and sustainable development, aiming to identify pathways for an inclusive and sustainable future.

## Review of Literature

The existing literature highlights various facets of the relationship between population growth and sustainable development in India:

- **Economic Implications:** Studies emphasize the potential demographic dividend, contingent on effective investments in education and job creation (Bloom, 2011; Klasen & Kuhnt, 2019).
- **Social Dimensions:** Gender disparities and family planning initiatives are critical for managing population growth (Bhat, 2002; Desai, 2010).
- **Environmental Concerns:** The impact of population growth on resource depletion and environmental sustainability is well-documented (Dasgupta, 1995; Satterthwaite, 2009).
- **Political Frameworks:** Effective governance and political will are essential for implementing policies that address these demographic challenges (Pritchett, 1994; Ghosh, 2016).

## Research Methodology

This study utilizes a mixed-methods approach:



- **Data Collection:** Combining primary data from interviews and focus groups with secondary data from literature and demographic statistics.
- **Data Analysis:** Employing thematic analysis for qualitative data and statistical analysis for quantitative data.
- **Case Studies:** Examining specific regions that illustrate diverse strategies in managing population growth and sustainable development.

### Key Findings

- a. **Demographic Dividend vs. Burden:** The potential for a demographic dividend exists, but it hinges on effective policy implementation and educational initiatives.
- b. **Gender Empowerment:** Women's empowerment and access to reproductive health services are critical in managing population growth and enhancing development outcomes.
- c. **Resource Management:** Urbanization and resource management require innovative solutions to prevent environmental degradation.
- d. **Governance Challenges:** Political fragmentation and varying regional policies complicate the implementation of cohesive population strategies.

### Policy Recommendations

To harness the benefits of population growth while promoting sustainable development, the following policy recommendations are proposed:

- **Enhance Education and Employment Opportunities:** Invest in quality education and vocational training to equip the workforce for future challenges.
- **Strengthen Family Planning and Health Services:** Expand access to reproductive health services and family planning education, particularly for women and marginalized communities.
- **Promote Sustainable Urban Planning:** Implement policies that integrate sustainability into urban development, ensuring efficient resource use and infrastructure development.
- **Foster Collaborative Governance:** Encourage cooperation between central, state, and local governments to ensure effective policy implementation and resource allocation.

### Findings and Suggestions

#### Findings

1. **Demographic Dynamics:** India is on track to become the most populous country by 2027, with a projected population of approximately 1.7 billion by 2050. This growth presents both a potential demographic dividend and significant resource management challenges.
2. **Economic Potential:** A young and growing workforce can contribute to economic growth, but this potential is contingent on effective education and job creation policies. Regions with robust educational systems and vocational training programs demonstrate better economic outcomes.
3. **Gender Disparities:** Gender inequality remains a significant barrier to sustainable development. Empowering women through education, healthcare access, and economic opportunities is essential for controlling population growth and improving overall development metrics.
4. **Urbanization Pressures:** Rapid urbanization, driven by population growth, places immense pressure on infrastructure, housing, and resources. Many urban areas are facing challenges related to pollution, inadequate sanitation, and traffic congestion.

5. **Environmental Sustainability:** Population growth exacerbates environmental degradation, including deforestation, water scarcity, and increased carbon emissions. Sustainable resource management practices are critical to mitigate these impacts.
6. **Political Will and Governance:** Effective governance is crucial for the successful implementation of population policies. Political fragmentation and differing priorities across states can hinder cohesive national strategies.
7. **Public Awareness:** There is a lack of awareness regarding family planning and sustainable practices among certain demographics, particularly in rural areas. Educational initiatives are necessary to promote understanding and engagement.

### Suggestions

1. **Education and Skill Development:**
  - **Expand Educational Access:** Invest in educational infrastructure, particularly in rural and underserved areas, to ensure that all children, especially girls, have access to quality education.
  - **Vocational Training Programs:** Develop targeted vocational training initiatives that align with market needs to enhance employability among youth.
2. **Empower Women:**
  - **Promote Gender Equality:** Implement policies that address gender disparities in education, employment, and healthcare.
  - **Family Planning Services:** Increase accessibility to reproductive health services and family planning education, particularly for women in rural and low-income communities.
3. **Sustainable Urban Planning:**
  - **Integrated Urban Development:** Encourage sustainable urban planning that incorporates green spaces, efficient public transport, and affordable housing to accommodate growing populations.
  - **Smart City Initiatives:** Invest in technology-driven solutions to manage urban challenges such as waste management and traffic congestion.
4. **Environmental Management:**
  - **Resource Conservation Policies:** Develop and enforce policies that promote the sustainable use of natural resources, including water and land.
  - **Community Engagement:** Involve local communities in conservation efforts and environmental sustainability programs to foster ownership and responsibility.
5. **Strengthen Governance:**
  - **Decentralized Approaches:** Promote decentralized governance models that empower local governments to tailor policies to their specific demographic and environmental contexts.
  - **Inter-State Collaboration:** Facilitate collaboration between states to share best practices and resources in managing population growth and development.
6. **Public Awareness Campaigns:**
  - **Education Initiatives:** Launch public awareness campaigns to educate citizens about family planning, sustainable practices, and the importance of resource conservation.

- **Engagement with Local Leaders:** Work with community leaders to promote sustainable development initiatives and encourage community participation.

#### 7. Monitoring and Evaluation:

- **Data-Driven Policies:** Establish robust mechanisms for monitoring demographic trends and the effectiveness of policies aimed at population and sustainable development.
- **Feedback Loops:** Create channels for public feedback on policies and initiatives to ensure they remain responsive to community needs.

### Conclusion

As India approaches its centenary of independence in 2047, the interplay between population growth and sustainable development emerges as a critical focus for policymakers. With a projected population of approximately 1.7 billion, the challenges and opportunities posed by this demographic shift require urgent and comprehensive strategies.

The findings of this study underscore that population growth can be both a demographic dividend and a significant burden. The potential for economic growth hinges on investments in education and vocational training, particularly for the youth. Empowering women through access to education and reproductive health services is crucial for managing population dynamics and enhancing social equity.

Urbanization, driven by population growth, demands sustainable planning and innovative resource management to mitigate environmental degradation. The rapid expansion of urban areas necessitates effective governance frameworks that can address local needs while fostering collaboration across states to share best practices.

Political will is vital for implementing cohesive and effective policies. A decentralized approach to governance, combined with active community engagement, can ensure that initiatives are tailored to specific regional challenges. Public awareness campaigns play a key role in promoting understanding of family planning and sustainable practices, particularly in underserved communities.

In conclusion, navigating the complexities of population growth and sustainable development in India requires a holistic, inclusive approach that integrates economic, social, and environmental considerations. By prioritizing education, gender equality, and sustainable resource management, India can create a framework that not only addresses immediate challenges but also paves the way for a prosperous and sustainable future by 2047.

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# INDIA'S POPULATION AND SUSTAINABLE FUTURE BY 2047 - A POLITICAL ANALYSIS

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## Introduction

As India approaches its centenary of independence in 2047, the interplay between its rapidly growing population and the quest for sustainable development presents both profound challenges and unique opportunities. Currently home to over 1.4 billion people, India is projected to become the most populous country in the world by the late 2020s. This demographic shift necessitates urgent attention from policymakers, as the implications for economic growth, social equity, environmental sustainability, and governance are immense.

The potential for a demographic dividend—where a larger working-age population can drive economic growth—exists, but it is contingent upon strategic investments in education, healthcare, and job creation. Conversely, without adequate planning and resources, rapid population growth may exacerbate existing challenges, including poverty, inequality, and environmental degradation.

Political leadership plays a crucial role in shaping policies that balance population dynamics with sustainable development goals. Initiatives aimed at family planning, women's empowerment, and sustainable urbanization are essential for addressing the complexities of demographic change. Furthermore, regional disparities in population growth and resource distribution require tailored approaches to ensure that development is inclusive and equitable.

This analysis will explore the critical intersections between India's population growth and sustainable future, examining historical trends, current policies, and future projections. By analyzing the political dimensions influencing these dynamics, this study aims to identify pathways for sustainable development that can accommodate India's growing population while fostering economic prosperity and social well-being. As India stands on the brink of significant demographic transitions, understanding these relationships will be vital for crafting effective strategies that promote a sustainable and prosperous future for all citizens by 2047.

## India's Population and Sustainable Future by 2047 - A Political Analysis

As India approaches its centenary of independence in 2047, the interplay between its rapidly growing population and the pursuit of sustainable development poses both profound challenges and unique opportunities. With a population projected to exceed 1.7 billion by 2050, India's demographic dynamics will significantly influence its economic growth, social equity, and environmental sustainability. This political analysis seeks to explore how these factors interact, focusing on the role of governance and policy in shaping a sustainable future.

## Literature Review

The existing body of literature highlights critical themes regarding population growth and sustainable development in India:

1. **Demographic Dividend:** Scholars like **Bloom et al. (2001)** discuss the potential benefits of a youthful population, asserting that a demographic dividend can drive economic growth, provided there are adequate investments in education and job creation. **Klasen and Kuhnt (2019)** stress that realizing this dividend requires targeted policies.
2. **Gender Equality:** Research by **Desai (2010)** and **Bhat (2002)** emphasizes the importance of empowering women through education and reproductive health access, which can lead to lower fertility rates and better economic outcomes.

3. **Environmental Challenges:** The environmental impact of population growth is significant, with studies by **Dasgupta (1995)** and **Satterthwaite (2009)** highlighting issues such as resource depletion and pollution. Sustainable resource management practices are essential for mitigating these effects.
4. **Governance and Policy Effectiveness:** Effective governance is crucial in managing demographic changes. **Pritchett (1994)** notes the challenges of fragmented governance, while **Ghosh (2016)** advocates for local governance models to enhance policy implementation.
5. **Future Projections:** Institutions like the **UNDP (2020)** and **World Bank (2021)** underscore the urgency of proactive strategies to address population growth, advocating for integrated policies that encompass economic, social, and environmental dimensions.

## Research Methodology

This study employs a mixed-methods approach:

- **Primary Data:** Semi-structured interviews with policymakers and community leaders, and focus groups to capture grassroots perspectives.
- **Secondary Data:** A comprehensive review of academic literature, government reports, and demographic statistics.
- **Data Analysis:** Thematic analysis for qualitative data and statistical analysis for quantitative data, including case studies of regions with varied approaches to population management.

## Findings and Suggestions

### Key Findings

1. **Potential for Economic Growth:** India's young population could drive significant economic growth, but only if there are effective policies in place to harness this potential through education and skill development.
2. **Importance of Gender Empowerment:** Gender equity is essential for managing population growth. Empowering women leads to lower fertility rates and better health outcomes, fostering sustainable development.
3. **Need for Sustainable Urbanization:** Rapid urbanization demands innovative solutions to infrastructure and resource management challenges, emphasizing the need for integrated urban planning.
4. **Environmental Sustainability:** Effective resource management practices are vital to counteract the environmental impacts of population growth, requiring a shift towards sustainable practices.
5. **Governance Challenges:** Fragmented political structures and varying regional policies complicate the implementation of cohesive population strategies, highlighting the need for decentralized governance models.

### Suggestions for Policy

1. **Enhance Education and Skill Development:** Invest in education and vocational training programs to prepare the workforce for future challenges and economic demands.
2. **Promote Gender Equality:** Implement policies that ensure equal access to education and healthcare for women, alongside robust family planning programs.
3. **Sustainable Urban Planning:** Develop urban policies that integrate sustainability, focusing on infrastructure that supports environmental conservation and efficient resource use.
4. **Strengthen Governance Frameworks:** Foster decentralized governance that empowers local authorities to tailor policies to regional needs, enhancing community participation and effectiveness.

5. **Public Awareness Campaigns:** Launch initiatives to raise awareness about family planning and sustainable practices, particularly in rural areas.

## Conclusion

As India approaches 2047, the interplay between its burgeoning population and the imperative for sustainable development emerges as a defining challenge for policymakers. With projections indicating a population exceeding 1.7 billion, the potential for both economic growth and environmental degradation is significant. This political analysis has highlighted critical factors influencing this dynamic, including the importance of education, gender empowerment, sustainable urbanization, and effective governance.

India's demographic dividend presents an opportunity for accelerated economic growth, but it is contingent on strategic investments in human capital. Empowering women through education and healthcare access is essential not only for managing population growth but also for fostering social equity and economic resilience.

The rapid urbanization accompanying population growth necessitates innovative approaches to infrastructure and resource management. Sustainable urban planning must be prioritized to address environmental challenges while supporting economic development.

Effective governance remains crucial in navigating these complexities. Decentralized governance models that empower local communities can enhance policy implementation and responsiveness to regional needs. Moreover, public awareness campaigns are vital to educate citizens about family planning and sustainable practices, fostering a culture of sustainability.

In conclusion, India has a unique opportunity to harness its demographic potential while ensuring sustainable development. By integrating economic, social, and environmental policies, the nation can work towards a balanced and inclusive future. The path forward requires a concerted effort from all stakeholders government, civil society, and communities to create a sustainable and prosperous India by 2047. This commitment to holistic development will be essential in shaping a future that benefits all citizens, ensuring well-being and sustainability for generations to come.

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## DEMOGRAPHY AND SUSTAINABILITY OF INDIA - POLITICAL JOURNEY TO 2047

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### Introduction

As India approaches its centenary of independence in 2047, the interplay between demography and sustainability stands at the forefront of national discourse. With a projected population of over 1.7 billion, India is poised to become the most populous country in the world. This demographic shift presents both challenges and opportunities that will significantly influence the country's socio-economic landscape and environmental sustainability.

India's demographic profile is characterized by a youthful population, which has the potential to act as a catalyst for economic growth if harnessed effectively. However, this potential is contingent upon strategic investments in education, healthcare, and job creation. Simultaneously, rapid population growth raises pressing concerns related to resource management, environmental degradation, and social equity.

The political journey towards a sustainable future involves navigating complex challenges, including urbanization, gender inequality, and regional disparities. Policymaking in this context requires a multifaceted approach that integrates economic, social, and environmental considerations. Moreover, effective governance and community engagement are critical for implementing policies that foster sustainable development.

This analysis aims to explore the relationship between demography and sustainability in India, examining historical trends, current policies, and future projections. By analyzing the political dynamics shaping these interactions, this study will highlight pathways for achieving a balanced and sustainable future by 2047. As India stands at this pivotal juncture, understanding the intricacies of its demographic and sustainability goals will be essential for crafting effective policies that benefit all citizens.

### Demography and Sustainability of India - Political Journey to 2047

As India approaches 2047, marking a century of independence, the intersection of its demographic trends and sustainability initiatives emerges as a crucial area for policy focus. With a population projected to surpass 1.7 billion, India stands at a pivotal moment where its demographic potential can either drive sustainable growth or exacerbate existing challenges. This analysis explores the political journey towards achieving sustainability in the face of significant demographic shifts.

### Historical Context

India's demographic landscape has transformed dramatically since independence in 1947. Rapid population growth, urbanization, and changing age structures have reshaped societal dynamics. Policies implemented over the decades, from family planning initiatives in the 1970s to recent commitments to the Sustainable Development Goals (SDGs), reflect the government's evolving approach to managing these changes.

### Key Demographic Trends

1. **Population Growth:** India's population growth has been one of the fastest in the world, with the current growth rate presenting both opportunities for a demographic dividend and challenges in resource management.
2. **Youthful Population:** A significant portion of the population is under 25, highlighting the potential for economic growth through a robust workforce. However, this potential requires substantial investment in education and job creation.

3. **Urbanization:** Rapid urbanization is reshaping cities and communities, demanding sustainable infrastructure and services to accommodate growing urban populations.

### Challenges to Sustainability

1. **Resource Depletion:** Increased demand for water, energy, and food poses significant challenges to sustainability. Overexploitation of natural resources can lead to environmental degradation and conflict over resources.
2. **Environmental Impact:** Urbanization and industrialization contribute to pollution and climate change, necessitating comprehensive environmental policies to mitigate adverse effects.
3. **Social Inequality:** Disparities in access to education, healthcare, and economic opportunities can exacerbate social tensions, making inclusive policies critical for sustainable development.

### Political Landscape

The political journey towards sustainability involves navigating a complex landscape of governance, policy-making, and public engagement. Key factors include:

1. **Governance Structures:** Effective governance is essential for implementing policies that address demographic and environmental challenges. Decentralized governance can empower local communities to tailor solutions to their specific needs.
2. **Policy Frameworks:** The alignment of national policies with local needs is crucial. Policies must integrate demographic considerations with sustainability goals, ensuring a holistic approach.
3. **Public Participation:** Engaging citizens in the policy-making process fosters accountability and responsiveness. Grassroots movements and civil society organizations play vital roles in advocating for sustainable practices.

### Future Projections

Looking ahead to 2047, India has the opportunity to position itself as a leader in sustainable development by:

1. **Investing in Human Capital:** Prioritizing education, skill development, and healthcare can enhance the quality of life and economic productivity, maximizing the benefits of the demographic dividend.
2. **Promoting Sustainable Practices:** Implementing policies that encourage sustainable agriculture, renewable energy, and efficient resource use will be essential for environmental stewardship.
3. **Strengthening Resilience:** Developing adaptive strategies to address climate change and resource scarcity will help build resilience in communities and ecosystems.

### Findings and Suggestions

#### Findings

1. **Demographic Dividend Potential:** India's youthful population presents a significant opportunity for economic growth. However, this potential is contingent on substantial investments in education and skill development to prepare the workforce for future challenges.
2. **Rapid Urbanization:** The increasing rate of urbanization poses challenges in infrastructure, housing, and resource management. Cities are expanding faster than the capacity to provide essential services, leading to environmental degradation and social inequality.
3. **Resource Strain:** The demands of a growing population have intensified pressure on water, energy, and food resources. Unsustainable practices have led to depletion of natural resources, raising concerns about long-term sustainability.

4. **Environmental Challenges:** Urban pollution, climate change, and habitat loss are significant issues exacerbated by population growth and industrialization. Comprehensive policies are needed to mitigate these impacts.
5. **Social Inequality:** Disparities in access to education, healthcare, and economic opportunities remain prevalent. Inequality can lead to social unrest and undermine efforts to achieve sustainable development.
6. **Governance Gaps:** Fragmented governance structures can hinder effective policy implementation. There is a need for more cohesive policies that integrate local needs with national goals.

### Suggestions

1. **Invest in Education and Skills Development:** Prioritize educational reforms that emphasize quality and inclusivity. Vocational training programs should be expanded to equip the youth with relevant skills, aligning education with market needs.
2. **Sustainable Urban Planning:** Develop comprehensive urban policies that promote sustainable practices. This includes investments in public transportation, green spaces, waste management, and affordable housing to accommodate growing urban populations.
3. **Resource Management Policies:** Implement integrated resource management strategies that promote conservation and sustainable use of water, energy, and agricultural resources. Incentives for sustainable practices in agriculture and industry should be encouraged.
4. **Strengthen Environmental Regulations:** Enhance regulatory frameworks to address pollution and environmental degradation. This includes stricter enforcement of environmental laws and promoting renewable energy sources to reduce carbon emissions.
5. **Promote Gender Equality:** Empower women through education and access to healthcare, ensuring their participation in decision-making processes. Gender equity is vital for achieving sustainable development and improving community resilience.
6. **Enhance Governance Structures:** Foster decentralized governance models that empower local authorities to tailor policies to regional needs. Collaboration between government, civil society, and communities can enhance policy effectiveness and accountability.
7. **Public Awareness and Engagement:** Launch awareness campaigns to educate citizens about sustainable practices and the importance of family planning. Community engagement in sustainability initiatives can foster collective action.
8. **Monitor and Evaluate Policies:** Establish mechanisms for monitoring and evaluating the effectiveness of population and sustainability policies. Data-driven approaches will ensure that policies are responsive to changing demographics and environmental conditions.

### Conclusion

As India approaches its centenary of independence in 2047, the interplay between demography and sustainability is set to define the nation's trajectory. With a population expected to exceed 1.7 billion, the opportunities for economic growth are immense, but so are the challenges related to resource management, environmental sustainability, and social equity.

The findings of this analysis highlight that while India's youthful demographic presents a significant potential for economic advancement, it is contingent upon strategic investments in education, skills development, and infrastructure. Rapid urbanization necessitates innovative urban planning and resource management to accommodate growing populations while minimizing environmental impacts.

Moreover, addressing social inequalities is crucial for fostering a stable and inclusive society. Empowering women and marginalized communities will not only enhance social cohesion but also contribute to sustainable development

outcomes. Effective governance structures that promote local participation and accountability will be vital for implementing policies that resonate with diverse regional needs.

Looking towards 2047, India has the potential to emerge as a global leader in sustainable development by leveraging its demographic strengths. By integrating demographic insights into policy frameworks and fostering collaboration across all sectors, India can create a resilient and equitable future.

Ultimately, the political journey towards achieving sustainable development requires a commitment to holistic approaches that balance economic growth with social and environmental stewardship. The choices made today will shape the legacy of India's progress for generations to come, making it imperative to act decisively and collaboratively in pursuit of a sustainable future.

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# A STUDY ON INNOVATIVE POLICY FRAMEWORK FOR MAXIMIZING INDIA'S DEMOGRAPHIC ADVANTAGES TOWARDS A SUSTAINABLE FUTURE

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## Abstract:

India, with its vast and little population, stands at a dangerous point in time where leveraging demographic dividends can significantly impact its sustainable growth goals. This paper explores an innovative policy framework designed to tie together India's demographic possible while address the ecological, social, and economic challenge of the 21st century. The support emphasizes education, skill development, employment generation, and sustainable practices to create a holistic approach toward a sustainable future.

## Introduction:

India is home to one of the largest and most young populations in the world, with over 1.4 billion people and approximately 65% under the age of 35. This demographic profile presents a unique opportunity for economic growth and modernization, often referred to as a "demographic dividend." However, the potential benefits of this demographic advantage come with major challenges, with rising being without a job rates, skill mismatches, environmental poverty, and socio-economic disparities. The purpose of this paper is to propose an innovative policy framework that maximizes India's demographic advantages while addressing this critical challenge. This structure will focus on four key pillars: education and skill growth, employment generation, social equity, and environmental sustainability. By creating synergies among these pillars, India can ensure that its youthful population is equipped to contribute meaningfully to a sustainable future.

**Base for an Innovative Framework:** The urgency for such a framework is underscored by several factors:

- 1. Speedy Urbanization:** India is experience unparalleled urban immigration, which places vast pressure on urban transportation and Services. An original policy framework can guide sustainable urban development and advance, ensure that urban centers can provide accommodation growing populations without compromising on quality of life.
- 2. Industrial advancement:** The rapid development of technology brings both opportunities for growth and challenges of inequality, necessitating policies that ensure equitable access to education and training for all demographics to benefit from advancements
- 3. Environment Change:** India is one of the most defenseless countries to climate change impacts, including extreme weather events, water scarcity, and food security challenges. Addressing these environmental concerns through sustainable practices is vital for long-term flexibility.
- 4. Universal Competitiveness:** As country around the world vie for leadership in sustainable development; India must location itself as an aggressive player in green technologies, sustainable agriculture, and circular economies.

## Objectives:

1. To identify key areas where India can leverage its demographic advantages.
2. To propose an integrated policy framework focusing on education, skill development, green jobs, and sustainable practices.
3. To assess potential impacts on social equity and environmental sustainability.

## Key Areas of Focus:

### 1. Education and Skill Development:

#### a. Curriculum Reform

Integrate sustainability and green technologies into educational curricula. Emphasize critical thinking, problem-solving, and entrepreneurial skills.

#### b. Vocational Training

Expand access to vocational training programs in emerging sectors like renewable energy, waste management, and sustainable agriculture.

### 2. Employment Generation:

**a. Green Jobs:** Promote industries focused on renewable energy, sustainable agriculture, and eco-friendly technologies. Encourage public-private partnerships to foster job creation in sustainable sectors.

**b. Support for Startups:** Implement policies that provide financial and technical support for startups focused on sustainable innovation.

### 3. Social Equity:

**a. Inclusive Policies:** Ensure marginalized communities have access to education and employment opportunities. Promote gender equity in workforce participation through targeted initiatives.

**b. Community Engagement:** Involve local communities in decision-making processes related to sustainable development projects.

### 4. Environmental Sustainability:

**a. Sustainable Resource Management:** Develop policies for sustainable water, energy, and waste management practices. Promote circular economy principles to reduce resource depletion.

**b. Climate Resilience:** Invest in infrastructure that enhances climate resilience, especially in vulnerable regions.

## Policy Framework:

**1. Integrated Approach:** Develop an overarching national strategy that integrates education, employment, and ecological policy.

**2. Collaborative Governance:** advance teamwork between central, state, and local government, along with personal sectors and civil society.

**3. Data-Driven Decision Making:** Utilize data analytics to monitor growth, assess impact, and refine policies continuously.

## Case Studies:

**1. United Nations Development Programme (UNDP) (2020). *Human Development Report 2020: The Next Frontier – Human Development and the Anthropocene*.**

This report emphasizes the need for integrating demographic dynamics into development policies, highlighting how sustainable development can be achieved by leveraging human capabilities, particularly in youthful populations like India's.



**2. World Bank (2021). *India: Demographic Transition and Economic Growth*.**

This publication provides a thorough analysis of India's demographic transition, focusing on the opportunities and challenges presented by a young workforce. It discusses how effective policies can harness demographic dividends to drive economic growth while addressing issues like unemployment and skills mismatches.

**3. International Labour Organization (ILO) (2022). *World Employment Report 2022: The Future of Work in India*.**

This report explores the evolving labor market in India, highlighting the need for innovative employment strategies that align with demographic trends. It underscores the significance of creating sustainable job opportunities, particularly in emerging sectors.

**4. Kumar, R. & Sharma, A. (2021). "Education and Skill Development in India: The Need for Reform." *Journal of Education Policy*, 36(3), 345-362.**

The authors argue for comprehensive reforms in India's educational system, stressing the importance of aligning curricula with market needs. This study provides a basis for the proposed policy framework's emphasis on skill development as a critical component of maximizing demographic advantages.

**5. Mehta, P. & Sinha, S. (2022). "Green Jobs and Sustainable Development: Evidence from India's Solar Sector." *Renewable Energy Journal*, 145, 123-135.**

This article examines the potential of green jobs in India's solar energy sector, providing evidence that supports the framework's focus on sustainable employment generation. It highlights the positive impacts of renewable energy initiatives on local economies.

**Conclusion**

Maximizing India's demographic advantages requires a comprehensive and innovative policy framework that promotes sustainable development. By focusing on education, skill development, employment generation, and environmental sustainability, India can not only harness its demographic potential but also pave the way for a more equitable and sustainable future.

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## AI IN AGRICULTURE

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### Abstract

The application of AI in agriculture has been widely considered as one of the most viable solutions to address food inadequacy and to adapt to the need of a growing population. This review provides an overview of AI's application in agronomic areas and progress in research labs. The review first presents two fields that AI can potentially play an important role in, which are soil management and weed management, and then Internet of Things (IoT) a technology that shows great potential in future usage is mentioned. Three challenges that need to be addressed in order for AI-based technology to be popularized in markets are uneven distribution of mechanization, the ability of algorithms to process large sets of data accurately and quickly, and the security and privacy of data, as well as the devices. Agricultural robots targeted at diverse aspects in agricultural industry have been developed and improved greatly in the past years, and although pointing out the hardship of applying machines and algorithms tested in experimental environment to real environments, the review highlights an already prosperous development and a promising prospect of application.

The age of artificial intelligence is now upon us, and it is predicted that physical labour will eventually be taken over by robots, while mental tasks will be replaced by intelligent technology. In agriculture, the impact of artificial intelligence is significant and this review explores its usefulness in this sector. It highlights how AI is revolutionizing the farming process by making it more streamlined and efficient. Additionally, this review delves into the various ways in which AI can be applied to different aspects of crop production. Keywords: precision farming, robots, expert systems, AI-bots.

### Keywords:

Artificial Intelligence, Internet of things.

### Introduction

AI is one of the essential areas in computer science, has penetrated a variety of domains, such as education, healthcare, finance and manufacturing, because of its nature to tackle problems that cannot be solved well by humans [1]. Humans continue to be shocked by AI's capacities.

The term "Artificial Intelligence" was first introduced in the 1955 Dartmouth Conference, in which John McCarthy proposed a study to be carried out grounded on the hypothesis that "every aspect of learning or any other feature of intelligence can in principle be so precisely described that a machine can be made to simulate it" [2].

The field of computers have significantly grown and now computers are capable of simulating human activities like speaking, reading, drawing, observing, analyzing, calculating arithmetic, memorizing, Distinguishing numbers, making decisions and in effective interactive learning. Recent trends in AI involves in discovering AI systems which would simulate intelligent human behavior, human sensory capabilities, knowledge accumulation, and mechanical capabilities of Human beings. Erlangga, Wihardi, Y., and Nugraha, E., in 2020 have emphasized the need for developing a mobile learning platform that would use the internet and mobile cloud communications to provide information and interactive communication about agricultural production needed by farmers.

### AI applications in agriculture

- Soil Management.
- Weed Management
- The Use of Internet of Things Technology

## Challenges of AI

### 1. Security and privacy

Security counter measurements are data encryption, tag frequency modification, tag destruction policy, use of blocker tags, etc. Location-based services are also exposed to device capture attack, which means after capturing the device, the attacker can extract cryptographic implementations and therefore have unlimited access to data stored in the device. Data can also be attacked when transferring from the device to the gateway, where the data is then uploaded to other infrastructures, like the cloud. vulnerable data tampering, can unauthorizedly interfere the automated operations in the farm. Means such as session hijacking, logon abuse and denial of service (DoS) can also interfere cloud infrastructures. The corresponding security policies include cryptographic algorithms, data flow control policies, identity authentication mechanisms etc. Therefore, security issues are causing serious problems and should be addressed in different levels.

### 2. Agricultural Robotics

Robots are taught to manage weeds and harvesting crops faster than human beings may do. Such robots have been customized to pick and pack produce simultaneously to ensure that the quality is good and to eliminate the waste. Robots have the capacity to operate in bulk quantities with excellent speed and accurate standards

Manas Wakchaure, B. K. Patle and A. K. Mahindrakar (2023) have described in their research study that the use of robots in farming has improved productivity and made it more popular. AI techniques frequently provide data in real-time, reducing the chance of human error and enhancing decision-making skills. According to the thorough review, modern technology and AI methods outperform conventional methods with the least amount of human effort and in the shortest amount of time. Instead of the core agricultural activities of the farming, scrutinizing and harvesting phases, AI techniques have primarily been used to solve path planning problems of the agriculture robot.

Farming being the 2<sup>nd</sup> biggest industry where in robots are being utilized professionally, behind defence.

### 3. Drone analysis

These characteristics now influence the creation and application of drones in contemporary farming. Sky Squirrel Technologies has introduced aerial imaging drone programmers to assess healthiness of crops. Experts analyze the data after it has been transferred from the drone to the computer using a USB drive.

### 4. Crop yield predictions

The advent of scientific technologies like artificial intelligence businesses would be able to forecast prices, make estimates on the crop yield, cognize possibility of pest infection and disease infection. On potential price trends, consumer demand, the best crop to plant, the use of pesticides, and other issues, they can offer advice to farmers and governments.

The fluctuation in crop prices is a major source of worry for many farmers. Because of fluctuating costs, agriculturist could not decide a specific cultivation pattern. These kinds of issues are very widespread in crops with a short shelf life, such as tomatoes. Businesses utilize climate information along with satellite images to scrutinize crop health in real time and assess crop acreage.

### 5. Weather forecasting

In the study carried out in Australia, machine learning techniques were used to identify rising heat events as a significant factor contributing to yield losses in the future.

Farmers find it difficult to know when to sow seeds because of climate change and pollution. However, with the help of artificial intelligence, they can use weather forecasting to analyze the conditions and plan when to sow seeds and what kind of crops can be grown.

## Conclusion

This review presents an overview of the application of AI technology in agriculture. Corresponding to the current social situation of decreasing manual labor, limited usable agronomic land and a greater gap between total food produced and the world population, AI has been regarded as one of the most feasible solution to those problems and has been developed and improved for years by scientists worldwide. In this review, the definitions of AI are first introduced, in which the highlight is the Turing Test. Then two sub fields that AI has been playing an important role in are demonstrated, which are in soil management, weed management, and Internet of Things (IoT), a useful data analysis and storing technology that has wide application in agriculture, is introduced.

Artificial Intelligence will be powerful tools that can help businesses to administer the problems and complex issues faced in agriculture. It significantly paves ways for the problem of shortage of man power. Artificial Intelligence techniques will undoubtedly improve farming practices and pose a challenge to current decision-making techniques. Because of these technological advancements, farmers' lives will probably be better in every way, and agricultural practices and yields will probably improve as well. These tools would definitely facilitate the farmers to bring automation and computerization of the processes involved and shifts toward precision resulting excellent quality and desirable yielding at less resource consumption. More practical applications in this area will become available as technology advances, helping the world address issues related to food production for a growing population.

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# THE ROLE OF ARTIFICIAL INTELLIGENCE IN AUTONOMOUS VEHICLES

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## Abstract

The evolution of autonomous vehicles (AVs) has been significantly influenced by advancements in artificial intelligence (AI). This paper explores the pivotal role that AI plays in the development of AVs, examining the core technologies, applications, challenges, and future potential of these systems. We analyze how AI algorithms enhance vehicle perception, decision-making, and navigation, while also addressing the ethical, safety, and regulatory implications of deploying autonomous vehicles on public roads.

## Introduction

Autonomous vehicles represent a groundbreaking shift in transportation, aiming to enhance safety, efficiency, and accessibility. Central to this revolution is artificial intelligence (AI), which serves as the brain of AVs, enabling them to perceive their environment, make decisions, and navigate complex scenarios. Traditionally, vehicles required human intervention for operation. However, AI technologies such as machine learning, computer vision, and sensor fusion are transforming vehicles into intelligent systems capable of independent operation.

## Core Technologies of AI in Autonomous Vehicles

### 1. Perception Systems

Perception is vital for AV functionality, allowing vehicles to interpret their surroundings. AI-powered perception systems rely on various sensors, including cameras, LIDAR, radar, and ultrasonic sensors.

#### Computer Vision

AI algorithms process visual data from cameras to detect and recognize objects, lane markings, traffic signs, and pedestrians. Convolutional Neural Networks (CNNs) are often employed to improve recognition accuracy.

#### Sensor Fusion

Combining data from multiple sources enables a more comprehensive understanding of the vehicle's environment. AI algorithms integrate information to mitigate limitations related to individual sensor technologies.

### 2. Decision-Making

The decision-making process in AVs involves predicting future states and determining optimal actions based on real-time data.

#### Reinforcement Learning

This AI approach allows vehicles to learn from interactions with their environment. By simulating scenarios, AVs can improve their decision-making policies to enhance safety and efficiency.

#### Path Planning

AI algorithms analyze the current environment to create optimal routes while considering dynamic obstacles, traffic regulations, and passenger preferences.

### 3. Navigation

AI-powered navigation systems enable autonomous vehicles to traverse their environments effectively.

## Map Building

High-definition maps, enhanced with AI, provide detailed information about road conditions, such as topography and traffic signals, essential for safe navigation.

Localization: AI algorithms compare sensor data to pre-existing maps to localize the vehicle accurately, ensuring that it knows its position within a few centimeters.

## Challenges in Implementing AI in Autonomous Vehicles

### 1. Safety and Reliability

Ensuring the safety of autonomous vehicles is paramount. AI systems must be thoroughly tested and validated to handle diverse real-world scenarios, including unpredictable human behavior and environmental challenges.

### 2. Ethical Considerations

The deployment of AVs raises ethical dilemmas. For instance, how should an AV prioritize the safety of its occupants versus pedestrians in an unavoidable accident scenario? Developing ethical frameworks and guidelines for AI decision-making remains a significant challenge.

### 3. Regulatory Framework

The integration of AVs into existing transportation systems necessitates new regulatory frameworks. Policymakers must address issues such as liability, insurance, and infrastructure adaptations to accommodate the unique aspects of autonomous vehicles.

### 4. Data Privacy and Security

AVs rely heavily on data collection for navigation and learning. This raises concerns regarding privacy and cybersecurity. Ensuring that sensitive information is protected against unauthorized access and misuse is critical.

## Benefits of AI in Autonomous Vehicles

The integration of AI into autonomous vehicles has several benefits:

### 1. Safety

One of the most compelling arguments for AVs is that they can significantly reduce accidents caused by human error. AI systems can react faster than humans and are not subject to distractions or fatigue. By leveraging real-time data from a range of sensors, AVs can minimize the risk of collisions.

### 2. Efficiency and Convenience

AI can optimize routes for time and fuel efficiency, reducing congestion and lowering emissions. Additionally, AVs can provide new levels of convenience, such as the ability to work or relax during commutes, since passengers would not be responsible for driving.

### 3. Accessibility

Autonomous vehicles have the potential to improve mobility for people who are unable to drive, including the elderly and disabled. By offering safe and reliable transportation alternatives, AI-powered AVs can enhance the quality of life for many individuals.

## Future Of AI

The future of AI in autonomous vehicles is promising, driven by continuous advancements in technology. As AI algorithms become more sophisticated and robust, the potential applications of AVs will expand beyond personal transportation to include delivery services, public transportation, and emergency response.



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## Trends and Innovations

### V2X Communication

Vehicle-to-Everything (V2X) technology will allow AVs to communicate with other vehicles, infrastructure, and the cloud, enhancing safety and traffic flow.

Shared Mobility: The rise of shared AV services will likely lead to decreased vehicle ownership, reduced traffic congestion, and improved urban planning.

AI Explainability: Developing transparent and explainable AI systems will be vital for building public trust in AV technologies.

### Conclusion

Artificial intelligence is reshaping the landscape of transportation through the development of autonomous vehicles. By enhancing perception, decision-making, and navigation capabilities, AI is paving the way for safer, more efficient, and accessible transportation systems. However, addressing the associated challenges, including safety, ethics, regulation, and data privacy, is crucial for the successful integration of AVs into society. As technology continues to evolve, collaboration among stakeholders—including researchers, policymakers, and industry leaders—will be essential for realizing the full potential of AI-driven autonomous vehicles.

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