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*Bi-Annual National Referred Research Journal of Economics*

Dept. of Economics  
Dayanand Arya Kanya Mahavidhyalaya, Nagpur

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[rseasons@yahoo.com](mailto:rseasons@yahoo.com)

[shouryavrata@gmail.com](mailto:shouryavrata@gmail.com)

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## कुछ अनकही ?

विश्लेषक के लिये संपादकीय लिखते हुये मुझे सदैव रोमांच महसूस हुआ क्योंकि अर्थशास्त्र मेरा विषय नहीं था किंतु हिंदी अध्यापन में राष्ट्र के सांस्कृतिक बोध, भारतीय संस्कृति के विस्तार के अंतर्गत अर्थतंत्र भी समाविष्ट हैं। वैसे भी ज्ञान सदैव एकात्मकता का आभास कराता है, इसी तत्व पर ऋषियों ने आत्मतत्व का साक्षात् किया था। जिन साहित्य शाश्वत मूल्यों के आधार पर जीवन जीने को शुभ मानता है, उसमें संतुलित अर्थ व्यवहार भी एक मूल्य है। हिंदी साहित्य पढ़ते हुए मैंने सदैव छात्रों को व्यष्टि से समाविष्ट की फिर परमात्मा की ओर जाने का चिंतन मनन सिखाया। साहित्य व भाषाएँ सभी विषयों तथा क्षेत्रों से संबंधित हैं और जहाँ कहीं अमानवीय या मानव विरोधी चरित्र उन्हें दिखाई देता है, उसे वे उजागर करने का प्रयास करती हैं। भाषा की प्राध्यापिका होने के कारण मेरे स्वभाव में यह संस्कार है और इसलिए 'विश्लेषक' के मुख्य संपादक की भूमिका को मैंने स्वीकार किया। यहाँ यह उल्लेख करना जरूरी है कि, मनुष्य जीवन को सार्थक बनाने में अर्थ जितना सहयोगी है, उसका जो सत प्रभाव राष्ट्र के हित में है, मैंने उन्हीं पर अपनी लेखनी को केंद्रित किया। मैं महसूस करती हूँ कि मेरे देश की प्रवृत्ति अन्य देशों से भिन्न है। विश्व संस्कृति सिखाते सिखाते हम राष्ट्रीय हितों का विरोध कर बैठे हैं। सूचना कांति जिस अर्थतंत्र को व्यापक बना रही है, वह हमारे सामाजिक तथा सांस्कृतिक हित में नहीं है। भारतीयों की जीवन शैली बाजारवाद नहीं, अध्यात्मवाद है, विश्लेषक के संपादकीय लेखों में मैंने इसी की चर्चा की। जिन आर्थिक संस्कारों से व्यक्ति को तेजस्विता और दीप्ति प्राप्त होती है, उन्हीं पर चलने का संपादकीय कार्य मैंने निभाया। निश्चित रूप से यह मेरे लिये आनंद का विषय बन गया। जिस अर्थतंत्र से व्यक्ति चेतना को विस्तार मिले, जीवन में संतुलन व सामंजस्य का गुण आत्मसात हो, भारतीय समाज व्यवस्था को मजबूत आधार प्रदान हो, उसी अर्थ संस्कार को पुष्ट करने की चेष्टा मैंने की

हैं। अखंड व एकात्मज्ञान के महत्व को मनीषियों ने बार बार दोहराया है, उसी दृष्टिकोन से मैंने अर्थशास्त्र की सीमा में प्रवेश किया एवं अर्थशास्त्र को उर्ध्वगामी बनानेवाले आर्थिक आवरण में विश्वास करने की टिप्पणियां लिखी।

अपनी क्षमता के अनुसार 'विश्लेषक' को मैंने अपने शब्द दिये हैं। जिंदगी अपनी रफ्तार से चलती है और चलती रहेगी। संपादकीय लिखने के इस सुंदर रिश्ते को दुआएं देते हुए, अपने सफर को सही समाप्त कर रही हूं। लगता है अभी कल ही की बात है जब हमने मिलकर 'विश्लेषण' की बुनियाद डाली थी, इसने अपनी राहें तलाश ली हैं, दूर-दूर के विचारकर इस पर भरोसा रख दरखत की जड़ों को सींच रहे हैं, यकीन से अपने लेख इसमें प्रकाशित करने के लिये भेज रहे हैं। अब यह पत्रिका अक्षम नहीं रही, आगे निकल चुकी है। पुराना घर नये रंग रोगन से सुधर जाता है, परिवर्तन आना चाहिए मैं इस मत की हूं। डॉ. ऋतु तिवारी ने अथक प्रयासों व निजी संपर्कों से इसकी विषय वस्तु में गुणवत्ता लाई है। मुझे विश्वास है कि उनके संरक्षण में यह पत्रिका ओर निखरेगी। विश्लेषक के प्रकाशन में उसकी प्रतिबद्धता व विषय के प्रति उसकी साधना से मैं आश्वस्त हूँ। स्तरीय सामग्री का प्रकाशन एवं पत्रिका को उत्तरोत्तर विराट व्यक्तित्व प्रदान करने में सुश्री. ऋतु तिवारी ने मुकम्मल काम किया है। मैं कदाचित् विश्लेषक से रिश्ता तोड़ने की बात नहीं कर रही किंतु इसकी गरीमा में अभिवृद्धि करनेवाला और भी कोई वरदान स्वरूप मिल सकता है। आप सभी लेखकों एवं पाठकों से मेरी मुलाकात अत्यंत प्रेरणादायक एवं ज्ञानवर्धक रही, वक्त उन्हें माफ नहीं करूँगा जो वक्त के संकेत नहीं समझते। यह आपसे संवाद करते हुये यह अंतिम संपादकीय आप सभी को सम्मानपूर्वक समर्पित है। विश्लेषक अप्रतिम उपलब्धियों को प्राप्त करें, यहीं शुभकामना।

“ देनेवाले ने दिया है सब कुछ अजब अंदाज में।

सामने दुनियाँ पड़ी है और उठा सकते नहीं ॥”

- डॉ. वंदना खुशालानी,  
प्राचार्या  
दयानंद आर्य कन्या महाविद्यालय,  
जरिपटका, नागपुर

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## Make in India: The Road Ahead

*\*Davinder Kumar Madaan*

### **Introduction:**

**Make in India** is an initiative of the Government of India to encourage multinational, as well as domestic companies to manufacture their products in India. This programme was launched by Prime Minister, Narendra Modi on 25 September 2014. It seeks to make India a self-reliant country. The major objective behind the initiative is to focus on job creation and skill enhancement in the economy. The motive is to develop India, so that it could emerge as the top destination globally for Foreign Direct Investment (FDI), surpassing China as well as the United States. The initiative also aims at high quality standards and minimizing the impact on the environment. It hopes to attract capital and technological investment in India.

The Government of India has set an ambitious target of increasing the contribution of manufacturing output to 25 per cent of Gross Domestic Product (GDP) by 2025, from 16.1 per cent during 2013-14. India's manufacturing sector could touch US\$ 1 trillion by 2025. There is potential for the sector to grow and create up to 10 Crore domestic jobs by 2025. The share of manufacturing sector in GDP has been increased to 32% in China, 34% in Thailand, and 24% in Malaysia and Indonesia. Business conditions in the Indian manufacturing sector continue to remain positive. The Government of India has an ambitious plan to locally manufacture as many as 181 products under "Make in India" Programme. This could help infrastructure sectors such as power, oil and gas, and automobile manufacturing that require large capital expenditure and revive Indian capital goods business worth Rs 1,85,000 crore (US\$ 27.42 billion). In the process, the government expects to generate jobs, attract much FDI, and transform India into a manufacturing hub preferred around the globe.

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\*Professor of Economics & Head, School of Social Sciences, Punjabi University, Patiala-147002,

## **Role of FDI inflows in India:**

The increase in FDI<sup>1</sup> has largely reflected relatively high economic growth and strong corporate performance in many parts of the world. This is especially applicable for the developing countries. The FDI increases productive capacities and international competitiveness. It also permits the transfer of technologies, and develops the human capital resources of the country. The success stories of East and South East Asian countries suggest that FDI is a powerful tool of export promotion because TNCs<sup>2</sup> through which most FDI is undertaken have the well-established contacts and up to date information about foreign markets.

India initiated economic reforms consisting of liberalization, privatization and globalization of the economy in July 1991. Her average annual growth rate of real GDP at 2004-05 prices was 6.6 per cent during post reforms period (1991-2016). There has been an appreciable increase in the growth of FDI. The country's foreign exchange reserves were in a comfortable position. FDI inflows into India increased from US\$ 0.3 bn in 1992 to US\$36 billion in 2013-14 and US\$ 55.5 billion in 2015-16 (RBI, 2016). The FDI in India came from non-resident Indians, international companies, and other foreign investors.

During 2015, FDI inflows to the developed countries reached highest level at US\$ 936 billion. Developing economies also saw their FDI reaching a new high of US\$741 billion -- 5 per cent higher than 2014. The USA was the top host country for FDI in 2015 amounting US\$ 384 billion, followed by Hong Kong (US\$ 163 billion), China (US\$ 136 billion), the Netherlands (US\$ 90 billion), the UK (US\$ 68 billion), Singapore (US\$ 65 billion), India (US\$ 59 billion) as the top seven FDI host economies of the World. Measures taken by the government to improve the investment climate have had an impact as per UNCTAD report.

Under the "Make in India" Programme, government has identified 25 major sectors which have the potential of becoming a global leader. These are the sectors where likelihood of FDI is the highest. The development of these sectors would ensure



that the world shall readily come to Asia, particularly to India where the availability of both democratic conditions and manufacturing superiority made it the best destinations. Before the initiative was launched, foreign equity caps in various sectors had been relaxed. In August 2014, India increased FDI cap from 26% to 49% in the defense sector, and zero to 100% in railways infrastructure. This was in hope of bringing down the military imports of India. The investment limit requiring prior permission from Foreign Investment Promotion Board (FIPB)/Cabinet Committee of Economic Affairs has been increased from Rs. 1200 crore to Rs. 3000 crore. The application for licenses was made available online and the validity of licenses was increased to three years. Various other norms and procedures were also relaxed. India will be the fastest-growing economy in the world with its growth of 7.3% in 2016 and 7.5% in 2017 as per UN report of “World Economic Situation and Prospects 2016”.

The *Make in India* Programme focuses on the following 25 sectors of the economy by permitting 100% FDI inflows/foreign equity:

1. Automobiles
2. Automobile Components
3. Aviation
4. Biotechnology
5. Chemicals
6. Construction
7. Electrical Machinery
8. Electronic systems
9. Food Processing
10. Information Technology and Business process management
11. Leather
12. Mining
13. Oil and Gas
14. Pharmaceuticals
15. Ports and Shipping

16. Railways
17. Renewable Energy
18. Roads and Highways
19. Textiles and Garments
20. Thermal Power
21. Tourism and Hospitality
22. Wellness
23. Space (74% FDI cap)
24. Defence manufacturing (49% FDI cap)
25. Media and Entertainment (26% FDI cap)

#### **Sectors with Caps on FDI in India:**

1. Petroleum Refining by PSU (49%).
2. Teleports (setting up of up-linking HUBs/Teleports), Direct to Home (DTH), Cable Networks (Multi-system operators (MSOs) operating at national, state or district level and undertaking upgradation of networks towards digitalisation and addressability), Mobile TV and Headend-in-the-Sky Broadcasting Service (HITS) – (74%).
3. Cable Networks (49%).
4. Broadcasting content services- FM Radio (26%), uplinking of news and current affairs TV channels (26%).
5. Print Media dealing with news and current affairs (26%).
6. Air transport services- scheduled air transport (49%), non-scheduled air transport (74%).
7. Ground handling services – Civil Aviation (74%).
8. Satellites- establishment and operation (74%).
9. Private security agencies (49%).
10. Private Sector Banking- Except branches or wholly owned subsidiaries (74%).
11. Public Sector Banking (20%).
12. Commodity exchanges (49%).

13. Credit information companies (74%).
14. Infrastructure companies in securities market (49%).
15. Insurance and sub-activities (49%).
16. Power exchanges (49%).
17. Defence (49%).
18. Pension Sector (49%)
19. Stock Exchange (49%)
20. Civil aviation (49%).

**Some of the recent significant FDI announcements in India are as follows**

1. Japan has won the right to construct India's first bullet train, while offering a loan of US\$ 8.11 billion to India for the same.
2. Foxconn has signed a Memorandum of Understanding (MoU) with Maharashtra state government to invest US\$ 5 billion over the next three years for setting up a manufacturing unit between Mumbai and Pune.
3. Indian Railways has issued a Letter of Award (LoA) to US-based General Electric (GE) for a Rs 14,656 crore (US\$ 2.2 billion) diesel locomotive factory project at Marhowra, and to French transport major Alstom for Rs 20,000 crore (US\$ 3 billion) electric locomotive project in Madhepura, Bihar.
4. Swedish home furnishing brand Ikea has made a long-term plan of opening 25 stores in India by making an investment worth Rs 12,500 crore (US\$ 1.9 billion).
5. The Government of Karnataka has signed an agreement with the Taiwan Electrical and Electronic Manufacturers Association for the purpose of creating a Taiwanese electronic manufacturing cluster near the Bengaluru airport, with an investment expectation of Rs 3,200 crore (US\$ 500 million).
6. Amazon India expanded its logistics footprint three times to more than 2,100 cities and towns in 2015, as Amazon.com invested more than US\$ 700 million in its India operations since July 2014.

7. Chinese mobile handset maker, Cool pad Group Limited, has committed US\$ 300 million for setting up a research and development (R&D) centre and its own assembly line in India by 2017.
8. Google plans to invest Rs 1,500 crore (US\$ 234.3 million) for a new campus in Hyderabad which will be focused on three key areas — Google Education, Google Fibre broadband services and Street view.
9. Warburg Pincus, a US based Private Equity (PE) firm, has planned to invest Rs 850 crore (US\$ 132.8 million) in Ecom Express – an India based logistics solutions provider.
10. Germany-based ThyssenKrupp group is aiming to double its revenue from India to US\$ 1 billion in next three-four years while the group's elevator unit, ThyssenKrupp Elevator, plans to invest EUR 44 million (US\$ 50.5 million) to set up a manufacturing plant in Chakan, Pune.

#### **Make in India Week:**

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce, Government of India, is organizing "Make in India" Week from February 13-18, 2016 in Mumbai with the association of Confederation of Indian Industry (CII). The Make in India Centre will feature an exhibition of the most innovative products and manufacturing processes that have been developed in India. Further, "Start Up" programme was also launched by the government on 16 January 2016, which aims to establish 11750 new Start Up, and would create 2.5 lacs jobs by 2020. An Investor Facilitation Cell has been created in "Invest India" to assist, guide, and facilitate investors during the various phases of business life cycle. This Cell provides necessary information on vast range of subjects.

#### **Critical Evaluation:**

"Make in India" Programme is at loggerheads with the Make in China that has gained momentum over the past decade. China is a major rival to India when it comes to the outsourcing, manufacturing, and services business. India's ailing infrastructure

scenario and defunct logistics facilities make it difficult for the country to achieve an elite status as a manufacturing hub.

India ranks low (130<sup>th</sup> in 2016) on the "the Ease of Doing Business Index" constructed by World Bank for 189 countries. New Zealand, Singapore, Denmark, Hong Kong and Korea have top five ranks in this index. Even India's rank in the "Starting a Business Index" is 155 in 2016. Labour laws in the country are still not conducive to the *Make in India* programme. This is one of the universally noted disadvantages of manufacturing and investing in India. The bureaucratic approach of former governments, lack of healthy transport networks, and widespread corruption makes it difficult for manufacturers to achieve timely and adequate production.

Recent government's decision to allow 100% foreign direct investment (FDI) in seven important sectors of the economy, including defense and retail is being criticized. Allowing 100% FDI in defence may compromise the security of the country. Government is emphasizing on the need for developing greater self-reliance in defense equipment on the mantra of "Make in India". But India has made the dubious distinction of being among the world's largest importer of defense equipment. She was the world's largest importer of major arms during 2010-15, accounting for 15 per cent of the world. 70 per cent of the country's defense requirements are being met from foreign countries during the last 25 years. However, India aims at increasing self-reliance on defense equipment from 30 per cent to 70 per cent by 2027. Similarly, opening of retail sector to FDI will ruin crores of small traders and people associated with it across the country.

Unemployment situation in the India is so severe that about 12 crores people did not have jobs as per Census 2011. Unemployment rate has increased and the growth of employment was slowed down. There are less employment opportunities in the non-agricultural sector. As per ILO report, unemployment in the world will increase from 20.1 crore in 2015 to 21.2 crore in 2017. Computer will take over about

73% jobs in the world by 2025. Therefore, it is not easy to create more jobs under the “Make in India” programme.

Moreover, inequalities in world have been increased over the period. Privatization, deregulation, financial secrecy and globalization in the last 30 years have contributed to a greater concentration of wealth in fewer hands. 1% of the world’s population own more wealth than the rest 99% (Oxfam, 2016). The richest 1% own more than 50% of the world’s wealth. In 2015, just 62 individuals had the same wealth as 3.6 billion people – the bottom half of humanity. This figure is down from 388 individuals as recently as 2010. In fact, wealth of poorer diminished by 38% during 2010-15, and wealth of richer increased by 45% during the same period.

The question arises that “Can India be a global player?” If we see the size of economy and stage of development, then the answer is 'no'. India is the 7th largest economy of the world in terms of the size of GDP (US\$ 2074 billion in 2015). The country is a lower middle income economy of the world with per capita income of US\$ 1590 only in 2015. It accounted 17.8 per cent of the world population and 2.8 per cent of the world GDP during 2015 (World Bank data). Its share in world trade was 2 per cent during this period. India cannot be a global player in view of her marginal share in world GDP and trade. In 2015, 79 High Income economies controlled 64 per cent of world Gross Domestic Product (GDP)/Production and 60 per cent of world trade with only 16 per cent of the world population and 40 per cent of the world area. On the other hand, 138 developing economies constituted 84 per cent of world population and controlled only 36 per cent of the world GDP and 40 per cent of the world trade with 60 per cent of the world area. Out of the total 1.1 Lac parent MNCs, the developed economies account for more than 70%. General Electric of USA had total assets of worth US\$ 492.7 bn in 2015.

In view of above, India should have to take more initiatives for the realization of the Make in India programme. The government has promised to remove hurdles and make the nation an ideal destination for investors to set up industries. The ‘Make

in India' idea is fine. But now, the government needs to choose between Growth and Jobs. The hurdles posed by agricultural crisis, rising inequality, a banking crisis, infrastructural constraints, etc. are to be sorted out. Further, Women Entrepreneurial development can boost up the initiative for Make in India. Role of MSME, implementation of GST, banking and labour reforms, strengthening health and education, and good governance are the key for the success of the Make in India programme.

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#### Notes:

1. FDI includes equity capital, reinvested earnings and intra-company loans. Equity capital is the foreign direct investor's purchase of shares of an enterprise in a country other than that of its residence. Reinvested earnings comprise the direct investor's share of earnings reinvested. Intra-company loans refer to short- or long-term borrowing and lending of funds between direct investors (parent enterprises) and affiliate enterprises.
2. Transnational corporations comprise parent enterprises and their foreign affiliates. A parent enterprise is defined as an enterprise that controls 10 per cent of more assets or equity capital stake in countries other than its home country. A foreign affiliate means an investor, who is resident in another economy, owns an equity stake of 10 per cent or more of an enterprise.

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## Development, Industrialisation and peoples' response: Insights From Odisha

*Dr. Sunita Mahanti\**

*Miss. Silan Das\*\**

Development is a value loaded word. It implies "change leading to improvement or progress". (Pearle et.al, 1989,P.29). There is no consensus as to what constitutes real development. Broadly it can be defined as socio-economic change for achieving a set of desirable goals. What constitutes development depends on what goals are advocated by the society . Development can be taken as a set of desirable objectives, which the society intends to achieve or maximise. The elements of such a vector might include (Pearle et al., 1990) increase in real per capita income leading to economic growth, social justice by way of fairer distribution of income, improvements in health and nutritional status, educational achievement, access to resources and increase in basic freedom. The model of development essentially concerned with economic growth of a nation state is measured in terms of increase in gross national/ gross domestic product (GNP/GDP) and percapita income. It is based on capital accumulation from within the country wherever possible and with foreign assistance where domestic accumulation is not possible and is characterised by rapid industrialisation. One of the assumptions of the economic growth model of development was that, the GNP/GDP growth would automatically trickle down to the lower income groups. It is thus most generally accepted that development induces sustained growth of real per capita income. The resource demand of dev. has led to the narrowing of the natural resource base for the survival of the economically poor and powerless. Sustainable dev. has to take into account the social, cultural ecological and economic factors of the living and non-living resource base. For centuries, village communities controlled and used collectively natural resources like land, water and forests thus ensuring a sustainable use of these renewable resources. This took a drastic

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\* Lecturer in Karilopatna College, Kendrapada,

\*\*Lecturer in Christ College, Cuttack, Odisha.



turn of events after colonial domination and heavy industrialisation. Subsistence economy gave way to linear enterprise.

Industrialisation is the period of social and economic change that transforms a human group from an agrarian society into an industrial one, involving the extensive reorganisation of an economy for the purpose of manufacturing. The relationship between economic growth, employment and poverty reduction is complex. Higher productivity is argued to be leading to lower employment. There are differences across sections, whereby manufacturing is less able than the tertiary sector to accommodate both increased productivity and employment opportunities; over 40% of the world's employees are "working poor" whose incomes fail to keep themselves and their families above the Rs 120/- a day poverty line. On going industrialisation is an important indicator of newly industrialised country, where social upheaval can occur due to migration as primarily rural or agricultural populations migrate to the cities, where the growth of manufacturing concerns and factories can draw many thousands of labourers. While being a liberal democracy throughout after its independence, India has been widely criticised for its inefficient governance and slow process of structural reform.

The goals a society pursues change over time. Economic growth does not always go together with elements like equity, stability, environmental quality, resource availability and sustainability. Nation should grow in an inclusive manner desirable goals. As the world's largest democracy and a rising economic power. India has gradually begun to play a larger role in the international market. After independence, India envisaged an economic system which combines the best features of socialism and capitalism - this culminated in the mixed economy model. All the economic planning has been formulated through five-year plans, by the planning commission. The community projects and the national extension service schemes were initiated under the five-year plans. Through these schemes it was sought to start a process of transformation of the socio - economic life of the villagers. Common goal of the five-year plans are growth modernisation, self-sufficiency and equity. The major policy initiatives in the agricultural sector were land reforms and green revolution.

These initiations helped India to become self-sufficient in food grains production. The population of people depending on agriculture did not decline as expected.

India is a developing nation Industry has been receiving special attention. Policy initiations in the industrial sector raised its contribution to GDP. Over the years, agriculture has been the major source of livelihood of the Indian population. Improvement in agriculture can not proceed beyond a point unless the surplus working force on the land is progressively diverted to industries and services. Similarly, industrial development itself can not advance sufficiently without a large increase in the supply of food necessary to maintain the population thus diverted and of the raw materials needed to enable industries to expand production. After independence the founding fathers saw the nation progressing with decent industrial base. This triggered the formulations of programmes and strategies to construct a proper infrastructure or speedy industrialisation. One of the major drawbacks in the industrial sector was the inefficient functioning of the public sector as it started incurring losses leading to drain on the nation's limited resources. Economic growth does not always go together with equity. It comes with a price. The trade off between economic growth and equity has to be appreciated quantitatively or qualitatively and the areas of conflict and harmony between them have to be carefully resolved through the socio - political process of an economy be at the local, regional, national or global level.

Growing demand for steel in the international market has insisted steel manufacturing giants world over like TISCO and POSCO to make inroads into India with huge resources of iron ore, coal and other minerals. Development through large scale industrialisation has been the key message given by the government of Odisha from time to time. People believe that no development is possible in the state without going by the norms dictated by the corporate giants coming with an aim to plunder the mineral resources of Odisha by utilising its low cost labour. Investments in education convert human beings into human capital; human capital represents enhanced labour productivity, which is an acquired ability and an outcome of deliberate investment decisions with an expectation that it will increase future income sources. Human development is based on the idea and education and health are integral to

human well-being because only when people have the ability to read and write and the ability to lead a long and healthy life, will they be able to make other choices which they value. The status of women is correlated with the development of a society. Apart from the fact that she is an equal to man in intelligence and capacity to do hard work, she is also an agent of peace and preservation by nature, largely nurtured by socialisation, she is inclined to preserve things and oppose violence and destruction. If empowered, she can play a crucial role in the dynamics of development. An educated and free woman has such potential to contribute to nation - building.

People's response to industrialisation is also ambiguous. Some group of people are pro industry while some others are anti development, why pro & why anti. The response is polarised the socio economic issues related to industrialisation are never given due importance before or during the finalisation of a project. As a result, government and corporate houses are now facing mass discontent in many places like the proposed POSCO plant site places like the proposed POSCO plant site near Paradip, TATA steel plant site in Kalinga Nagar, Jajpur, while attempting to acquire land for the respective projects. Industrialisation over agricultural land is discouraged in most of the developed countries as they have realised the gravity of food crisis in the coming days. When population is growing rapidly in India, how wise is it to hand over limited agricultural land resources to the industrial houses to build their plants and colonies? The Nano Project in West Bengal was shelved looking into the needs of the farmers case studies.

The People's movements against POSCO NALCO industrialisation are primarily based upon these issues which should never be neglected. The police - police clash that happened in Kalinga Nagar industrial complex over the TISCO project has made many issues fresh in the minds of social activists, economic analysis, policy makers as well as peoples who suffer a lot in the name of development while the overall prosperity of the world has increased many folds over the last fifty years, the benefits of science and technology have gratified towards the rich. The divide between the rich and poor has further widened leading to the marginalisation of the poor and

weaker sections of the world; the number of persons below poverty line has increased. This lopsided development causing serious resource crunch, population and unequal distribution of wealth has raised question marks in the minds of some serious thinkers about the appropriateness of the existing model of development. E. Schumaker in his book, "Small is beautiful", disfavours sophisticated technology for developing countries and favours "Appropriate Technology". Ivan Illich, another modern sociologist, believes that material development, beyond a certain point, does not bring human happiness, rather causes frustration. The following are his words in his "Shadow work" (1981): "Each major sector of economy produces its own unique and paradoxical contradictions. Each necessarily brings about the opposite of that for which it is structured. Economists, who are increasingly competent to put price tags on externalities, are unable to deal with negative internalities and can not measure the inherent frustrations of captive clients, which is something other than cost. For most people schooling twists genetic differences into certified degradation, medicalisation health increases demand for services far beyond the possible and useful and undermines the coping ability which common sense calls healthy; transportation; for greater majority bound to rush, increases the time spent in servitude to traffic, reducing both freely chosen mobility and mutual access. The development of educational, medical and other welfare agencies has actually removed most clients from the obvious purpose for which these projects were designed and financed. This institutionalised frustration, resulting from compulsory consumption, combined with new externalities, totally discredits the description of the desirable society in terms of installed production capacity to a result slowly, the full impact of industrialisation on the environment becomes visible which some forms of growth threatens the "Cameron". All economic growth inevitably degrades the utilisation value of the environment'. Thrich (1976) and Mishan (1977) have emphasised the social limits to growth. It is held that economic growth undermines social foundations. Individual morality breaks down in an affluent, growing economy. Indicators of social disintegration such as divorce, suicide, delinquency, theft, drug taking, sexual deviance, crime and violence increase with economic growth.

The earth has a limited carrying capacity. If the present trends in carrying capacity continue, the world population, industrialisation, pollution, food production and resource depletion will reach uncharged limits of growth on this planet within the next hundred years. Ecologists have pointed out that the consequence of diversity is stability. A simple system can be destroyed or deformed by shocks. But a diversified system possesses resilience for compensation and substitution. A man-mediatediotic system often lacks the "Balance of Nature" and is subject to disaster in comparison with a diverse natural ecosystem. Pollution of air, water and soil are the direct adverse environmental impacts of an industry. Other indirect impacts are mainly sociological, caused by migration of people from rural areas to industrial cities causing problems of hygiene and habitation, social tensions etc. It is a common experience to find slums developed by labourers around factory sites. Industrial towns do not have a reputation of good law and order. Ecology promotes strong conceptions of personal, natural and corporate capitalist responsibilities for the environment, plant and animal life and the quality of life for future generations.

When the people's representatives and policy makers are neither responsive nor lenient for the development of the state astonishingly in a democratic country nor they are accountable to what ever they do for the state and people, how can they expect people to believe them and go by whatever they say or decide? People are not very receptive to the idea of industrialisation. Is it because they are losing their land or is the rehabilitation package inadequate? Or is it something more? The political response is also polarised. If such money hawking and anti-people psychology prevails among the politicians and bureaucrats of Odisha and if people are kept away from the decision making process, the gap between both will be widened which may lead to more violent situations across the state that will block the process of industrialisation and development. Benefit would be to resolve this ambiguity. From our past experience of setting up Nilachal Ispat Nigam Ltd., Juddal Steels, MESCO Steels, it has come across that the people who were to do or rich when government acquired land, are now working as daily wage labourers or out on the streets begging for alms. These people

wee closer to nature in tending to the piece of land they had by way o substance economy, or the pond to eke out their daily livelihood by fishing. Now they have nothing to fall back on Just how long does the compensation money last? Have they fulfilled the rehabilitation packages declared by them/ how many local boys and girls are employed in the said industries? Is it like a picnic spot situation where the locals are not involved and become passive enlookers while people all over have a major chunk of the development process? Wherever works from the local area is either a peon or a domestic servant in the houses o big bosses. Is it what is meant by development? The stakes are too high. The planners, policy makers and the political leaders should lenuise the socio-economic slalities of the inhabitants with the ongoing/proposed industrial zones to enable them to embark on a realistic approach towards industrial development keeping in view people's aspirations and social realities.

Habitat loss has led to the shrinkage of species diversity, the genetic diversity, particularly in plants, is also shinking perhaps at a greater rate which has been overlooked. In India, many indigenous mango and right variations have become extrinct. When such a community is displaced its synifiotic relationship with the surrounding eco-system is disrupted. Large devepment projects in forest and eco-sensitive areas are certainly a major cause, if net the main cause of habitat less. for tribals and other indigeneous people, the forest is their home. It is intimately connected with their economic and cultural life. Being the primary source of their food, fuel and fedder, the forest influences their sustenance and survival. The people of third world countries have polarised perceptions o forests due to their turn potentials of economical economy and sustenance economy that stand in conflict relations with each other.

POSCO is the country's biggest FDI project US \$-12 billion (54,000 crores) steel project. People in Govindapur and Dthinkia are up in arms protect their land from being graffed by corporate interests They feel the government wants to grow at their cost snatching their livelihood from betel Vines. The POSCO Project wi;; deprive them of their income. The betel vines are spread across nearby 3000 acres of forest

land. POSCO, the Korean steel giant wants 2700 acres to set up its huge steel project mega steel project. The project would affect families located in Dinkia, Nuagaon and Gadkunjang Panchayats. Development is a pro-poor approach. The Lok Sabha approved land reforms according to the land Acquisition Bill that fosters farmers' rights. With the rupee's value falling drastically, India is struggling to finance its current account deficit. The leaders are desperate to promote economic growth. The United Action Committee, UAC has demanded a six point charter of demands to fight for the rights of the displaced people like providing jobs to a number of each project affected family changing the method of measurement of betel vines ground on the land from stay to stay instead of fence to fence, which now require to be uprooted; Tree compensation should be raised for homestead and agricultural land. The grievance of the local people is that IDCO officials were engaging outside labour and contractors in the reforestation work ignoring the local unemployed youth. The ecological treasure trove has been systematically decimated and ruin brought on people who depend on it for sustenance. People are vehemently opposing the construction of the boundary wall as most of their demands have not been met. Over 170,000 trees have been felled and betel vines and green leaves destroyed for the steel plant. There was a green cover of virgin mangroves, Cashew trees, fruit bearing trees and casuarina forest. During the 1999 Super Cyclone even though the nearby Jagatsingpur area was vastly devastated, Govindpur and Dinkia were spared due to forest cover and sand dunes, which acted as a natural barrier against natural calamities. The Phelin in October 2012 created fear psychosis in the minds of the people which made them vulnerable due to loss of forest cover. The result of ecological degeneration very often falls on the shoulders of women and children. They have to walk for 8 - 10 kilometers and spend hours collecting fuel wood and fodder. The loss of land, affected pollution and the accompanying displacement has risen serious in the minds of people. They feel the compensation has to be feasible to meet the needs of the people. The alternative land given to them should be proportionate in terms of fertility and feasibility to gain a decent livelihood and also absorbing them into the mainstream with adequate training and skill enhancement, as assured in the six point charter.

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# An Analysis of Physical Road Network in Madhya Pradesh

*\*Dr. Varsha Choudhary*

## Abstract

Infrastructure is a prerequisite condition for economic development (Purakaystha, 1995). A number of academicians and politicians admitted that without adequate infrastructure and a modern transportation network the chasm between India's moneyed elite and 800 million poor will continue to widen, potentially diabolizing the country. This paper explores a general overview of the physical road sector in the state of Madhya Pradesh. It compares the state of Madhya Pradesh

with national figures based on some crucial indicators and a comment on the priority accorded to the state in terms of provisioning of national highways including the Golden Quadrilateral project. Further, it is concerned with the different types of roads (like rural roads, major district roads and state highways) and classes of roads by their surface types. Also, analysed the functioning of various institutions - NHAI, MPRDC, PWD and MPRRDA.

**Key Words:** District roads, NHAI, MPRDC, PWD and MPRRDA.

## **Introduction:**

The Indian economy in the immediate post independence period was characterized by poor infrastructure, extensive regulation, protectionism, public ownership, slow growth, poor quality and inefficiency. At that time the development of infrastructure was completely in the hands of the public sector. The low spending on power, construction, transportation, telecommunication and real state had prevented the country from sustaining higher growth rates. The government realized this and embarked upon an ambitious program of infrastructure development and investment for strengthening and consolidating recent infrastructure initiatives.

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\*Assistant Professor, Department of Economics, BSSS Bhopal

Initiatives were taken to enhance the investments at all levels, i.e. central, state government as well as the private sector in each major infrastructure sector (ASSOCHAM, 2013).

Overall the share of physical infrastructure spending in GDP rose only marginally from 4.5 percent to 4.6 percent between 2003 and 2010-11 (Roopa Kudva, 2012). The government has reiterated its infrastructure focus to take the economy into a higher growth trajectory and also planned for the expansion and development of roads, railways and power plants and greenfield airports. Ranging from across-country link of the national highways to roads in the deep interiors. The country enjoys a road network of 33 lakh km, the second largest in the world while the road density and road–people ratio is lower than Japan and United-states (MORTH, 2012). The demand-supply gap in transport infrastructure is rising with growing population. There is an urgent need to speed up the transport infrastructure projects. Among all the states of country Madhya Pradesh is the second largest state by area (308 Square Km) and sixth largest state by population. Because of its central location traffic from surrounding states passes through the road and rail network. Roads carry 80 percent of goods and passenger traffic in Madhya Pradesh (Annual Report MPPWD, 2012). Hence, the systematic development of the road network is a pre-requisite for the overall development of the state.

#### **Objective:**

- To study the current status of physical road network in Madhya Pradesh
- To compares the state figures with national figures in terms of provisioning of national highways.
- To compare the different types of roads (like rural roads, major district roads and state highways) and classes of roads by their surface types.

#### **Research Methodology:**

The study is based on primary and secondary data with exploratory approach. Primary and Secondary data collected from various published and semi published

sources of government, non-governmental institutions and magazines. The Secondary Data is collected from Madhya Pradesh Transport Department (MPTD) is responsible from licensing, registration and regulation of motor vehicles, drivers and passengers in Madhya Pradesh. The data regarding to the village road progress, bridges, budgeted provision, establishment budget and expenditure on road maintenance has been collected from various publication and website of Madhya Pradesh Road Development Corporation (MPRDC) and Madhya Pradesh Rural Road Development Authority (MPRRDA).

### **Review of Literature:**

Griffin (1974), Chakravarty (1977), Ahluwalia (1983), GOI (1993), Jalan (1993), Das (2000) and Majumdar (2004) enhanced the development of road sector under different era's after Independence and in post Globalisation era with relation with their different transport problems like development rural road, traffic congestion, changes encountered by road infrastructure in India. *Dutt and Sundharam (2006)* in Roads and Transport System in India under "Infrastructure in the Indian Economy". However, the study in 1965 analysed the importance of Road Transport for the Indian Economy. They highlighted the Road Construction under the Five Year Plans and Major Initiatives by NHAI.

### **General Overview: Roads in Madhya Pradesh**

Madhya Pradesh state was formed on 1st November, 1956. Exactly after 44 years, on 1st November 2000, a significant area of state was carved out to make the Chhattisgarh state. With this partition, the state has lost some roads, airports, railway lines and other key infrastructure elements, like power plants to Chhattisgarh state. However, in the last eight years, Madhya Pradesh has been able to not only substantively compensate the infrastructure lost but has gained a lot more also.

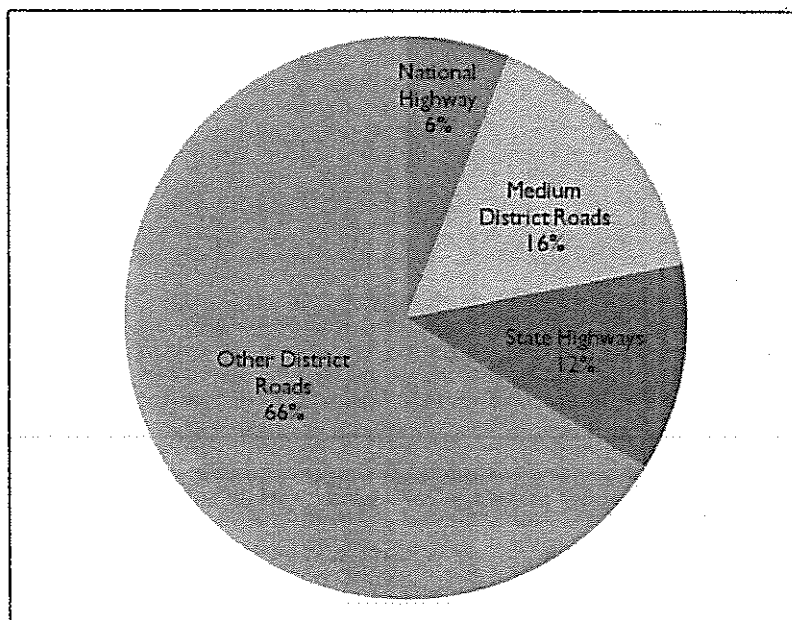
Madhya Pradesh state had total roads worth 67284.2 km. However, the state lost about 45 per cent of its total road length to Chhattisgarh state in November 2000. Gradually, MP recouped the loss and went up to attain a total road length of 73314km

by March-end 2008. It constitutes only 2.2 per cent of the total road length of 3.3 million km in India.

The road network of the state as compared to other states is very poor. The national average for road network is 74.9 km/100 square km whereas in MP, it is only 45.1 km/100 sq km. The national average for Class-I roads per 100 square km is 35.55 km whereas in MP, it is only 18.71 km. Similarly, the national average for tarred roads is 21.4 km/100 square km whereas it is only 8.4 km/100 square km for MP. This is not only an indicator of the backwardness of the state but also the cause of its backwardness (State Development Report Madhya Pradesh, 2011).

The state of Madhya Pradesh had 73314 km of roads by March 2008. Nearly 6 per cent of these roads were national highways, 16 per cent were major district roads, 12 per cent were state highways and the remaining 66.5 per cent were village roads and other district roads.

**Graph 1.1**  
**Madhya Pradesh Road**



**Networks**

*Source: MPPWD-2012*

The Golden Quadrilateral (GQ) comprehensively misses Madhya Pradesh with just 621 km of North South-East West corridors passing through the state. Again, it may be noted that the East West corridor has only a fleeting presence in the northern fringe of the state while much of the 621 km of road comes under the North South corridor. Of the total length of GQ, only 4.68 per cent passes through the state.

**Table 1.1**

**Length of Roads in Madhya Pradesh**

<b>Types of Roads</b>	<b>Length of Roads (in Km)</b>	<b>(In %)</b>
National highways	4,280	5.80
State highways	8,729	11.90
Major district roads	11,572	15.80
Rural roads	48,733	66.50
<b>Total</b>	<b>73,314</b>	<b>100.00</b>

*Source: Annual Administrative Report, PWD, GoMP, 2007-08*

Though the state covers 10 per cent of the nation's area, it has only 8 per cent of the national highways passing through them. As per the proposed National Highways Vision 2121, out of total national highway network, only 6.25 per cent of the total would pass through Madhya Pradesh. Madhya Pradesh has 18 national highways, with total length of 4280 km. These highways are: NH-3, NH-7, NH-12, NH-12A, NH-25, NH-26, NH-27, NH-59, NH-59A, NH-69, NH-75, NH-75Ext., NH-76, NH-78, NH-79, NH-86, NH-86Ext, NH-92. Because of the central location of the state and surrounded by five states, traffic from all the neighbouring states passes through the state's road/rail network (Madhya Pradesh State Development Report, 2011-12). The scanty railway network and the low density of population scattered across small and distant villages and hamlets, demands more roads on the one hand

while on other hand, make the business of construction of roads less cost-effective than in states with dense rural population.

A brief description of the division of responsibilities between the different agencies related to roads is given below.

*NHAI* - The National Highways Authority of India (NHAI) was constituted by the Indian Parliament in 1988. It is the authority responsible for the development, maintenance and management of national highways entrusted to it. The Authority was made operational in February 1995 and is currently undertaking the developmental activities under National Highways Development Project (NHDP) in phases.

*PWD* - The Public Works Department (PWD) in Madhya Pradesh has traditionally played the role of governing the maintenance and construction of roads. But in the last few years, this role has been perceived as much more significant and strategic and thus, has witnessed significant change in the way the roads are being governed in MP now.

*MPRDC* - Madhya Pradesh Road Development Corporation However, for strengthening the state highways, to develop projects in the state on the basis of public private partnership and to act as the State Highway authority, the state of Madhya Pradesh has incorporated Madhya Pradesh Road Development Corporation (MPRDC) as an independent company on 14.07.2004. MPRDC has also been entrusted with the responsibility of constructing state highways that comprise nearly 12 per cent of the total road length in the state. Of the total outlay for 2005-06 for PWD, nearly 61 per cent had been spent through MPRDC. Yet PWD continued to work on state highways using the funds from Central Road Fund (CRF), economic and interstate importance (E&I) and under Fast Track Schemes that were designated for developing roads that were not covered under any other scheme.

*MPRRDA* - The Madhya Pradesh Rural Road Development Authority (MPRRDA) is the implementing agency (IA) for central flagship programme Pradhan Mantri Gram Sadak Yojana (PMGSY). The MPRRDA is a registered society under the Societies Registration Act of 1860. It was registered on the 25th of December 2000. The

Authority has a general body that is headed by the chief minister, an executive council headed by the rural development minister and an empowered committee that is headed by the chief secretary. A senior IAS officer heads MPRRDA as its CEO.

Out of the total outlays Table 4.2, of 10th Five Year Plan, roads and bridges account for 5.15 percent; in monetary terms it comes to Rs. 1325 crore. During the Plan period, 71 major bridges, 530 medium bridges, 13,174 culverts, 8 railways over bridges, and a road length of 6448 km were expected to be constructed by March 2007 providing connectivity to 1,308 villages (Madhya Pradesh State Development Report, 2011-12). In the 11th Five Year Plan, the outlays for roads and bridges have been increased by near about six times to the tune of Rs. 7770 core. The target set to achieve during the 11th FYP is construction of 101 major bridges, 79 medium bridges, 5 railway over bridges, 66,535 culverts and a road length of 21,587 km and target was nearly achieved with 97 percent.

**Table 1.2**  
**Analysis of Outlays and Expenditures**

(Rs. in Crore)

Year	Outlays	Actual Expenditure	% of Utilization
2002-03	265.00	203.49	76.80
2003-04	390.77	331.31	84.80
2004-05	789.02	563.91	71.50
2005-06	857.99	778.60	90.70
2006-07	1,215.28	1,024.93	84.30
2007-08 Upto Dec. 2007)	1,995.74	949.55	47.60

*Note: Data of Roads and Bridges through PWD*

*Sources: Annual Administrative Report, PWD, GoMP, 2007-08.*

Table 1.3

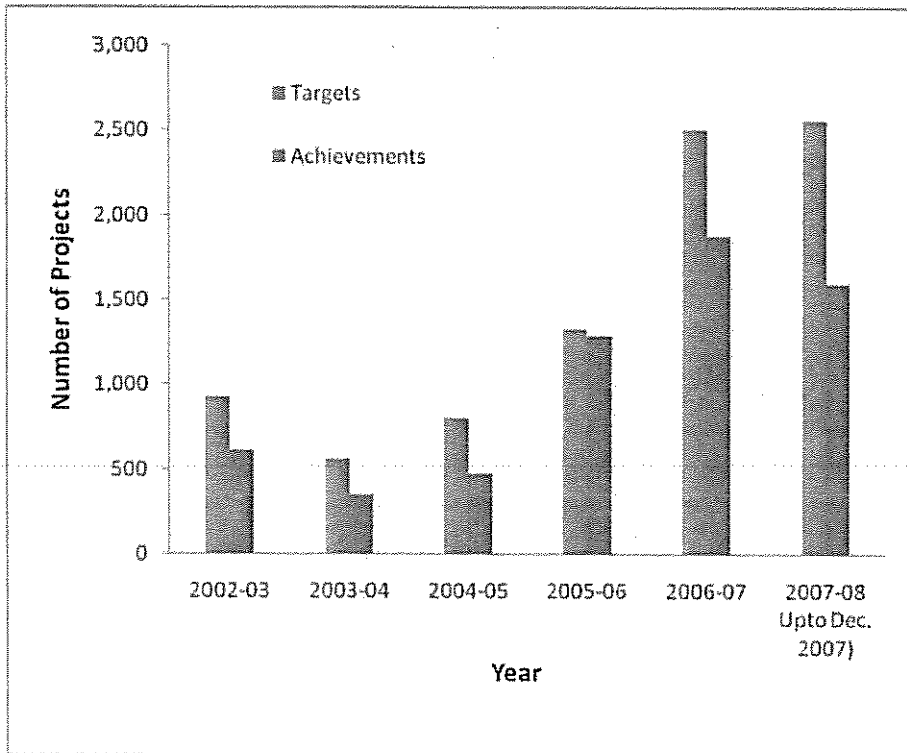
## Number of Projects in Road Construction

Year	Targets	Achievements
2002-03	929	617
2003-04	565	354
2004-05	804	479
2005-06	1,330	1,289
2006-07	2,508	1,882
2007-08 (Upto Dec. 2007)	2,561	1,598

Sources: Annual Administrative Report, PWD, Go MP, various years

Graph 1.2

## Number of Projects in Road Construction





**Table 1.4**

**Targets and Achievements for the Construction of Big and Medium Bridges**  
(in Number)

<b>Year</b>	<b>Targets</b>	<b>Achievements</b>
2002-03	20	19
2003-04	97	81
2004-05	64	57
2005-06	43	39
2006-07	61	45
2007-08 (Upto Dec. 2007)	55	13

*Sources: Annual Administrative Report, PWD, GoMP, 2007-08.*

But again in the consecutive years, the set targets fell short in its achievement. Similarly, Table 4.4 explains the targets and achievements for the construction of big and medium bridges. It seems the performance is positive in achieving the targets for constructing big and medium bridges in the state. In 2002-03, the set targets were nearly accomplished. Years 2003-04 and 2004-05 shows little dip in the achievement which is then speeded up in 2005-06. But again, the next two years were not promising compared to 2005-06. Keeping aside the performance of MPRDC, PWD also worked on different types of roads under various schemes over the years. Some of these schemes are:

*Farmer's Road Fund (FRF)* - In order to undertake road development, a surcharge has been imposed at the agriculture mandi level. It may be pertinent to note that the funds under FRF comes in MPRRDA's kitty from where a part of it is transferred to PWD who work under the conditions set by the general body of MPRRDA.

*Central Road Fund (CRF)* - The scheme is in implementation since 2000-01, wherein, certain proportion of tax collected by imposing a cess of Re. 1.00 on each

litre of petrol and diesel is distributed among state governments for improving the state highways and major district roads in the state. Out of CRF, MP is getting Rs. 93.29 crore annually on 100 per cent funding basis. During the Eleventh Five Year Plan, the state is likely to get Rs. 525 crore for construction of 1700 km of roads under this scheme.

*NABARD (RIDF)* - NABARD under its Rural Infrastructure Development Fund gives loans to the state government for development of rural roads.

*Special Central Assistance (SCA)* - SCA is provided by the Centre in Tribal Sub-Plan (TSP) to cater for basic infrastructure development like road construction.

*Roads of Economic and Interstate Importance (E&I)* - Roads and bridges of economic and interstate importance are being constructed under this scheme. It is sponsored by the Central government with 50 to 100 per cent central finance being given to the state government for construction purpose.

### **Financial Status of Road Projects**

The state government has started the development of road infrastructure in the state on the recommendations of the 12th Finance Commission. Under this, state government will get Rs. 52.00 crore per annum for development of road infrastructure from 2006-07 to 2009-10 which will be a total of Rs. 208.00 crore. The state government will complete 550 km of road construction out of this fund. The state government has developed some roads in past few years by issuing of bonds and taking loan from Housing and Urban Development Corporation Limited (HUDCO).

The state government is currently developing many roads by taking loan from Asian Development Bank (ADB). Also it is negotiating a loan of from ADB for up gradation of 1768.16 km roads. The approach roads to villages are being undertaken by the state government under NABARD. Currently, rural connectivity is being provided under the PMGSY in a big way. Besides the road construction being undertaken through the state plan, significant quantity of roads and bridges/culverts are being constructed under PMGSY Rs. 2,959.00 crore is expected to be spent under

the scheme constructing 13,500 km of road providing single connectivity to 3,372 villages during the 10th Five Year Plan.

**Table 1.5**  
**Road Length Completed by MPRDC**

Type of Project	Number of Projects Completed	Length in Km	Expenditure (Rs. Core)
Built, Operate and Transfer (BOT)	11	1,532.66	760.97
Regular contract	7	559.71	235.85
ADB-Phase I	4	332.59	250.31
ADB-Phase II	10	1,118.24	650.69
Total	32	3,543.20	1,897.82

*Sources: MPRDC, Govt*

**Table 1.6**  
**Ongoing Road Projects by MPRDC**

Type of Project	Number of Ongoing Projects	Length in Km	Expenditure (Rs. Crore)
Built, Operate and Transfer (BOT)	6	656.26	1,836.53
Regular contract	9	667.28	506.29
ADB-Phase II	1	153.00	83.87
ADB-MPSRSP II	17	1,670.11	1,348.27
Total	33	3,146.65	3,774.96

*Note: MP State Road Sector Project.*

*Sources: MPRDC, GoMP*

The last five years of running PPP in MP prove that it has many obvious advantages. Seven such advantages have been enumerated here. First, the cost of building roads gets shared between the government and the private developer, thereby reducing the burden of government. Second, the government neither have to answer nor deploy manpower for maintaining roads. Third, the government does not have to divert any part of its budget on the maintenance of roads.

Fourth, more than 95 per cent of the budgeted expenditure accrues to the project development head because the administrative cost under this system is less than 5 per cent of the total project outlay. Fifth, the quality standards maintained are much higher than the roads built sans the participation of private entrepreneurs. Sixth, there are many other aspects attributed to efficient management that flourish owing to the private sector participation. Finally, the users get good quality roads that are built fast, without any time and cost overruns, providing satisfaction to road users and enhancing the image of the state government.

Thus, far, the experience that the public has had of the roads built by MPRDC has been good. This is primarily on account of two factors. First, the BOT system, by itself, creates a charge in favour of the concessionaire, delivering good quality roads, as it is the concessionaire who would have to maintain and operate it for the upcoming 15 years. Second, for the non-BOT roads undertaken by contractors, the developers are made to furnish performance guarantees. Besides, MPRDC supervises the work directly as well as through independent supervision consultants appointed by them.

### **Conclusion:**

Developing infrastructural sectors of roads, railways, airports, telecom and power involve very tangible and concrete structures, with well-defined capital outlays, capacity installations and their measurable performance. India initiated an ambitious reform programme of commercialising the infrastructure about a decade and a half ago, ascertaining a shift from a controlled to an open market economy (Lall and Rastogi, 2007). However, the market showed very few signs of private or foreign direct investment getting into the infrastructure. Reason being, so far, the bulk of

infrastructure in India was in the public sector which meant that this sector operated in a protected set up and hence, had been largely subsidised by the government.

Since the launching of reform, the government is trying to reduce its borrowing which means that further subsidisation will not be possible. Because of the long gestation period and many social implications, the infrastructure sector compares unfavourably with manufacturing and many other sectors that flourish with the private and foreign capital. For reversing this trend, specific policies in this area were needed to make infrastructure attractive. There is a wide gap between the potential demand for infrastructure for high growth and the available supply; which required bridging. And this was the challenge that was placed before Madhya Pradesh state and the whole of India.

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### **Eminent Legendary Scholars on Different Fields from Kurnool District**

1. Vyyalawada Nasimha Reddy, Freedom Fighter (1850)
2. Kotla Vijaya Bhaskar Reddy, Former Chief Minister (1922-2001)
3. Pendekanti Venkata Subbbaiah, Former Governor (1927-1993)
4. Demodaram Sanjeevaiah, Former Chief Minister (1921-1972)
5. B.V Subba Reddy, Dy. Chief Mister 91902-1974)
6. Maddur Subba Reddy, Former Chairman, Z.P & M.P (1912-1996)
7. Nivarthi Venkata Subbaiah, Former, Chairman A.P Legislative Council (1910-1978)
8. Sardar Nagappa, Gandhian (1911-1983)
9. T.G.L Thimmaiah Srasti, Industrialist (1912-1988)
10. Halvi Satyanarayana, Syndicate Member, S.V. University, Tirupati (1914-1996)
11. T.G Gopal Setty, Industrialist (1919-1996)
12. Hardhger Seetharami Reddy, Educationist (1927-1998)
13. Karra Subba Reddy, Gandhian & Former MLA (1937-2004)
14. Kanika Reddy (Erragudi) Eswara Reddy, Communist MLA (1920-1927)
15. Chandra Pulla Reddy, Communist leader (1917-1984)
16. Pulla Panthula Venkatarama Sarma, Poet (1919-1975)
17. Kalugotla Vijayathreya, Poet & Writer (1935-1997)
18. Doma Deesthithulu venkatasubbaiah, Poet & Writer (1899-1962)
19. Meduri Deeshithulu Venkatasubbaiah, Poet & Writer (1911-1995)
20. D.V. Subba rao, Novelist (1939-2004)
21. Pendekal Atlareddy Lakshmana, Raobahadur Congress leader (1878-1982)
22. Yemmiganur Machani Ramanna, Businessman (1910-2005)

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23. I.Linganna, Drmatist & Actor (1922-1994)
  24. Pedda Hanumantharayudu Muscian (1919-1991)
  25. Veldurthi Venkatanursu Naidu, Dramatist (1923-1988)
  26. Bethamcherla B.P.Sesha Reddy, Industrialist (1886-1973)
  27. Machani Somappa, Industrialist (1904-1978)
  28. Dr.Abdul Huq, Educationist (1901-1958)
  29. Mukkumalla Venkata Subba Reddy, Gamago, Gandhian (1918-2002)
  30. Bhashyam Siva Bhasyam Goud, Project Sacrificer (1922-2003)
  31. Dr.Ramaswamy Mudaliyar Member of Parliament (RS) 1887-1976)
  32. Dr.Lakshmanaswamy Mudaliyar, Madras University, Vice Chancelor (1887-1974)
  33. Dr.Perugu Siva Reddy, Eye Specialist (1920-2005)
  34. Kasi reddy Venkata Reddy, Educationalist (1885-1975)

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# **“An Analysis Of Increasing Contribution Of Tertiary Sector In Countries Gdp & Impact Of Social-Economic Indicators Of The Country”**

*\*Dr. Anamika Shrivastava*

## **ABSTRACT**

The development of an economy depends upon its structural scenario, under which various economic activities execute & their contribution in countries GDP determine. Primary, Secondary, & Tertiary sectors play a very significant role in countries development. Now a days the contribution of tertiary sector in countries GDP is increasing rapidly, by which we are getting so many

employment opportunities, countries per capita income increasing & various social- economic problem are getting abolished. The present paper is an effort to mention the contribution of tertiary sector in countries GDP, & the impact of various social economic factor on it. It is an analysis by which the growth & development of an economy can be boost up significantly.

Key Words: Structural, GDP, Contribution.

## **INTRODUCTION:**

The recognition of differences among the major sectors of the economy, such as agriculture, commerce or manufacturing has a considerable tradition in economic thinking. Also there is evidence that important national & international predicaments of our time are closely related to sectoral - structural developments.

Service sector is the life-line for the social economic growth of the country. It is today the largest & fastest growing sector globally contributing more to the global out-put & employing more people than any other sector.

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## REVIEW OF LITERATURE:

Economy is divided into three sectors: Primary, Secondary, & Tertiary sector. The primary sector consists of farming, forestry, animal husbandry & fisheries. The manufacturing sector is composed of mining, construction, & manufacturing. All other economic activities which are not covered by the agricultural or manufacturing sectors are broadly defined as services & hence belong to the service sector.

According to Gaurav Nayyar(2009)<sup>1</sup> the dramatic growth of the services sector in India reflects rapid strides made by educated professionals.

Services play a central role in the economies of both developed & developing countries. They account for over half of the GDP of all developed economies & constitute the single largest sector in most developing economies.

The reason of growing service sector in past few decades is uprising of information & communication technology BUSARI(2007)<sup>2</sup> .

It has been argued in developing countries the share of services sector like business & finance, software directing the development therefore the role of manufacturing declining by the passage of time SZIRMAI& VERSPAGEN (2010)<sup>3</sup>.

It has been observed that transformation from agriculture to manufacturing furthermore structural change from manufacture to service is the process of economic development CLARK(1941)<sup>4</sup>, KUZNETS(1957)<sup>5</sup>, & FUCHS(1980)<sup>6</sup>.

KONGSAMUT et al (2001)<sup>7</sup> found the high contribution of service sector increase the GDP per capita sample size of 123 countries with time duration 1970-80.

CHENERY (1961)<sup>8</sup> & KASPER (1978)<sup>9</sup> found the secular view as the resources reallocate because the change in income & taste of society, as the income increased the primary goods demand fall, so that the percentage of spending of income fall on primary products.

ARNOLD et al (2008)<sup>10</sup> suggested that finance, transport, & telecommunication are the backbone of service sector, which allowed business & open international market competition.

ARNOLD et.al (2010)<sup>11</sup> discovered India covering banking, insurance, telecommunication, and transport improved their services policies which led to improve in manufacture productivity . This is the another way that service sector has taken part in improving economic efficiency .

### **OBJECTIVE & METHODOLOGY:**

The present paper is based on secondary data. The objectives of present paper are:

1. To observe interstate NSDP of tertiary sector.
2. To find out the inter state PCNSDP.
3. To study about various social- economic indicators at two time points(i.e. 2001& 2011)
4. To observe the impact of various social-economic indicators on tertiary sector development

To achieve the above objectives various statistical techniques have been used. Annual growth rate, co-efficient of variance & multiple regression techniques are used in the paper to obtain the conclusion.

### **INTERSTATE NSDP OF TERTIARY SECTOR (2009-10 to 2013-14):**

Service sector is the life-line for the social economic growth of a country. It is today the largest & fastest growing sector globally contributing more to the global out-put & employing more people than any other sector.

STEFEN LEHNDORFF (2002)<sup>12</sup> describes the diversity & unity of work organization in service activities.

**TABLE: 1**  
**COMPONENTS OF NSDP AT FACTOR COST BY INDUSTRY OF ORIGIN**  
**BASE (2004-05)**  
**SERVICE SECTOR**

					Rs. Billion
STATES	2009-10	2010-11	2011-12	2012-13	2013-14
ANDHRA PRADESH	1075.5	1184.4	1214.15	1271.35	1380.24
		<i>1084.4</i>	<i>1114.15</i>	<i>1171.35</i>	<i>1280.24</i>
ASSOM	386.63	413.67	435.69	460.46	504.21
		<i>313.67</i>	<i>335.69</i>	<i>360.46</i>	<i>404.21</i>
BIHAR	730.8	834.12	929.47	1043.92	1195.09
		<i>734.12</i>	<i>829.47</i>	<i>943.92</i>	<i>1095.09</i>
GUJRAT	1589.04	1793.84	1954.91	2156.45	2350.97
		<i>1693.84</i>	<i>1854.91</i>	<i>2056.45</i>	<i>2250.97</i>
HARYANA	877.83	948.36	1036.23	1112.31	1213.34
		<i>848.36</i>	<i>936.23</i>	<i>1012.31</i>	<i>1113.34</i>
KARNATAKA	1452.55	1598.71	1708.38	1854.9	1961.53
		<i>1498.71</i>	<i>1608.38</i>	<i>1754.9</i>	<i>1861.53</i>
KERALA	1283.45	1384.91	1468.2	1567.83	1690.31
		<i>1284.91</i>	<i>1368.2</i>	<i>1467.83</i>	<i>1590.31</i>
MADHYA PRADESH	849.75	933.28	1014.87	1078.74	1154.3
		<i>833.28</i>	<i>914.87</i>	<i>978.74</i>	<i>1054.3</i>
MAHARASHTRA	4246.9	4641.02	5004.22	5428.49	6013.73
		<i>4541.02</i>	<i>4904.22</i>	<i>5328.49</i>	<i>5913.73</i>
ODISHA	602.04	668.76	716.22	735.37	763.48
		<i>568.76</i>	<i>616.22</i>	<i>635.37</i>	<i>663.48</i>
PUNJAB	636.59	689.11	752.81	803.61	865.5
		<i>589.11</i>	<i>652.81</i>	<i>703.61</i>	<i>765.5</i>
RAJASTHAN	976.97	1095.78	1148.22	1240.42	1318.16
		<i>995.78</i>	<i>1048.22</i>	<i>1140.42</i>	<i>1218.16</i>
TAMILNADU	2291.61	2615.59	2839.76	2966.92	3214.24
		<i>2515.59</i>	<i>2739.76</i>	<i>2866.92</i>	<i>3114.24</i>
UTTAR PRADESH	1968.48	2151.88	2310.75	2462.96	2632.43
		<i>2051.88</i>	<i>2210.75</i>	<i>2362.96</i>	<i>2532.43</i>
WEST BENGAL	1808.89	1957.17	2087.09	2278	2456.43
		<i>1857.17</i>	<i>1987.09</i>	<i>2178</i>	<i>2356.43</i>
MEAN	1385.14	1464.28	1577.75	1698.12	1847.29
S.D.	963.36	1057.83	1142.41	1235.33	1365.38
C.V.	69.55	72.24	72.41	72.75	73.91

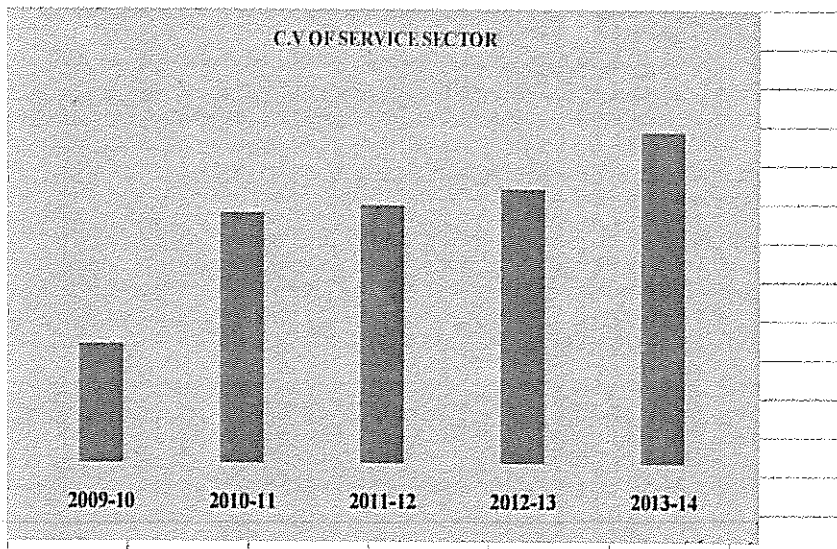
Source: Central Statistical Office (CSO)

Value in Italics shows the growth rate

As the above table reveals major variations are there which we find in the NSDP of tertiary sector. As it is clear with the table Maharashtra state shows huge growth rate in tertiary sector during the year 2009-10 to 2013-14. Basically we find that in Maharashtra state the industrial location is very high, but instead of high industrial location the service sector is also increasing rapidly. The education scenario & various opportunities according to educational qualification can be a major factor for high growth rate.

Tamilnadu state's contribution or its growth rate comes at second place in the tertiary sector. Basically Tamilnadu state doesn't have huge industrial establishment, thus it is quite natural to have high contribution of tertiary sector or service sector in India's GDP.

Uttar pradesh & West Bengal state ranked IIIrd & IVth place respectively in the tertiary sector contribution in countries GDP.



When we see the C.V. of tertiary sector it is clear that disparity in tertiary sector is continuously increasing. In 2009-10 it was 69.54%, & in 2010-11, 2011-12, & 2012-13 it was almost constant level, but in 2013-14 it was registered 73.91%. The various employment opportunities in various social-economic sector, the movement of youth's from country to abroad with the attraction of higher package, government policies

towards creating new job opportunities in service sector can be a major cause for disparity in tertiary sector.

### INTERSTATE PER CAPITA NSDP (2009-10 to 2013-14)

#### (WITH REFERENCE TO ECONOMIC DEVELOPMENT):

The income of the countries residents are very important or one of the prominent factor to measure the development of the country. Though GDP is the factor by which we can exactly assume the countries residents economic condition and the impact of development on their social economic life.

### INTER STATE PCNSDP

(BASE: 2004-05)

					Rs.
STATE	2009-10	2010-11	2011-12	2012-13	2013-14
ANDHRA PRADESH	35677	37708	38556	39645	42170
ASSOM	20406	21146	21741	22273	23392
BIHAR	10635	12090	13149	14356	15506
GUJRAT	49168	53813	56634	59157	63168
HARYANA	55044	57797	61716	64052	67260
KARNATAKA	37294	40699	41492	43266	46012
KERALA	47360	50146	52808	55643	58961
MADHYA PRADESH	20959	21706	23272	24867	26853
MAHARASHTRA	54246	59587	61276	65095	69097
ODISHA	22846	23968	24542	25163	24929
PUNJAB	42831	44769	46325	47854	49529
RAJASTHAN	24304	27502	29612	30839	31836
TAMILNADU	47394	53507	57093	58360	62361
UTTAR PRADESH	16390	17388	18014	18635	19233
WEST BENGAL	29799	31314	32164	34177	36293
MEAN	34290.2	36876	38559.6	40225.46667	42440
S.D.	14584.88937	15873.93128	16682.31422	17370.04193	18546.86216
C.V.	42.53369585	43.04678185	43.26371182	43.18170396	43.70137173

Source: Central Statistical Office (CSO)

As it is clear with the above table that Maharashtra state has registered higher PCNSDP during all study period. After Maharashtra, Haryana & Gujrat states registered IInd and IIIrd place respectively in PCNSDP. As it is mentioned previously that with the existence of various employment opportunities in these states the contribution of service sector is increasing rapidly. Thus it is still quite natural to have high PCNSDP during the study period.

When we see the C.V. of PCNSDP we find that though the variations are there in PCNSDP but these variations are not as huge as it was expected, because if we consider the states performance, few states are agriculture oriented and few are industries oriented, but instead of that very slight variations or disparities are there which we find in the c.v. of PCNSDP.

#### **SOCIAL- ECONOMIC INDICATORS & ECONOMIC DEVELOPMENT:**

**LITERACY:** Literacy is always been considered as an important key for social economic growth. Economic prosperity of the country entirely depends on the economic resources it has & human resource is an important part economic resource.

#### **INTER STATE LITERACY RATE**

STATE	2001	2011
ANDHRA PRADESH	60.47	67
ASSOM	63.25	72.2
BIHAR	47	61.8
GUJRAT	69.14	78
HARYANA	67.91	75.6
KARNATAKA	66.64	75.4
KERALA	90.86	94
MADHYA PRADESH	63.74	69.3
MAHARASHTRA	76.88	82.3
ODISHA	63.08	72.9
PUNJAB	69.65	75.8

RAJASTHAN	60.41	66.1
TAMILNADU	73.45	80.1
UTTAR PRADESH	56.27	67.7
WEST BENGAL	68.64	76.3

Source: Census of India, 2011, Registrar General of India

The table reveals that in 2001 the Kerala state registered highest literacy rate (90.86%), while Maharashtra(76.88%), & Tamilnadu (73.45%) ranked IIInd & IIIrd place respectively. In 2011 the ranking were remained same and Kerala(94%), Maharashtra (82.3%), & Tamilnadu (80.1%) registered the high literacy rate than 2001.

#### FEMALE LITERACY RATE

STATE	2001	2011
ANDHRA PRADESH	50.4	59.1
ASSOM	54.6	66.3
BIHAR	33.1	51.5
GUJRAT	57.8	69.7
HARYANA	55.7	65.9
KARNATAKA	56.9	68.1
KERALA	87.7	92.1
MADHYA PRADESH	50.3	59.2
MAHARASHTRA	67	75.9
ODISHA	50.5	64
PUNJAB	63.4	70.7
RAJASTHAN	43.9	52.1
TAMILNADU	64.4	73.4
UTTAR PRADESH	42.2	57.2
WEST BENGAL	59.6	70.5

Source: Census of India, 2011

Registrar General of India

When it comes female literacy rate of the country in 2001 & 2011 the state ranking were almost same. Kerala state registered highest literacy rate in both the years i.e. 2001 & 2011 87.7% & 92.1% respectively, while Maharashtra & Tamilnadu states again ranked IInd & IIIrd place in both the above mentioned years with 67% & 75.9% and 64.4% & 73.4% respectively.

The higher literacy rate with higher female literacy rate shows the rapid & intense growth of the country, which is responsible for increasing contribution of tertiary (service) sector in countries GDP.

**POVERTY:** Economic growth is most powerful instrument for reducing poverty & improving the quality of life in developing countries. Growth can generate virtuous circle of prosperity & opportunity.

Research that compares the experiences of a wide range of developing countries finds consistently strong evidence that rapid and sustained growth is the single most important way to reduce poverty.

*A typical estimate from these cross-country studies is that a 10% increase in a country's average income will reduce the poverty rate by between 20% to 30%.<sup>14</sup>*

### INTERSTATE POPULATION BELOW POVERTY LINE

STATE	2001	2011
ANDHRA PRADESH	15.7	9.2
ASSOM	36.09	32
BIHAR	42.6	33.7
GUJRAT	14.07	16.6
HARYANA	8.74	11.2
KARNATAKA	20.04	20.9
KERALA	12.72	7.1
MADHYA PRADESH	37.43	31.6
MAHARASHTRA	25.03	17.4
ODISHA	47.15	32.6



PUNJAB	6.16	8.3
RAJASTHAN	15.28	14.7
TAMILNADU	21.12	11.3
UTTAR PRADESH	31.15	29.4
WEST BENGAL	27.02	20

Source: PLANNING COMMISSION,  
GOVERNMENT OF INDIA

With the above reference the table reveals that Odisha(47.15%), Bihar (42.6%), & Madhya Pradesh (37.43%) states were the highly poor states, while Punjab (6.16%), Haryana (8.74%), & Kerala (12.72%) states were very low poor percentage during 2001. As it is clear that highly poor states also known as ‘BIMARU’ states, where development process is very slow and major interstate disparity exists, while the states in which we find the less percentage of poor population are well developed states comparatively to above mentioned states. It means the development process were high that’s why they are having less poor population.

The scenario of population below poverty line remains same during the year 2011 too. There is slight fluctuations in percentage of poor population of BIMARU states & developed states respectively.

#### **INTERSTATE TOTAL LABOUR FORCE PARTICIPATION & FEMALE LABOUR FORCE PARTICIPATION :**

When we talk about the term economic development or growth the contribution of country’s human resources play a very significant role as a labour force participation. The economic participation of labourforce not only contribute the country’s GDP, it also increases per- capita income of states too.

### INTERSTATE TOTAL WORKING POPULATION

STATE	2001	2011
ANDHRA PRADESH	45.79	66.6
ASSOM	35.79	62.8
BIHAR	33.71	55.8
GUJRAT	41.95	63.9
HARYANA	39.62	63.6
KARNATAKA	44.53	65.9
KERALA	32.3	64.3
MADHYA PRADESH	42.74	60.8
MAHARASHTRA	42.5	63.6
ODISHA	38.79	63
PUNJAB	37.47	64.9
RAJASTHAN	42.06	60.2
TAMILNADU	44.67	66.1
UTTAR PRADESH	32.48	59.5
WEST BENGAL	36.77	66.3

As the above table reveals the picture of interstate total working population. It is clear with the table that Andhra Pradesh (45.79%), Tamilnadu (44.67%), & Karnataka state (44.53%) we find the highest percentage of working population, while Kerala (32.3%), Bihar (33.71%), & Uttar Pradesh (32.48%) states are having low working population in the year 2001.

When it comes to year 2011, the scenario were almost the same, but we find that initially those states which were contributed very less labourforce participation, they have grown up now & we find remarkable growth in labourforce participation of these states.

### FEMALE WORKFORCE PARTICIPATION RATE

STATE	2001	2011
ANDHRA PRADESH	27.47	66.8
ASSOM	13.26	63
BIHAR	12.66	56.2
GUJRAT	16.68	64
HARYANA	15.61	64
KARNATAKA	23.23	66.3
KERALA	17.27	65
MADHYA PRADESH	19.56	60.7
MAHARASHTRA	25.09	64
ODISHA	11.1	63.5
PUNJAB	15.45	65.6
RAJASTHAN	19.34	60.3
TAMILNADU	26.74	66.4
UTTAR PRADESH	9.26	59.7
WEST BENGAL	11.97	66.2

As we see the table it is clear that in year 2001 the female workforce participation was very less not even underdeveloped states but in developed states too. But in year 2011 the scenario was totally changed & we find huge growth in female workforce participation rate both in underdeveloped & developed states.

This growth rate indicates that participation of women is continuously increasing in economic activity, which can be a result of increased literacy rate & various women rights determined by law. With the increased level of literacy rate women are getting aware , they are coming in front of society & contributing with more & more economic activity.

**TERTIARY SECTOR DEVELOPMENT & IMPACT OF SOCIAL ECONOMIC INDICATORS:**

This section is an attempt to highlight the impact of social economic indicators on tertiary sector.

The multiple regression technique has been used to find out the impact of social economic variables over the development of tertiary sector. The study is based on two time points i.e. 2009-10 & 2013-14 respectively.

Development is a multi variable concept so we have chosen 6 indicators as an independent variable from available sources. They are:

X1: PCNSDP

X2: Total literacy rate

X3: Female literacy rate

X4: Population below poverty line

X5: Total workforce participation rate

X6: Female workforce participation rate

The least square method has been used in which we follow the equation given below:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6$$

**MODEL:1 INTERSTATE NSDP AT FACTOR COST BY INDUSTRY OF ORIGIN: (2009-10)**

$$R^2 = 0.54$$

Independent variables	Beta values	S.E.	t
X1 PCNSDP	0.058	0.036	1.61
X2 Total literacy rate	176.52	150.71	1.17
X3 Female literacy rate	-158.21	118.65	1.33
X4 Population BPL	43.71	28.28	1.54
X5 Total WFPR	-157.00	113.56	1.38
X6 Female WFPR	138.27	83.66	1.65

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The  $r^2$  value of model I for 2009-10 is registered 54%, which indicates that independent variables partially explain the impact on tertiary sector. The beta values of model I indicates that female literacy rate & total workforce participation rate are negatively inclined with tertiary sector, while total literacy rate, population BPL & female workforce participation rate are positively inclined with tertiary sector development.

It is quite true that it is not necessary that female literacy rate & total wfpr are equally responsible for tertiary sector development. If women is literate but not contributing in the economy or not taking part in day to day economic activities it is difficult to increase the tertiary sector GDP. On the other hand if total WFPR is not involve in productive economic activities the contribution in GDP will be less.

But country's total literacy rate, population BPL & female WFPR is quite responsible to increase the GDP of tertiary sector. High literacy rate will increase the skilled population by which literate people can contribute more in the economy. Higher percentage of poor population can be a hurdle for the development of tertiary sector, because poor & illiterate population can be a unproductive human resource for the economy.

But female literacy rate can significantly contribute in the development of tertiary sector . Higher rate of female literacy can increase the awareness towards the job. If females contribute significantly in the economy the development of the economy & GDP of tertiary sector can definitely reach at significant level.

But all these independent variables are not proven significant at both 1% & 5% level of significance, because the arithmetic value of t is less than the table value of t.

**MODEL:2 INTERSTATE NSDP AT FACTOR COST BY INDUSTRY OF ORIGIN: (2013-14)**

$$R^2 = 0.41$$

Independent variables	Beta values	S.E.	t
X1 PCNSDP	0.069	0.044	1.56
X2 Total literacy rate	-59.86	365.06	-0.16
X3 Female literacy rate	68.54	277.20	0.24
X4 Population BPL	51.92	67.05	0.77
X5 Total WFPR	1484.68	1867.91	0.79
X6 Female WFPR	-1602.59	1954.86	-0.81

The  $r^2$  value of model II is registered 41%, which indicate that independent variables partially explain the impact on tertiary sector. The beta values of model II shows that total literacy rate and female WFPR are negatively inclined with tertiary sector while female literacy rate, population BPL and total WFPR rate is positively inclined with tertiary sector development.

As mentioned above that though these variables are positively or negatively inclined with tertiary sector but instead of that we can say that there are so many other social, economic, cultural, political aspects too by which the increased contribution of tertiary sector determined.

On the other hand the increasing contribution of tertiary sector is a recent phenomenon. It is quite possible that other social economic variables will influence to tertiary sector's contribution in near future.

But again all these independent variables are not proven significant at 1% & 5% level of significance because the arithmetic value of t is less than the table value of t.

## CONCLUSION:

Now we have reached at the last segment of the paper. In this paper we have discussed about few social economic variables which are partially or fully influenced the contribution of tertiary sector in country's GDP.

Apart from these mentioned variables so many other indicators, social cultural & political surroundings are equally responsible for the development & contribution of tertiary sector.

Tertiary sector development & its increasing contribution is a recent incident. With the positive development of other variables definitely tertiary sector will perform significantly in world's & country's economic scenario.

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# मौलिक नैतिक संप्रत्यय : रसेल के मत की आलोचना

\*डॉ. सुमेरू गोंडाणे

नीतिशास्त्र में जिन मुख्य समस्याओं पर चिंतन किया जाता है उनमें एक उचित और शुभ इन नैतिक संप्रत्ययों के मध्य विद्यमान स्वरूप संबंधी है। इस समस्या के समाधान हेतु 1) फलसापेक्ष नीति (Teleological Ethics) और 2) फलनिरपेक्ष नीति (Deontological Ethics) इन दो नीतिशास्त्रीय सिद्धान्तों का प्रतिपादन नीतिज्ञों ने किया है। बीसवीं शताब्दी में फलसापेक्ष नैतिक सिद्धान्त के प्रमुख समर्थकों में एक बरटूड रसेल के नैतिक विचारों की समीक्षा हेतु प्रस्तुत लेख लिखा गया है। इस लेख में रसेल ने फलसापेक्ष सिद्धान्त के समर्थन में जो तर्क दिए हैं, उन्हें अपर्याप्त सिद्ध करने का प्रयास किया गया है। फलसापेक्ष सिद्धान्तानुसार 'कर्म का उचित होना उसके शुभ परिणाम पर निर्भर करता है अथवा कर्म के किसी अच्छे उद्देश्य के साधक होने पर आश्रित होता है।'<sup>1</sup>

रसेल ने अपने फलसापेक्षवादी विचारों का प्रतिपादन 1954 में प्रकाशित 'Human Society in Ethics and Politics' में किया है। इस ग्रंथ में रसेल — 1) 'उचित' शुभ परिणामों पर निर्भर करता है तथा 2) उचित शुभ का साधक होता है।

इन दो फलसापेक्षवादी सिद्धान्तों के केन्द्रवर्ती विचारों का समर्थन करते हुए कहते हैं कि, "सर्वप्रथम किसी उद्देश्य का निश्चित रूप से निर्धारण कर.... तत्पश्चात् उस उद्देश्य की प्राप्ति में जो कर्म उपयोगी सिद्ध होगा उसे 'उचित' कर्म के रूप में मान्यता दी जाये।"<sup>2</sup> आगे उचित को शुभ का साधन सिद्ध करते हुए वे कहते हैं, "'उचित' आचरण वह आचरण है जो शुभ का साधन हो।"<sup>3</sup> रसेल के इन विचारों से यह सिद्ध होता है कि वे 1) शुभ, साध्य तथा उद्देश्य इन पदों का समान अर्थों में प्रयोग करते हैं तथा 2) उचित और साधन इन पदों का समान अर्थों में प्रयोग करते हैं।

\*सहाय्यक अध्यापक (दर्शनशास्त्र), वसंतराव नाईक शासकीय कला व समाजविज्ञान संस्था, नागपुर.

शुभ और उचित के मध्य साध्य-साधन के संबंध का प्रतिपादन करनेवाला यह मत जो फलसापेक्षवादी है और जिसका समर्थन रसेल करते हैं, मौलिक नैतिक संप्रत्यय के विषय में भी एक निश्चित मत रखता है, जिसका प्रतिपादन और समर्थन करते हुए रसेल कहते हैं, "इस प्रकार हम वहाँ पहुंचते हैं कि 'उचित' और 'अनुचित' की तुलना में 'शुभ' और 'अशुभ' यह नीतिशास्त्र के मौलिक संप्रत्यय है, इस मतानुसार 'उचित' आचरण वह आचरण है जो शुभ का साधन हो।"<sup>4</sup>

रसेल यहाँ शुभ को उचित की तुलना में मौलिक नैतिक संप्रत्यय के रूप में स्वीकारते हैं। यहाँ मौलिक संप्रत्यय का अप्रत्यक्ष रूप से मानक देते हुए वे दिखाई देते हैं। वह मानक है - 1) दो नैतिक संप्रत्ययों में जो संप्रत्यय साध्य रूप से स्वीकृत किया गया है, वही मौलिक संप्रत्यय होगा। रसेल शुभ को साध्य और उचित को साधन के रूप में स्वीकार करते हैं। अतः मौलिक संप्रत्यय के इस मानक के अनुसार शुभ ही मौलिक संप्रत्यय होगा। मौलिक संप्रत्यय विषयक इस मानक की समीक्षा लेख के अंत में की गई है।

साध्य रूप से स्वीकृत नैतिक संप्रत्यय को मौलिक संप्रत्यय के रूप में मान्यता देनेवाले उपरोक्त मानक के अतिरिक्त मौलिक संप्रत्यय संबंधी दूसरे मानक की स्थापना करते हुए रसेल कहते हैं, "यदि मानव समूह में "उचित" क्या है? इसके प्रति एकवाक्यता होती तो "उचित" को मौलिक संप्रत्यय के रूप में स्वीकारा गया होता और इस परिस्थिति में शुभ की परिभाषा 'जो उचित आचरण द्वारा प्राप्त होता है वह' इस प्रकार दी जाती।"<sup>5</sup> यहाँ रसेल मौलिक नैतिक संप्रत्यय के संबंध में एक नये मानक की स्थापना करते हैं। इस मानक के अनुसार - 2) वह नैतिक संप्रत्यय जिसकी परिभाषा के संदर्भ में अथवा अर्थ के संबंध में मानव समूह में एकवाक्यता दिखाई देती है, वही मौलिक संप्रत्यय है। किन्तु, रसेल 'शुभ' को मौलिक संप्रत्यय के रूप में स्वीकृति देते हैं। इसका अर्थ यह है कि रसेल की दृष्टि में 'शुभ' के अर्थ अथवा परिभाषा को लेकर मानव समूह में एकवाक्यता पाई जाती है। किन्तु तथ्य कुछ भिन्न है। 1954 में रसेल ने अपनी पुस्तक *Human Society in Ethics and Politics* में शुभ की परिभाषा इच्छाओं का समाधान द्वारा होने का प्रयास किया है। वे कहते हैं, "more precisely that we may define "good" as "satisfaction of desire"-"<sup>6</sup> रसेल द्वारा प्रतिपादित शुभ की यह परिभाषा कोई सर्वमान्य परिभाषा नहीं है। जी.ई. मूर से लेकर आर.

एम. हेअर तक भिन्न-भिन्न दार्शनिकों ने शुभ की परिभाषा देने का प्रयास किया है। अप्राकृतिकवादी मूर जहाँ शुभ को अपरिभाष्य मानते हैं, वही प्राकृतिकवादी नैतिक चिंतक शुभ की परिभाषा प्राकृतिक गुणों के माध्यम से देते हैं, तो दूसरी ओर संवेगवादी और परामर्शवादी चिंतक 'क्ष शुभ है' इस नैतिक निर्णय का रूपांतरण भावना और परामर्श विषयक निर्णयों के माध्यम से देते हैं। रसेल के समकालीन दार्शनिकों में ही 'शुभ' पद के अर्थ तथा परिभाषा को लेकर मतैक्य का अभाव होते हुए भी रसेल शुभ को मौलिक संप्रत्यय स्वीकारते हैं, यह आश्चर्य की बात है। जिसके अर्थ अथवा परिभाषा के संबंध में मानव समूह में एकवाक्यता हो वहीं मौलिक संप्रत्यय है, ऐसा मौलिक संप्रत्यय का मानक निश्चित करने के पश्चात 'शुभ' को रसेल मौलिक संप्रत्यय के रूप में स्वीकारते हैं। किन्तु, शुभ के अर्थ को लेकर दार्शनिकों में तीव्र मतभेद है। अतः रसेल मौलिक नैतिक संप्रत्यय के जिस मानक की निश्चिति देते हैं। अतः रसेल मौलिक नैतिक संप्रत्यय के जिस मानक की निश्चिति देते हैं उसी मानक की अनदेखी वे 'शुभ' का मौलिक नैतिक संप्रत्यय के रूप में निर्धारण करते समय करते हैं।

उचित को मौलिक संप्रत्यय के रूप में नकारते हुए रसेल कहते हैं कि "टाबू नैतिकता में 'उचित' के अर्थ को लेकर मतभिन्नता अधिक तीव्र रूप में दिखाई देती है... और इस तथ्य के कारण 'शुभ' की परिभाषा 'उचित' द्वारा देने से बेहतर होगा कि 'उचित' की परिभाषा 'शुभ' द्वारा दी जाए।" रसेल के अनुसार 'उचित' मौलिक संप्रत्यय नहीं है, क्योंकि मौलिक संप्रत्यय के लिए रसेल का मानक है — उस नैतिक संप्रत्यय के अर्थ अथवा परिभाषा के संबंध में आम सहमति और रसेल के मतानुसार यह आमसहमति 'उचित' की अपेक्षा मौलिक संप्रत्यय है। यहाँ उचित की मौलिकता को नकारने के लिए रसेल ने जो टाबू संस्कृति में 'उचित' के अर्थ को लेकर मतैक्य न होने का हवाला दिया है, उसे बीसवीं शताब्दी के अतिनीतिशास्त्रीय चिंतन की तुलना में कहा तक स्वीकारा जाए यह प्रश्न है। दर्शन के प्रारंभिक युग से लेकर बीसवीं शताब्दी के मध्य तक नीतिज्ञों ने 'उचित' की जो परिभाषाये, जो अर्थ दिए हैं उन्हें अनदेखा कर केवल टाबू नैतिकता में 'उचित' के अर्थ को लेकर पाई जानेवाली मतभिन्नता को स्वीकार कर उसके आधार पर उचित को मौलिक

संप्रत्यय के रूप में अस्वीकार करने के प्रयास को विशुद्ध दार्शनिक प्रयास नहीं कहा जा सकता है।

‘उचित’ को मौलिक संप्रत्यय के रूप में नकारते हुए रसेल कहते हैं, “‘उचित’ के अर्थ में मतैक्य का अभाव होने के कारण... उचित की परिभाषा ‘शुभ’ द्वारा दी जाए” वे आगे कहते हैं ‘यदि मानव समूह में “उचित” क्या है? इसके प्रति एकवाक्यता होती तो ‘उचित’ को मौलिक संप्रत्यय के रूप में स्वीकारा गया होता और इस परिस्थिति में ‘शुभ’ की परिभाषा ‘उचित’ द्वारा ‘जो ‘उचित’ आचरण द्वारा प्राप्त होता है वह’ इस प्रकार दी जाती।’ रसेल के इन विचारों से यह सिद्ध होता है कि वे मौलिक संप्रत्यय द्वारा गौण संप्रत्यय की परिभाषा देते हैं। वे शुभ को मौलिक संप्रत्यय मानते हैं और इसलिए ‘शुभ’ द्वारा ‘उचित’ की परिभाषा देते हैं। और साथ ही साथ यह भी कहते हैं कि यदि ‘उचित’ मौलिक संप्रत्यय होता तो ‘उचित’ द्वारा ‘शुभ’ की परिभाषा दी जाती।

‘शुभ’ को मौलिक संप्रत्यय मानकर ‘शुभ’ द्वारा ‘उचित’ की जो परिभाषा दी गई, वह इस प्रकार है – “‘उचित’ आचरण वह आचरण है जो ‘शुभ’ का साधन हो,” और यदि ‘उचित’ मौलिक संप्रत्यय होता, तो ‘उचित’ द्वारा ‘शुभ’ की जो परिभाषा दी जाती, वह इस प्रकार होती – “‘शुभ’ वह है जो ‘उचित’ आचरण द्वारा प्राप्त होता है।” ‘उचित’ को मौलिक मानकर ‘उचित’ द्वारा ‘शुभ’ की परिभाषा दी जाये या ‘शुभ’ को मौलिक मानकर ‘शुभ’ द्वारा ‘उचित’ की परिभाषा दी जाये। क्षेत्रों परिभाषाओं से यही व्यंजित होता है कि ‘शुभ’ साध्य – तथा ‘उचित’ उसका साधन है। अर्थात् मौलिक संप्रत्यय शुभ हो अथवा ‘उचित’ दोनों परिस्थितियों में ‘शुभ’ साध्य तथा ‘उचित’ साधन ही बना रहेगा। ‘शुभ’ साध्य है और मौलिक नैतिक संप्रत्यय संबंधी रसेल के एक मानक के अनुसार साध्य रूप से स्वीकृत संप्रत्यय ही मौलिक होगा। ‘शुभ’ साध्य है अतः ‘शुभ’ ही मौलिक संप्रत्यय के रूप में स्वीकारा जायेगा।

साध्य रूप से स्वीकृत नैतिक संप्रत्यय ‘शुभ’ की मौलिकता के समर्थन में यह कहा जा सकता है कि कोई कर्म यदि साध्य प्राप्ति में अर्थात् ‘शुभ’ की प्राप्ति में सहायक सिद्ध होगा तो ही ‘उचित’ कहलायेगा। अर्थात् किसी कर्म का ‘उचित’ होना उस कर्म द्वारा ‘शुभ’

परिणाम के उत्पन्न होने पर निर्भर है। अर्थात् 'उचित' संप्रत्यय 'शुभ' संप्रत्यय के सापेक्ष है। 'उचित' का निर्धारण 'शुभ' के आधार पर ही किया जा सकता है। अतः एव 'शुभ' जो साध्य है मौलिक संप्रत्यय होगा। 'उचित' की तुलना में जो उस साध्य का 'शुभ' का साधन है। साधन की निश्चिती साध्य के अनुसार की जाती है। किन्तु साध्य की निश्चिती साधन के अनुसार नहीं की जाती। इसलिए साध्य-साधन में साध्य मौलिक है और साधन गौण है। यहाँ 'शुभ' ही साध्य है और 'उचित' ही साधन है। इसलिए 'शुभ' मौलिक संप्रत्यय है और 'उचित' 'शुभ' पर आश्रित गौण संप्रत्यय है।

उपरोक्त परिच्छेद में फलसापेक्षवादी दृष्टिकोण से 'शुभ' की मौलिकता के संदर्भ में प्रतिपादित विचार प्रथम दृष्टि से अकाट्य प्रतीत होते हैं। किन्तु, उस मत के खंडन में यह कहा जा सकता है कि यदि 'शुभ' साध्य और 'उचित' उसका साधन है। अर्थात् 'शुभ' की प्राप्ति केवल 'उचित' कर्म द्वारा ही संभव हो अर्थात् 'शुभ' अपनी प्राप्ति के लिए 'उचित' कर्म पर निर्भर हो, तो ऐसी परिस्थिति में 'शुभ' संप्रत्यय अपनी प्राप्ति के लिए 'उचित' संप्रत्यय पर आश्रित ही रहेंगा और यदि 'शुभ' 'उचित' पर आश्रित हो, तो ऐसी अवस्था में 'शुभ' और 'उचित' में 'शुभ' को मौलिक संप्रत्यय नहीं कहा जा सकता। इस अवस्था में तो 'उचित' ही मौलिक संप्रत्यय के रूप में स्वीकारा जायेगा।

इस प्रकार फल सापेक्षवादी सिद्धान्त के समर्थन में रसेल ने जिन तर्कों का उपयोग किया है, 'शुभ' और 'उचित' की जो परिभाषाये दी है, उन्ही तर्कों और परिभाषाओं का उपयोग कर यह दर्शाया जा सकता है कि 'शुभ' असंदिग्ध रूप से मौलिक संप्रत्यय के रूप में स्वीकार्य नहीं है। इतना ही नहीं उन्हीं तर्कों और परिभाषाओं का उपयोग कर 'उचित' की भी मौलिक संप्रत्यय के रूप में सिद्धी दी जा सकती है।

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## Employee Turnover: Causes, Impact on an organisation and Management

*\* Ms. Minni Sharma*

**Objective:** This paper examines the sources of employee turnover, effects and forwards some strategies on how to minimize employee turnover in organisations.

**Employee turnover** refers to the number or percentage of workers who leave an organization and are replaced by new employees. It is defined as the proportion of a firm's workforce that leaves during the course of a year. Labour turnover (or "staff turnover" as it is sometimes called) is all about employee retention - i.e. the ability of a business to convince its employees to remain with the business.

Labor turnover is important both internally and externally. A high turnover rate may indicate poor working conditions, which reflects poorly on an organization. Internally, having to frequently hire new replacements can be expensive due to training costs.

The turnover rate differs between organizations for many reasons, and also significantly differs based on the industry they operate in.

There are many individual types of turnover, some good and some negative. A positive type of turnover can be an internal promotion within an organization. However, internal position changes can also be negative, like when a demotion occurs.

Another common aspect of turnover to analyze is voluntary turnover. If employees actively leave the company for a different job, it reflects on the working conditions. However, if they are let go or fired due to downsizing, it may reflect the company's economic struggles.

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\*Assistant Professor, Department Of Commerce and Management, St.Bede's College, Shimla.

**Causes:**

Employee turnover is not a good thing for any company as it directly hits the cost aspect. And yes, employee turnover is expensive. Causes for labour turnover could be classified into two types. They are:

1. Unavoidable causes i.e., Natural causes, and
2. Avoidable causes.

**Unavoidable causes**

Unavoidable causes are natural causes are are not under the control of the management. Such causes normally include

- Change of Locality
- Death, retirement etc., of workers.
- Transport or housing problem in the firm's locality.
- Unfit for the work.
- Misconduct of workers.
- Sickness, accident, etc., of workers.
- On account of personal betterment.
- Domestic matter like marriage, etc.

**Avoidable causes of employee turnover**

Avoidable causes are the causes that are under the control of the management and are due to the personnel policy of the organization. Such causes are

***Lack of vision:***

Initially, no employee cares about the company's profit but about their personal interest and gains. These shortsighted employees come with high expectations without realizing that the process would take some time. Therefore, they tend to change jobs.

***Salary scale:***

This is the common reasons why the employee turnover rate is high. Employees are for sure in search of jobs that pay them well. When employees are underpaid, they tend to look out for jobs that offer considerable pay.

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***Work environment:***

Work environment is also the main cause for employee turnover. Every employee would want to work in the environment that he is comfortable in. This is one such reasons why employees jump from one company to another in a just a couple of months.

***Paucity of motivation:***

Employees who leave due to lack of motivation are not amonthose who look forward for a pat on their back, but those who would want to know if their work adds value to the company's growth.

***Growth policies:***

This is the prime reason why employees quit their job. Employees always look up for potential opportunities for advancements and promotions.

***No employee engagement:***

Employee engagement is one of the important motivator. Employees would be happy to be a part of the company's ups and downs, and therefore they should be kept posted with all the happenings in the organization.

***Low Salary :***

If your competition is willing to pay workers a significantly higher salary than you are, it could be a reason for high labor turnover in your business. Make sure your pay rate is competitive and in line with industry averages. Perks can play a role in job satisfaction as well. Even if you don't have a budget for significant pay raises or benefit packages, consider other ways to compensate employees. Comp time, paid time off and flex time are tools small-business owners can use to compete with their corporate rivals



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***Poor Management:***

Poorly trained managers and supervisors who lack conflict resolution skills can all play a role in creating an inhospitable work environment. Pay attention to the ways employees interact with managers and to how often conflict arises in the workplace. Provide management training skills for top company leaders to ensure they understand how to properly motivate, interact with and retain workers.

***Lack of Recognition:***

Employees often leave jobs because they feel they aren't recognized for their contributions or that they aren't being utilized to their full potential. Develop an internal employee recognition program and reward employees for their efforts. Share credit when it's due and let employees know they are valued and important members of your small-business team.

***Lack of Opportunity for Advancement:***

Workers who feel they've reached their potential may no longer feel incentive to stay at the same job. Provide mentoring and cross-skills training for interested employees. Encourage workers to take on new projects and to advance through the ranks.

***Poor working conditions:***

Poor working conditions can contribute to a high turnover rate. Unsafe or hazardous conditions may be a factor, or employees may not have the tools they need to perform their jobs well. Conduct an internal audit to assess how the work environment may be driving employees away and take steps to correct problems

**Impact of employee turnover on the organisation**

Businesses hire and train employees to carry out the tasks necessary for them to operate and generate revenue. Businesses depend on their workers to succeed, but

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employees may leave their jobs for a variety of reasons, such as taking new positions at other companies, retirement or continuing education. Employee turnover describes the rate at which an employer has to replace employees; high turnover can have several detrimental impacts on a business.

High turnover rates can negatively affect a company and its employees in many ways. High turnover means an organisation is losing a relatively high percentage of employees each year compared with the number of people you hire and employ. While losing poor performers may have benefits, effects of high turnover are typically negative. Some of the major effects are as under:

### ***High Costs***

High turnover is expensive for companies to manage. Losing an employee may bring costs such as severance pay and administrative tasks such as exit interviews. More critically, you have to go through the recruitment, selection and hiring process all over again. Once you find a new employee, you have to train him, which also costs time and money. Plus, you typically have opportunity costs that result because a new employee can't immediately deliver the same sales or production results as the former one.

### ***Low Morale***

Morale in high-turnover companies is typically weak. Organizational culture is the shared norms and value of a collection of employees who work together. Motivating your employees to share the vision of your business and perform at high levels is difficult when colleagues and co-workers are vanishing all around them. Workplace relationships are key to an employee's satisfaction with work. As friends and co-workers leave, remaining employees constantly have to cycle through the process of getting to know new employees.

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### ***Poor Performance***

High turnover means the basic level of experience across your organization is lower than it otherwise would be. Employees with less knowledge and less experience in your business and with their jobs won't produce as well as those who know more about what they are doing. In a production job, the efficiency of production is likely lower. In sales and service jobs, sales results and service satisfaction ratings are affected. The major challenge is that high turnover contributes to a downward spiral that is tough to get out of, since poor performance leads to poor business results, which often forces your company to freeze salaries or cut back on training.

### ***Management Frustration***

Managers quickly get frustrated with the constantly revolving door of employees. In retail, for instance, a manager finds himself spending so much time hiring and training new employees he can't coach and develop those who have been around. This contributes to longer-term employees getting upset and leaving. Plus, poorly equipped and developed employees place more burden on the manager to work hands-on in the business or store. This takes away from his decision-making and supervisory duties.

### ***Distractions***

One of the worst effects of high turnover is that it requires focus to fix. Some businesses hire consultants to help get out of a turnover rut. As you invest time, money and resources to correct high turnover, you take away from diversifying your business, marketing to new customers and improving on performance.

### ***Deteriorating Product or Service Quality***

Lower productivity and sub-par quality of work can result from a disruption in daily operations due to an overall low number of employees or inexperienced employees without complete training. This is especially true in industries where repetition and comfort level play a larger role than innovation. For instance, new hotel clerks may

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not provide top-tier customer service, as they are unfamiliar with the organization's policies. This could manifest in situations as trivial as providing refunds from broken snack dispensers. Although a seemingly small issue, there could be a sizable impact on customer satisfaction.

### ***Profit***

The combined effect of the negatives that can result from high turnover may cause a firm to generate less profit. Anything that tends to increase costs or reduce productivity or revenue will tend to reduce profit. A new business often takes months or years to achieve profitability and unexpected costs like high turnover can increase the time it takes a new venture to make a profit.

### ***Customer Service***

High turnover can harm a business's ability to retain customers and provide high-quality customer service. Customers may feel more comfortable talking to the same employees and customer service representatives over time. Personal relationships and familiarity can build customer loyalty. Small businesses are better positioned than large competitors to take advantage of this, but if workers are constantly leaving and being replaced by new ones, it may limit the ability of the business to form a strong rapport with customers.

### ***Management***

Employee retention is without a doubt one of the most intense challenges facing most human resources departments. Businesses can lower turnover rates by providing adequate training, rewarding employees for a job well done and creating a company culture of trust. Reducing employee turnover is dependent on the total work environment an organization offers for its employees. High employee turnover undoubtedly hurts a company's morale and bottom line. While turnover can be broken down into two groups, involuntary and voluntary, businesses have no control of

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involuntary turnover like retirements, firings and unforeseen events. However, there are several things that can be done to reduce the rate of voluntary turnover that will keep keep production levels up and eliminate the need of additional resource investment.

### ***Hiring right people***

Select the right people in the first place through behavior-based testing and competency screening. The right person, in the right seat, on the right bus is the starting point.

### ***Develop People***

Organizations that focus on employee development enjoy higher employee satisfaction, which leads to lower turnover. If each employee has a concrete development plan that is reviewed at least annually and contains a variety of growth opportunities, the employee will have little reason to look for greener pastures elsewhere.

### ***Recognize Good Performance***

Reinforcing people for doing good work lets them know they are appreciated. Tangible and intangible rewards are a great way to show management appreciation for workers who excel. This improves morale if done well. However, understand that reinforcement can be a minefield if it is not handled properly. Make sure employees receive sincere appreciation by management on a continuing basis.

### ***Build Trust***

By extending trust to employees, leaders demonstrate their willingness to support them. This pays off in terms of higher trust on the part of employees toward the organization. There is a whole science on how to build trust. By creating a real environment, more trust in an organization will lead to lower turnover.

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### ***Reduce Boredom***

Employees who are underutilized, tend to get bored and restless. If there is a vacuum of activity, people often get into mischief. It is important for managers to craft job duties and responsibilities such that people are actively engaged in the work every day.

### ***Communicate More***

In nearly every corporate survey on employee satisfaction, the issue of communication surfaces as either the number one or number two complaint. Communication needs to be ubiquitous and consistent. It is not enough to have a monthly corporate news letter or an occasional town hall meeting. Communication needs to take many different forms and be a constant priority for all levels of management.

### ***Cross Train***

Employees, who have been trained on several different jobs recognize they are of higher value to the organization and tend to be less inclined to leave. Along with the pleasure of having more variety of work, employees appreciate the ability to take on additional skills. Having good bench strength allows the organization to function well, even during times of high vacation or illness.

### ***Keep It Light***

When managers apply constant pressure to squeeze out the last drop of productivity, they often go over the line, and it becomes counter productive. If leaders grind people down to a stump with constant pressure for perfection and ever higher productivity, the quality of work life suffers. Employees can tolerate a certain amount of this for some time, but eventually they will break down. It is smart to set very high goals, but very important to have employees believe the stretch goals are attainable. One good way to provide this assurance is to have the employees themselves participate in

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setting the goals. The best companies find ways to work in a little fun somewhere, even (and especially) in high pressure situations.

### ***Feedback Performance***

there needs to be a constant flow of information on how all employees are doing in each area of the organization. People who are kept in the dark about their performance become disillusioned and cranky. The simple kindness of letting people know how they are doing on a daily or weekly basis pays off in terms of lower turnover.

### ***Train Leaders***

All levels of management and supervision need to be highly proficient at creating an environment where the culture is upbeat, positive, and has high trust. This does not happen by accident, or simply by desire. It takes work and lots of emphasis by senior leadership to make sure that there are no weak links in the management chain. In most organizations there is a dud of a manager somewhere between the well intentioned and talented top brass and the worker bees. The result is that great objectives, ideals, and processes are morphed into oblivion by the time they reach the shop floor. The antidote is to improve leadership effectiveness at all levels and remove any dud who is incapable of changing.

### ***Listening to employees***

Encourage your employees to form a committee that can discuss the issues that matter to them and have representatives who can come to the management team. You won't be able to take on all their suggestions, but it's important to give them your full consideration. You should also look to run anonymous surveys to get the 'real' feelings of your employees.

Potential turnover prevention starts from the very first day when an employee joins your organization. It ends on the last day you employ the person. Organizations that are significantly committed to keeping their best employees institute the policies,

practices, and compensation that will retain the employees that you really want to keep. Many companies are finding it more difficult to retain employees as the economy and job market improves. Some level of employee turnover is a necessary and expected part of any modern workforce. Successful organizations plan on turnover, and plan for it in intelligent ways. Through succession planning, proactive recruitment, and retention strategies, the negative effects of employee turnover can be mitigated.

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# **“Analysis of Trends and patterns of Tax Revenue in India”**

*\* Dr. S.T. Pawar*

## **Introduction :**

Tax system world over has changed according to the nature, structure and development level of economy. The intonations behind these reforms have varied developmental to market based economy. During the period of economic reform, india was facing the economic crises as well economy from the closed to market besed economy. The reformed tax structure was targeted to fill the requirements of a market economy to ensure international competitiveness.

The traditional approach of revenue rising to finance large public sector has given up in favour of minimizing distortion in tax policy to keep the economy competitive. Minimizing distortion means readucing the marginal rates for both direct and indirect taxes.

The present study has been divided into two parts besides introduction. In first part the focus has been on the historical background of tax reforms in India during the liberalization of Indian economy. Trends and patterns of tax revenue of the central government have been discussed in the second part of the study followed by the conclusion.

## **Objectives of the study :**

The main objective of this paper is to study the trends in Direct and indirect tax revenue of the central government to now the trends in tax GDP ratio at Union levels.

## **Sources of data :**

This paper is mainly based on the secondary data obtained from various issues of the economic survey of India, publication of the planning commission, books,

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\*Depart Of Economics, Lokmanya College, Sonkhed, Tq. Loha Dist. Nanded

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journals, public finance statistics, Annual budgets of the central Governments etc.

### **Part I :**

The framework for taxes is provided in seventh schedule of Indian constitution. The separation of taxes has been done to avoid the displeasure in the tax system. But, still we have interdependence for taxes among centre and states. The tax policy was considered a major instrument to finance public sector led import substituting industrialization strategy and to reduce inequalities in income and wealth arising from industrial license regime. This was also one the instrument of prioritize allocation of resources among different sectors of the economy. The multiplicity of objectives assigned to the tax policy in the part is the legacy of the planned era.

In economic world, tax reform in an on going process. It is influenced by economic principles, evolved economic structure and the lessons of experience. The systematic reforms of Indian tax system in 1990s were the product of crisis and changed economic structure. They have been adopted on the basis of detailed analysis. Tax reform impact the finances of center government.

### **Analysis of trends and patterns of tax revenue :**

Table 1 indicates the trends of direct and indirect tax revenues center levels. The share of direct taxes in the total revenue collection was increasing from 16.3 percent in 1990-91 to 47.9 percent in 2005-06. But in the following period, share of direct tax in total revenue collection has come down to 38.9 percent in 2014-15. This increase in the share was the result of reform in direct tax structure, including reduction in direct tax slabs. Reduction in direct tax slabs has increased the direct tax base and tax compliance, which is complemented by economic development. Corporation income tax reforms also contributed in it, as the marginal tax rate has come down. This resulted in more tax compliance in economy.

**Table. 1**  
**Central Government Direct Vs Indirect Taxes**

Year	As per cent of GDP		As percent of Total Tax		
	Direct	Indirect	Total	Direct	Indirect
1990-91	2.09	12.87	14.96	16.3	83.7
1991-92	2.47	12.84	15.31	18.5	81.5
1992-93	2.5	12.24	14.74	19.6	80.4
1993-94	2.44	11.25	13.68	20.8	79.2
1994-95	2.76	11.38	14.14	28.4	71.6
1995-96	2.92	11.37	14.29	29.3	70.7
1996-97	2.89	11.27	14.17	29.1	70.9
1997-98	3.21	10.82	14.03	29.1	70.9
1998-99	2.72	10.2	12.92	31.6	68.4
1999-00	3.02	10.62	13.65	33.2	66.8
2000-01	3.31	10.77	14.08	36.1	63.9
2001-02	3.11	10.28	13.39	36.9	63.1
2002-03	3.45	10.63	14.08	35.5	61.5
2003-04	3.86	10.73	14.59	41.4	58.6
2004-05	4.23	11.02	15.25	43.9	56.1
2005-06	4.54	11.37	15.91	47.9	52.1
2006-07	5.39	11.77	17.15	37.2	62.8
2007-08	6.39	11.06	17.45	40.5	59.5
2008-09	5.83	10.43	16.26	40.8	59.2
2009-10	5.82	9.63	15.45	43.2	56.8
2010-11	5.78	10.53	16.31	40.7	59.3
2011-12	5.57	10.73	16.29	39.6	60.4
2012-13	5.62	11.35	16.97	38.6	61.4
2013-14	5.7	11.39	17.09	39.4	60.6
2014-15	5.81	11.57	17.38	38.9	61.1

*Source : Indian public finance statistics, various issues*

In the 1990s, it was mainly caused by steep reduction in custom and excise duties and abolition of some of them in response to economic reform and globalization adopted by India. As a result there was a decline in the indirect tax

revenue. But the share of indirect taxes has increase since 2005-06 from 52.1 per cent to 61.1 per cent in 2014-05. This period consist some major indirect tax reforms like introduction of value added tax and serice tax reforms. These reforms, widening service tax base through introduction of negative list have increased indirect tax base, which resulted in more indirect tax contribution to total revenue collection. Indirect taxes are regressive in nature, as they levied on rich and poor alike. So the present tax revenue collection composition shows that Indian taxation is dominated by regressive taxes. This is demanding urgent taxation reform in india. Trends in tax revenue, presented in Table 2, represent different phases. The economic recession following the severe drought of 1987 resulted in stagnation in revenues until 1993-94. This decline in tax GDP ration caused by the economic crises of 1991 and subsequent reforms in the tax system. It is seen that the tax GDP ratio which reached the peak of about 17 percent in 1987-88, declined there after to 13.68 percent in 1993-94. Further, it was recovered and reached to 14.29 percent of GDP in 1995-96 after 1995-96 it started to decline, which was perpetuated by Easy Asian crisis, and political instability in the country and declined to 12.92 percent in 1998-99.

**Table . 2**  
**Trends in tax GDP ratio at Union level.**

Year	Direct	Indirect	Total
1990-91	1.88	7.94	9.82
1991-92	2.28	7.72	10
1992-93	2.34	7.29	9.63
1993-94	2.28	6.22	8.5
1994-95	2.58	6.25	8.83
1995-96	2.74	6.33	9.07
1996-97	2.74	6.4	9.14
1997-98	3.07	5.78	8.85
1998-99	2.58	5.39	7.97
1999-00	2.88	5.66	8.54
2000-01	3.15	5.55	8.7
2001-02	2.95	5.02	7.97
2002-03	3.29	5.24	8.53

2003-04	3.7	5.26	8.96
2004-05	4.08	5.33	9.41
2005-06	4.4	5.52	9.92
2006-07	5.24	5.79	11.03
2007-08	6.26	5.63	11.89
2008-09	5.68	5.07	10.75
2009-10	5.67	3.97	9.64
2010-11	5.63	4.55	10.18
2011-12	5.42	4.45	9.87
2012-13	5.48	4.77	10.25
2013-14	5.56	4.65	10.21
2014-15	5.67	4.93	10.6

*Source : Indian public finance statistics, various issues*

In 1999-2000, it again showed rising trends as after effects of the political instability and economic crisis has gone. Tax GDP ratio rose to 17.45 percent all time high in the post reform period in 2007-08 once again the economics of the world got his by financial crisis. The economic crisis of 2008-09 has affected tax revenue adversely and declined to 15.45 percent in 2009-10. Fiscal stimulus has increased growth rate; coose quently revenue started recovery and reached to 17.38 per cent in 2014-15.

The share of direct taxes in total tax revenue has been increasing continuously, as in reached 5.81 percent of GDP in 2014-15 from 2.09 percent of GDP in 1990-91. When we come to the tax xomposition of central government finances, direct tax and indirect tax contribution was 1.88 percent and 7.94 percent of GDP in 1990-91 respectively. The dominance of indirect tax contribution has come to an end in 2007-08, as there were 6.26 percent and 5.63 percent of GDP direct and indirect tax revenue contributions respectively to central government finance. Thereafter, the contribution of direct taxes to central tax revenue is an mild fluctuations around 5.6 percent of GDP whereas, the indirect tax contribution to central government finances got a dip in 2008-09 as it reached 3.9 percent of GDP, lowest since economic reforms in the

subsequent years indirect tax contributions is increasing with fluctuating trends and reached 4.93 per cent of GDP in 2014-15 as compared to direct taxes 5.67 per cent of GDP in the same financial year. According to analysts, direct tax collections exceeding indirect tax revenues is the hallmark of a progressive taxation system since indirect taxes like excise are paid by poorer sections of society on par with a higher income earning individual. In 1990-91, less than a fifth of the centers gross tax revenues come from direct taxes. Now direct taxes account for more than 53 per cent of the centers gross tax revenues.

Overall, the level of tax revenues, although reasonable in the current period as compared to average tax level in developing countries it is inadequate from the view point of resource requirements of the economy.

#### **Conclusion :**

The main problems of Indian tax system are fragmented constitutional assignment large number of exceptions, concessions and deductions, complications, large number of tax laws, tax disputes, lack of organizational capacity and poor tax administration etc. It is causing the narrow tax base, and leaving the country in the low tax GDP ratio. These areas are seeking urgent reforms to widen the tax base. It will result in more revenue to Indian government consequently, government has more fiscal space to raise the physical infrastructure and human capital formation. The tax policy reform requires political will to implement them rather than the identification of reform areas on the basis of the above analysis we may suggest that there is an urgent need to raise the revenue productivity.

The changed composition of tax collection in favors of direct taxes is an indication of increasing the degree of progressivism in Indian tax system. It may help in establishing of just distribution of tax burden in the economy and may have less adverse effect on the productivity and growth.

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# Genetically Modified Food and Regulatory Laws in India

*\*Dr. Mugdha Deshpande*

## Abstract:

Mahatma Gandhi has stated 'The future depends on what you do today'. In India, since the inception of planning, greater use of science and technology and scientific methods of cultivation have been recommended in agriculture. Technological modification of crops known as genetically modified food/crops has made it possible to get higher yields and improve disease resistance. This is especially important considering the vast size of our population.

During the past decade adoption of Bt-cotton, an insect-resistant, genetically engineered crop, which contains a bacterial protein toxic to pests, has drastically reduced the use of chemical pesticides in cotton fields, enhanced food security and improved farmers' bottom line. It took 15 years (1982-97) for cotton yields in India to increase from 200 to 300 kg/hectare, but the availability of Bt-cotton boosted yields from 300 kg/hectare to over 500 kg/hectare during just 2002-08. Bt Brinjal is another such example where yields, disease resistance and herbicide tolerance have improved drastically on one hand and use of pesticides has decreased. But this has invoked a negative response in India mainly due to scaremongering and government interference.

This paper is an attempt to study the economic advantages of genetically modified food and its potential impact and implications on human health.

**Genetically Modified (GM) Food: Meaning-** Genetically modified food is one in which the DNA is altered in such a way that does not occur through natural mating or traditional breeding methods. That is selective genes are transferred from one crop to another. This is mainly done to increase yields of crops make them disease and pest resistant and herbicide tolerant.

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Dayanand Arya Kanya Mahavidyalaya, Jaripatka, Nagpur.



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### **Advantages of GM crops:**

- \*Have a desirably better taste and quality
- \*Better production in lesser time, thereby providing food for more people.
- \*Inbuilt resilience to diseases, viruses, insects and herbicides and therefore require lesser pesticides. These reasons make them supposedly environmental friendly.
- \*An enhanced farming technique is advocated.
- \*Evidently more nutritious with better stress tolerance as more nutritional substances can be introduced into the transgenic variety.
- \*Can be transported long distances as they have an increased resistance to spoilage with a better shelf life.
- \*They are potentially non-allergenic.
- \*They conserve the natural reserves of water, soil, and energy and can also grow in areas with scanty water and poor soil, and other hostile climatic conditions.
- \*More economical to the farmer and consumer in terms of production and supply.

### **Advantages of Genetically Modified Animals:**

- \*Provide more resistance to diseases,
- \*Provides an increased production of eggs, milk and meat.
- \*Provides improved health of the population and thereby reduces the economic burden.

The question of safety of genetically modified foods can be decided by various criteria's such as its potential or immediate effects on the health and the toxicity associated with it.

**Safety and ethical issues:** The debate surrounding genetically modified foods are mainly concentrated on health and environmental safety, poverty reduction, intellectual property rights, social and consumer preferences, ethics, environmental security and conservation.

Recombinant DNA technology or the method of combining inter-species genes in **Genetically Modified Food (GMO)** do not have the restraints, the coordination or the discipline present in nature seen in the conventional methods of breeding. This increases the risks associated with genetic instability in plants and animals. This means, that we cannot predict the future course of health and the environmental effects of GM foods. It is impractical, expensive and improbable to check every change, and to understand and test every genetic effect without any errors. We still require a foolproof method, as there are many genetic problems, which continue to baffle scientists and researchers.

The safety assessment of GM foods generally considers the following (a) direct health effects (toxicity), (b) potential to provoke allergic reaction (allergenicity) (c) specific components thought to have nutritional or toxic properties (d) the stability of the inserted gene (e) nutritional effects associated with genetic modification and (f) any unintended effects which could result from the gene insertion

### **Allergenicity**

The transfer of genes from commonly allergenic organisms to non-allergic organisms is discouraged unless it can be demonstrated that the protein product of the transferred gene is not allergenic. While foods developed using traditional breeding methods are not generally tested for allergenicity, protocols for the testing of GM foods have been evaluated by the Food and Agriculture Organization of the United Nations (FAO) and WHO. No allergic effects have been found relative to GM foods currently on the market.

### **Gene transfer**

Gene transfer from GM foods to cells of the body or to bacteria in the gastrointestinal tract would cause concern if the transferred genetic material adversely affects human health. This would be particularly relevant if antibiotic resistance genes, used as markers when creating GMOs, were to be transferred. Although the probability of

transfer is low, the use of gene transfer technology that does not involve antibiotic resistance genes is encouraged.

### **Outcrossing**

The migration of genes from GM plants into conventional crops or related species in the wild (referred to as “outcrossing”), as well as the mixing of crops derived from conventional seeds with GM crops, may have an indirect effect on food safety and food security. Cases have been reported where GM crops approved for animal feed or industrial use were detected at low levels in the products intended for human consumption.

Different GM organisms include different genes inserted in different ways. This means that individual GM foods and their safety should be assessed on a case-by-case basis and that it is not possible to make general statements on the safety of all GM foods.

GM foods currently available on the international market have passed safety assessments and are not likely to present risks for human health. In addition, no effects on human health have been shown as a result of the consumption of such foods by the general population in the countries where they have been approved. Continuous application of safety assessments based on the Codex Alimentarius principles and, where appropriate, adequate post market monitoring, should form the basis for ensuring the safety of GM foods.

The unknown effects related to genetically modified organisms especially because of the development of possible effects on health such as new allergens, new diseases, toxins, nutritional problems and antibiotic resistance.

\*Infringement of nature and natural products by disturbing their original genetic transference and by changing the normal genome in plants which have evolved over millions of years in a very precise and ordered way.

\*Meddling with the essential properties of plants and animals causing mutations, genetically related diseases and other potential risks.

\*Inadequate proof and no control of genetic transference and the results of gene expression, as a single gene subsist as a part of a highly integrated programming and is not responsible by itself for the expression of a particular trait.

\*The possible effects on the environment as the development of herbicide-resistant and pesticide-resistant crops can lead to the development of more resilient weeds and pests, which would become even more difficult to counter.

\*Unintentional transference of genetic substances by cross-pollination with other non genetically modified foods and their effects

**Environmental issues:** Environmental risk assessments cover both the GMO concerned and the potential receiving environment. The assessment process includes evaluation of the characteristics of the GMO and its effect and stability in the environment, combined with ecological characteristics of the environment in which the introduction will take place. The assessment also includes unintended effects which could result from the insertion of the new gene.

Issues of concern include: the capability of the GMO to escape and potentially introduce the engineered genes into wild populations; the persistence of the gene after the GMO has been harvested; the susceptibility of non-target organisms (e.g. insects which are not pests) to the gene product; the stability of the gene; the reduction in the spectrum of other plants including loss of biodiversity; and increased use of chemicals in agriculture. The environmental safety aspects of GM crops vary considerably according to local conditions.

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**Role of WHO in regulation of GM food:** WHO has been taking an active role in relation to GM foods, primarily for two reasons:

- on the grounds that public health could benefit from the potential of biotechnology, for example, from an increase in the nutrient content of foods, decreased allergenicity and more efficient and/or sustainable food production; and
- based on the need to examine the potential negative effects on human health of the consumption of food produced through genetic modification in order to protect public health. Modern technologies should be thoroughly evaluated if they are to constitute a true improvement in the way food is produced.

WHO, together with FAO, has convened several expert consultations on the evaluation of GM foods and provided technical advice for the Codex Alimentarius Commission which was fed into the Codex Guidelines on safety assessment of GM foods. WHO will keep paying due attention to the safety of GM foods from the view of public health protection, in close collaboration with FAO and other international bodies

The question is - can we tinker with the genetic material in the short term without any long-term implications. Economical advantages may sometimes make politicians overlook the disadvantages of Genetically Modified Food.

The people responsible for promoting genetically modified foods argue that it is scientifically safe and has the capacity to provide for millions of starving and famished people. They claim that it has a capacity to increase the nutritional and other beneficial effects of food and medicines.

**Laws and Regulations in India:** Environmentalist Vandana Shiva argues that there are no detailed protocols that cover all dimensions of the ecological, health, and socio-economic impact of GM organisms (2) and that it was precisely to evolve such protocols and strengthen India's Bio-safety regulatory process that the Supreme Court

appointed a Technical Expert Committee (TEC). The Committee recommended a ten-year moratorium on GM organism approvals till scientifically robust protocols, independent and competent institutions to assess risks and a strong regulatory system were developed.

In November 2012 hundreds of scientists raised serious concerns about open air field trials of GM crops in India by writing a letter to the Prime Minister. Their letter coincided with the release of a compilation of 440 scientific research studies on the impact of GM crops on the environment and health (3). The scientists demanded that the recommendations of the TEC be accepted. In their letter, they said that the final report of the TEC has recommended against the deployment of Bt food crops in India until their safety is established, and recommended avoiding Herbicide Tolerant GM crops.

**Conclusion:** The interference with genetic engineering has hurt farmers' ability to feed Indians more cheaply and reliably. India has enjoyed signal successes with genetic engineering in agriculture, but its relationship with this environmentally friendly, wealth-enhancing technology may be coming to an end.

The government's approach to oversight turns on its head a basic tenet of regulation that is the amount of oversight an activity receives should be commensurate with the level of risk it poses. In India, Bt-cotton and Bt-brinjal are crafted using precise, modern laboratory methods that essentially refine, or extend, more primitive, albeit highly successful, ways to perform genetic modification. Meanwhile, exempted entirely from regulation are new plants created by using cruder, less predictable breeding techniques, such as "wide-cross" hybridization, in which large numbers of genes are moved between unrelated plants; and plants that are the result of irradiation to alter DNA and create mutants.

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# Relationship between Energy Consumption and Economic Growth in Jammu and Kashmir

*\*Romesh Chander,  
\*\*Dr.Rajender Gupta*

## INTRODUCTION

Energy is critical to any modern and growing society. Energy heats, cools, and lights our homes and businesses, powers our factories, fuels our cars, and increasingly underpins the fabric of societal communication through modern technology. Business, industry, commerce and public services such as modern healthcare, education and communication are dependent on access to energy services. Governments have traditionally given priority to providing affordable and reliable energy to their subjects in order to fuel economic growth and welfare. As Schumpeter says, "There is no substitute for energy; the whole edifice of modern life is built upon it. Although energy can be bought and sold like any other commodity, it is not 'just another commodity', but the pre-condition of all commodities, a basic factor equally with air, water and earth." As Shehriel Alam (2006) puts it, "energy is the indispensable force driving all economic activities." In other words, the greater the energy consumption, the more the economic activity in the nation and as a result a greater economy emerges. Jammu and Kashmir is seen as one of the state of India endowed with huge hydro power potential, though not fully exploited. However, increasing access to electricity to meet demand has proved to be a challenge for the state.

The increasing demand for oil, leads to frequent escalation in the oil prices. Like shortage of oil, there is also shortage of electricity and other forms of energy viz. coal and natural gas. The shortage can significantly affect the consumption and production in the economy. One or the other forms of energy becomes vital to all the sectors of the economy viz. agriculture, industry and services. This energy dependence

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\*Assistant Professor, Dept. of Economics, Govt. Degree College Majalra, Udampur-182101 Jammu and Kashmir

\*\*Professor, PG Dept. of Economics, University of Jammu, Jammu Jammu and Kashmir-180001



being common to every sector of the economy justifies the association between energy utilization and the overall economic growth rate in an economy. Hence any deficiency in supply of oil, natural gas, coal and electricity generation may directly constrain the economic activities, thereby the growth rate. The declining supply of these sources of energy not only raises the input prices but also influences the prices of other commodities leading to a rise in overall inflation rate and thereby dampening the aggregate demand and growth rate.

To study the relationship between electricity consumption and economic growth in the state of Jammu and Kashmir in the backdrop of significantly higher power deficits associated with increasing cost of supply as well as apprehensions regarding its sustained supply in future, it is essential to see the influence of electricity consumption on the economic growth of the state. The study undertakes an empirical analysis, towards verifying this nexus of electricity consumption and economic growth in Jammu and Kashmir.

The relationship between electricity consumption and economic growth has been estimated in general, and an attempt has been made to assess the causality between total electricity consumption (TEC) and real GSDP.

To analyse the aforementioned objective, time series data of 24 years i.e., 1990-91 to 2013-14 has been used. The casual relationship between energy consumption (electricity) and GSDP has been studied using the Johansen's Co-integration Technique and Vector Error Correction Model. In this section, an attempt has also been made to investigate the relationship between population and total electricity consumption and further, per capita NSDP and per capita electricity consumption.

The time series data has been used in logarithm form except for population (Population Growth have been taken) to remove outliers. The variables used and the acronyms used have been given in the following Tabel: 1

Table: 1

S.No	Variables	Acronyms	Acronyms (Logarithm form)
(1)	(2)	(3)	(4)
1.	Gross State Domestic Product	GSDP	lgGSDP
2.	Total Electricity Consumption	TEC	lgTEC
3.	Per Capita Electricity Consumption	PCEC	lgPCEC
4.	Per Capita Net State Domestic Product	PCNSDP	lgPCNSDP
5.	Population	POPG	-

### Primary Hypothesis

For the aforesaid objective of studying the casual relationship between energy consumption and the economic growth of the state , the primary hypothesis has been framed as to see whether there exists any relationship between total electricity consumption and economic growth, represented by GSDP of the state in the long-run.

### Unit Root Test

For the purpose of the study, secondary time series data of 24 years has been used. However, the time series data present a number of methodological problems. It is convenient to estimate relationship through the regression method only if the series are stationary. The problem with non-stationary data is that the Ordinary Least Squares (OLS) regression procedure can easily result in incorrect conclusions. In the context of a time series, “stationary” refers to a condition wherein the series have constant mean and constant variance. Most of the time series data reflect trend, cycle and/or seasonality. These deterministic patterns must be removed to make the series stationary. Time series that are not stationary and whose properties have not been subjected to an examination could produce invalid inferences.

Since many economic time series have non-stationary characteristics, the variables must be tested for stationary process. Therefore, in order to avoid the

spurious regression, the Augmented Dickey-Fuller test proposed by Dickey and Fuller (1981), whose null hypothesis is the presence or absence of a unit root. The results have been summarized in Table: 2

**Table: 2**

S.No	Variable	ADF Statistic	Test level	1% level	5% level	10% Level	Prob.**
1	LgGSDP	-1.311		-3.752	-2.998	-2.638	0.6061
2	D(LgGSDP)	-5.131		-3.769	-3.004	-2.642	0.0005
3	lgTEC	-0.074		-3.752	-2.998	-2.638	0.9413
4	D(lgTEC)	-3.925		-3.769	-3.004	-2.642	0.0071
5	lgPCNSDP	-1.937		-3.752	-2.998	-2.638	0.3106
6	D(lgPCNSDP)	-5.437		-3.769	-3.004	-2.642	0.0002
7	lgPCEC	-0.487		-3.752	-2.998	-2.638	0.8768
8	D(lgPCEC)	-3.563		-3.769	-3.004	-2.642	0.0157
9	POPG	-2.928		-3.857	-3.040	-2.660	0.8616
10	D(POPG)	-4.501		-3.788	-3.012	-2.646	0.0021

The results indicated that the series are non-stationary when the variables are defined in levels. In the level form the ADF test supports the hypothesis that all five series under consideration are non-stationary. However, by first differencing the series, in all cases, it was found the test statistic was less than the critical values at 5 percent levels; the null hypothesis of non-stationary (presence of unit root) process is rejected and alternative hypothesis of absence of unit root is accepted meaning thereby that the variables at first differencing are stationary.

### **Johansen's Co-integration Test**

Having shown that the variables are stationary at 5 per cent level, it is significant to tests for co-integration of the variables using both the Johansen

maximum eigenvalue and trace statistics to test the null hypothesis of no co-integration. The major aim of this test is to find out whether a linear combination of variables that are integrated of the same order is stationary. If co-integration exists, then there is a long run relationship between the variables.

The Johansen co-integration test has been applied to establish relationship between the following variables:

1. LgGSDP and LgTEC
2. lgPOPG and LgTEC
3. lgPCNSDP and LgPCEC

The findings of Johansen co-integration tests between the variables have been shown in Table: 3 to table: 5

**Co-integration test for GSDP and TEC:** After establishing the level of integration of the data, Johansen Multivariate Co-integration Tests have been used to explore any possible long run relationship among the total electricity consumption and GSDP/ economic growth of the state. This involves testing the number of co-integrating vectors.

The estimated results between lgTEC (electricity consumption) and LgGSDP indicated in table: 3 show that the trace statistic and max eigen values are higher than their decisive values at 5 per cent level of significance. The Johansen Co-integrating test has found one co-integrating vector. Therefore, it can be established that these variables are co-integrated implying the presence of a long-run relationship between them.

**Table: 3**  
**Johansen' Co-integration Results between GSDP and Total Electricity**  
**Consumption**

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.529032	17.35575	15.49471	0.0259
At most 1	0.035294	0.790507	3.841466	0.3739
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level. * denotes rejection of the hypothesis at the 0.05 level.				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.529032	16.56524	14.26460	0.0213
At most 1	0.035294	0.790507	3.841466	0.3739
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level. * denotes rejection of the hypothesis at the 0.05 level.				

Co-integration test for Population and Total Electricity Consumption: The estimated results between POPG and LgTEC indicated in table:....show that two series have one co-integrating relationship meaning thereby that the population of the state does have a significant impact on the total electricity consumption in the long-run. This is because the null hypothesis of  $H_0: r= 0$  against  $r \leq 1$  is rejected at 5 per cent.

**Table: 4**  
**Johansen's Co-integration Results between Population and Total Electricity Consumption**

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.529747	16.77156	15.49471	0.0320
At most 1	0.007829	0.172914	3.841466	0.6775
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.529747	16.59864	14.26460	0.0210
At most 1	0.007829	0.172914	3.841466	0.6775
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level				

**Co-integration test for Per Capita Net State Domestic Product and Per Capita Electricity Consumption:** Table:5.below shows that LgPCNSDP and LgPCEC are co-integrated at 5 per cent level of significance since the trace statistic and the maximum eigen values are higher than their decisive values which establishes a long-run relationship between these variables.

**Table: 5**  
**Johansen's Co-integration Results between Per Capita Net State Domestic Product and Per Capita Electricity Consumption**

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.618136	24.04305	15.49471	0.0020
At most 1	0.122058	2.863840	3.841466	0.0906
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.618136	21.17921	14.26460	0.0035
At most 1	0.122058	2.863840	3.841466	0.0906
Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level * denotes rejection of the hypothesis at the 0.05 level **MacKinnon-Haug-Michelis (1999) p-values				

Therefore, it can be concluded from the results of the co-integration between these variables which have been summarized in the Table: 6 below that long-run relationships exists between the pairs of considered series. Both the Eigen and Trace tests as well as the probability test indicate the existence of a consistently co-integrating vector or long-run equilibrium relation among variables during the sample period of 1990-2013. More specifically, the values of the calculated tests statistics are

greater than the critical values which imply the rejection of the null hypothesis of no co-integration.

**Table: 6**  
**Summary of Johansen Co-integration Test Results**

Series	Trace Statistic	Maximum Eigen Value
LgGSDP, LgTEC	17.35575	16.56524
POPG, LgTEC	16.77156	16.59864
LgNSDP, LgPCEC	24.04305	21.17921

Note: The critical values at 5 per cent level of significance for maximum eigenvalue (14.26) and trace test statistics (15.49) are given by Johansen and Jesilius (1990).

**Vector Error Correction Model**

From the above analysis of co-integration test, it has been established that electricity consumption does have long-run relationship with the economic development of the state through significant influence on GSDP, per capita NSDP and Population. To see the dynamic effect and to investigate the impact of increasing energy consumption on the macro-economic variables of the state, we have used Vector Error Correction (VEC) Model which is an extension of the Vector Autoregression (VAR) model. As explained in the Chapter on Data and Methodology, the VAR model is used for analyzing the interrelation of time series and the dynamic impacts of random disturbances (or innovations) on the system of variables. Since the early 1980s a number of studies have used a vector autoregressive (VAR) model on the macroeconomic effects of increasing energy consumption on the economy and their relationship has been defined.

A VEC model is a restricted VAR, which has co-integration relations built into the specifications so that it restricts the long-run behavior of the endogenous variables to converge to their co-integrating relationships while, allowing for short-term adjustment dynamics. The co-integration term is known as the correction terms.



### Long Run Causality

The results of the VEC estimation have been shown in Table:7(a) for the relationship between real GSDP and electricity consumption. It has been found that the error correction coefficient of the model i.e., c(1) has a negative value and also the p-value is significant clearly indicating that there is a long run causality running from Electricity consumption to real Gross State Domestic Product of the state. The causality between GSDP and electricity consumption has been presented for the study period 1990 to 2013.

**Table: 7(a)**

GSDP and Total Electricity Consumption					
D(LG_GSDP)	CointEq1	D(LG_GSDP (-1))	D(LG_GSD P(-2))	D(LG_TE C(-1))	D(LG_TEC(-2))
Coeff.	-				
	0.769651	-0.022407	-0.128052	-1.108471	-0.73497
Standard Error					
	-0.20464	-0.18856	-0.17888	-0.38395	-0.56662
t-statistics	[-				
	3.76093]	[-0.11883]	[-0.71587]	[-2.88699]	[-1.29711]
D(LG_TEC)	CointEq1	D(LG_GSDP (-1))	D(LG_GSD P(-2))	D(LG_TE C(-1))	D(LG_TEC (-2))
Coeff.					
	0.247711	-0.01168	-0.01187	0.507391	0.155188
Standard Error					
	-0.17586	-0.16204	-0.15371	-0.32994	-0.48692
t-statistics	[				
	1.40859]	[-0.07209]	[-0.07719]	[ 1.53781]	[ 0.31871]

$$D(Y\_LGGSDP) = C(1)*(Y\_LGGSDP(-1) - 1.800712993*LGTEC(-1) + 4.69885597) + C(2)*D(Y\_LGGSDP(-1)) + C(3)*D(Y\_LGGSDP(-2)) + C(4)*D(LGTEC(-1)) + C(5)*D(LGTEC(-2)) + C(6)$$

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.769651	0.204644	-3.76093	0.0019
C(2)	-0.022407	0.188561	-0.11883	0.907
C(3)	-0.128052	0.178877	-0.71587	0.4851
C(4)	-1.108471	0.383954	-2.88699	0.0113
C(5)	-0.73497	0.566623	-1.29711	0.2142
C(6)	0.239449	0.059536	4.021903	0.0011

### Short Run Causality

To test the short-run causality, Wald Test has been used. The results of the model have been presented in the following table:

**Table 7(b)**

### Wald Test

Test Statistic	Value	df	Probability
F-statistic	4.226327	(2, 15)	0.035
Chi-square	8.452654	2	0.0146

The Wald test results given in Table: 7(b) gives p-value which is less than 5 per cent level indicating the null hypothesis of no short run causality. This implies that there is short-run causality running from electricity consumption to real GSDP of the state for the period under study.

### Causality from Population Growth to Electricity Consumption

The results of the causality between population growth and electricity consumption have been presented in Table: 8(a). The result shows no long –run causality running from Population Growth to electricity consumption since error

correction coefficient is negative but the p-value is not significant. The results of Wald Test Table: 8(b) shows no short-run causality running from population growth to Electricity consumption as the p-value is not significant indicating acceptance of null hypothesis of no short-run causality.

**Table: 8(a)**

**VEC Estimates of Population Growth and Electricity Consumption**

Population and Total Electricity Consumption					
D(POPG)	CointEq 1	D(POPG(- 1))	D(POPG(- 2))	D(LG_TEC (-1))	D(LG_TEC (-2))
Coeff.	- 2.34717	0.934171	0.55955	2.481166	-0.01424
Standard Error	- 0.35806	-0.26753	-0.17077	-1.31739	-1.77598
t-statistics	[- 6.55518 ]	[ 3.49182]	[ 3.27659]	[ 1.88340]	[-0.00802]
D(LG_TEC)	CointEq 1	D(POPG(- 1))	D(POPG(- 2))	D(LG_TEC (-1))	D(LG_TEC (-2))
Coeff.	-0.0294	-0.01883	-0.03206	0.215411	-0.19415
Standard Error	- 0.06571	-0.0491	-0.03134	-0.24178	-0.32594
t-statistics	[- 0.44735 ]	[-0.38347]	[-1.02301]	[ 0.89095]	[-0.59565]

$$D(LGTEC) = C(1)*( LGTEC(-1) + 0.5116987425*POPG(-1) - 9.060133903 ) + C(2)*D(LGTEC(-1)) + C(3)*D(LGTEC(-2)) + C(4) *D(POPG(-1)) + C(5)*D(POPG(-2)) + C(6)$$

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.05745	0.128424	-0.44735	0.661018
C(2)	0.215411	0.241777	0.89095	0.387024
C(3)	-0.19415	0.325942	-0.59565	0.560291
C(4)	-0.01883	0.049099	-0.38347	0.706752
C(5)	-0.03206	0.031341	-1.02301	0.322518
C(6)	0.061565	0.029239	2.105578	0.052501

**Table: 8(b)**

**Wald Test:**

Test Statistic	Value	Df	Probability
F-statistic	0.666763	(2, 15)	0.5279
Chi-square	1.333525	2	0.5134

**Causality from Per Capita Electricity Consumption to Per Capita NSDP**

The results presented in Table: 9(a) shows no long run causality running from per capita electricity consumption to per capita NSDP as vector error correction coefficient is negative but p-value is not significant. Also the Wald test result in Table: 9(b) shows no short-run causality since p-value is significant indicating acceptance of null hypothesis of no short-run causality.

Table: 9(a)

## Per Capita NSDP and Per Capita Electricity Consumption

D(LG_NSDP)	CointEq 1	D(LGNSDP (-1))	D(LGNSDP (-2))	D(LG_PEC (-1))	D(LG_PEC (-2))
Coeff.	- 0.23419	-0.04527	-0.01543	0.169185	0.045087
Standard Error	- 0.18804	-0.15659	-0.15987	-0.44022	-0.41565
t-statistics	[- 1.24541 ]	[-0.28910]	[-0.09651]	[ 0.38432]	[ 0.10847]
D(LG_PEC)	CointEq 1	D(LGNSDP (-1))	D(LGNSDP (-2))	D(LG_PEC (-1))	D(LG_PEC (-2))
Coeff.	0.15016 1	-0.14679	-0.02189	0.313814	-0.10698
Standard Error	- 0.10548	-0.08784	-0.08968	-0.24694	-0.23316
t-statistics	[ 1.42356 ]	[-1.67120]	[-0.24413]	[ 1.27082]	[-0.45885]

$$D(LGNSDP) = C(1)*( LGNSDP(-1) - 1.355513027*LG_PEC(-1) - 1.430514124 ) + C(2)*D(LGNSDP(-1)) + C(3)*D(LGNSDP(-2))+ C(4)*D(LG_PEC(-1)) + C(5)*D(LG_PEC(-2)) + C(6)$$

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.23419	0.188044	-1.24541	0.2321
C(2)	-0.04527	0.156588	-0.2891	0.7765
C(3)	-0.01543	0.15987	-0.09651	0.9244
C(4)	0.169185	0.440215	0.384324	0.7061
C(5)	0.045087	0.415646	0.108474	0.9151
C(6)	0.094273	0.075868	1.242589	0.2331

**Table: 9(b)**

**Wald Test:**

Test Statistic	Value	Df	Probability
F-statistic	0.086049	(2, 15)	0.918
Chi-square	0.172097	2	0.9175

In light of the tests being carried out covering a period of 24 years (1990-2013), the following are the key findings:

1. There is a Long-run as well as short- run causality running from Electricity Consumption to Real Gross State Domestic Product of the State.
2. There is no Long-run and short-run causality running from Electricity consumption to Population Growth of the state.
3. There is no Long-run and short-run causality running from per capita electricity consumption to per capita Net State Domestic Product.

**Empirical Evidences**

Comparing the results with the empirical evidences available from energy literature of various countries, it was found that during the 1970's, there was a great concern, especially among developed countries, as to whether conservation in energy use would adversely affect economic growth. Thus, the acceptability of energy conservation policies in the industrialised economies became a cause of concern

amongst the policy makers. Accordingly, the work of John and Arthur Kraft (1978), highlighted this issue and provided some answers. They conducted an empirical test, using data for the United States from 1947 to 1974, the purpose of which was to determine the casual relationship between energy consumption and the Gross National Product (GNP).

A number of studies have investigated the causal relationship between energy consumption and economic growth. *Aqeel and Butt (2001)* studied the causal relationship between energy consumption and economic growth in Pakistan. To investigate the causal relationship among the stated variables (economic growth, electricity, etc.), they preferred to use the co-integration and Granger tests. They found unidirectional causality running from economic growth to petroleum consumption, and causality running from economic growth to gas consumption. In contrast, they found unidirectional causality running from electricity consumption to economic growth.

*Chen and Lai (1997)* found causality running from Gross Domestic Product (GDP) to energy consumption in the case of Taiwan and Province of China. They used a co-integration and error correction model to investigate the causality among the chosen variables.

*Asafu-Adjaye (2000)* studied the causal relationship between energy consumption and income for India, Indonesia, the Philippines, and Thailand, using co-integration and error-correction modeling techniques. The results indicate that in the short-run, unidirectional Granger causality runs from energy to income for India and Indonesia, while bi-directional Granger causality runs from energy to income for Thailand and the Philippines, where energy, income and prices are mutually causal.

Ferguson, William and Hill (2000), studied the relationship between electricity use and economic development for over one hundred countries constituting over 99 per cent of the global economy. They concluded that wealthy nations have a stronger correlation between electricity use and wealth creation than the poor countries. Also,

for the global economy as a whole, there is a stronger correlation between electricity use and wealth creation than there is between total energy use and wealth. And, in wealthy countries, the increase in wealth over time correlates with an increase in the proportion of energy that is used in the form of electricity.

From this, Ferguson et al., suggested that their research does not prove that there is a causal relationship between electricity use and economic development. However, they concluded that the study does show that in the technological world of the 20<sup>th</sup> century, economic developed go hand in hand with electricity consumption and, in particular, with an increase in the proportion of energy used in the form of electricity.

## Conclusion

From the above analysis, it is clear that there is a positive relationship between total energy consumption to Economic Growth as most of the empirical studies shows. This relationship has also been found true for Jammu and Kashmir State for the study period (1990-2013). But the result does not indicate relationship between population growth and electricity consumption, and per capita electricity consumption and per capita NSDP of the state for the period under study.

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# Entrepreneurship Development Through Forest Based Msmes

*\*Lal Mrigendra Singh Baghel*

## ABSTRACT

*India's vast forest wealth plays an important role in environment and livelihood security of the country. However forests emerged the fact that Forests play a vital role in improving the livelihoods and alleviating poverty in the developing countries like India. This paper analyses various arguments in the debate between forests based small scale entrepreneurship and their role in economic growth. The paper also discusses the various aspects of MSMEs and their impact on economic development with the help of review of past literature. MSMEs are companies with metrics (usually number of employees or annual turnover) that fall below a certain threshold. Small Medium Forest Enterprises (SMFEs) are an industry-specific type of small and medium enterprise (SME) situated within the forest sector. Unfortunately, it is even difficult to unravel a meaning for SMEs, with standards varying from country to*

*country. The contribution of the forestry sector to the economic and social development can be increased by providing necessary support for the establishment and development of SMEs that base their business on forests. To properly plan the development of the private forestry sector and ensure the development of SMEs in forestry, it is necessary, in addition to wood products, to pay special attention to non-wood forest products. MSME can be the backbone for the existing and future high growth businesses with both domestic and foreign companies investing in the 'Make in India' initiative and make significant impact in the area of indigenization. 'Make in India with zero defect and zero effect', is a significant opportunity. Prime Minister Modi's new wave 'Make in India' should enable the development of forest based MSME business faster in the future.*

*\*Asst. Prof. (Senior Grade), Editor-Indian Journal of New Dimensions, Dept. of P.G. studies & Research in Economics, J.N.M.P.G. College, Barabanki (UP).*

Most of the studies on forests emerged the fact that Forests play a vital role in improving the livelihoods and alleviating poverty in the developing countries like India. World Bank has also pointed out importance of forests and reported that forests directly contribute to supporting the livelihoods of approximately 90% of the world's poorest people – either in the form of subsistence, conversion of forests to agricultural uses, or income derived from a diverse range of timber products, non-timber products, or ecosystem services (Arnold, 2001). Although there is no universally accepted definition of small and medium enterprises (SMEs), other than to say that they are companies with metrics (usually number of employees or annual turnover) that fall below a certain threshold. Small Medium Forest Enterprises (SMFEs) are an industry-specific type of small and medium enterprise (SME) situated within the forest sector. Unfortunately, it is even difficult to unravel a meaning for SMEs, with standards varying from country to country (Ayyagari et al., 2003).

In India, the MSMED Act, 2006 defines the Micro, Small and Medium Enterprises based (i) on the investment in plant and machinery for those engaged in manufacturing or production, processing or preservation of goods and (ii) on the investment in equipment for enterprises engaged in providing or rendering of Services. The investment in plant and machinery is the original cost excluding land and building and other items specified by the Ministry of Small Scale Industries, The Government of India enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 including definitions of micro, small and medium enterprises as follows<sup>1</sup>:

- a. Enterprises engaged in the manufacture or production, processing or preservation of goods as specified as: (i) A micro enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh; (ii) A small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed Rs. 5 crore; and (iii) A medium enterprise is an enterprise where the investment in plant and machinery is more

than Rs.5 crore but does not exceed Rs.10 crore. In case of the above enterprises, investment in plant and machinery is the original cost excluding land and building and the items specified by the Ministry of Small Scale Industries.

- b. Enterprises engaged in providing services are defined by their level of investment in equipment as: (i) A micro enterprise is an enterprise where the investment in equipment does not exceed Rs. 10 lakh; (ii) A small enterprise is an enterprise where the investment in equipment is more than Rs.10 lakh but does not exceed Rs. 2 crore; and (iii) A medium enterprise is an enterprise where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

Economic development depends to a large extent on the active and enthusiastic participation of intelligent entrepreneurs in the economic process (Schumpeter, 1967, p.621), while Hagen E (1961, pp.191-224) have pointed out that the economic development is seen almost exclusively as a process of technological change which is brought in by the creativity of the entrepreneurs. Studies have shown that small-scale industries in many countries provide the mechanism for promoting indigenous entrepreneurship, enhancing greater opportunities per unit of capital invested and aiding the development of local technology (Nils-Henrik and Morch, 1995). Research work on small-scale industries has shown that small-scale forest-based processing enterprises form a very large part of the overall forest products processing total in employment terms (FAO, 1995). Thus, in any country, economic developmental activities are centered on the entrepreneurship of the people of that country. The forest based small scale industries are the hub of many economic activities in a developing country like India. The social economic transformation of India cannot be achieved without paying adequate attention to the development of this labor intensive and capital sparing factor (Prasain & Singh, 2007, p.13).

Poverty eradication has been the major goal of small enterprise development in most developing countries. The small and medium scale industries represent 80 percent of industrial base of most of the developed countries (Mathew, 1999, p.23). The role played by these industries in the economic activity of advanced industrialized countries is also very significant. In modern India the small scale industries have been a success story, they have emerged vibrantly in the face of rising threats from large scale sectors inside the country and of multinationals from abroad. The small scale units constitute about 95 percent of the total industrial units and produce more than 7500 products with associated technology varying from traditional to state of the art (Suryanarayana & Krishnamohan, 2005, p.11). In addition, small enterprises provide employment to nearly 20 million persons, account for about 40 percent of the value added in the manufacturing sector, 34 percent of total national export and 7 percent gross domestic product. Hence, the role of smes sector in the economic development has been a matter of great concern for policy makers, researchers, national and international agencies. The growth of Small Scale Industries Sector has been a dominant feature of Indian economic development strategy since independence (Nectubala, 2007, p.9). While on the other side, Christopher's (1974, p.109) study revealed that economic gain as the most important reason for starting the small industrial units. High demand for the product perceived, was the most encouraging factor. He further highlighted that the basic rationale of developing SMEs is that they provide additional employment opportunities and ensure more equitable distribution of income and better standard of living.

India has 78.29 million ha of forest and tree cover which is 23.81 % of the geographical area as against a target of 33% envisaged by the National Forest Policy 1988. The total growing stock of the country's forests and tree outside forest is estimated at 6047.15 million cum which comprises of 4498.73 million cum inside the forests and 1548.42 million cum outside the forests. The total carbon stock in the country's forest is 6663 mtonnes (Forest Survey of India, 2011). Forests produce 3.175

m cum of timber and 1.23 m tonnes of firewood annually. The total annual consumption of fuelwood for the country is estimated at 216.42 m tonnes out of which 58.75 m ton comes from forests. Of the total population using fuel wood, 23% obtain fuel wood from the forests. It is estimated that about 200 million people live in and around forests, and fully depend for their livelihood on forest resources. Further, of the 530 million livestock population in India, about 190 million fully depend on forests either by direct grazing or by harvesting of fodder causing additional burden on the forests (ICFRE, 2010)<sup>2</sup>.

Apart from being a repository of valuable bio-diversity, forests are the source of most of the rivers and play a major role in water availability of the country. While on a global level there is a net loss of 7.3 mha of forest per year, the forest and tree cover of the country has stabilized which an achievement is keeping in view the demographic pressure on its forests. Forests play a key role in providing ecological security and resilience to the living conditions of millions of people in the country. However the vital contribution is not adequately reflected in the low contribution to the GDP at 1.7%. Forest cover refers to all land more than 1 ha of area having a tree canopy density of more than 10%. Tree cover excludes forest areas of more than 1 ha which have less than 10% tree cover but includes areas outside which are more than 1 ha and have more than 10% tree cover. Small and medium enterprises (SMEs) contribute to overall economy through income, regional development, employment (social contribution), share in GDP, innovations etc. As per 10<sup>th</sup> Five Year Plan, the contribution of the forestry sector to gross domestic product (GDP) was only 1% in 1996-97 (measured at constant prices of 1980-81). A estimate of gross value of goods and services provided by forestry sector in the beginning of 21<sup>st</sup> Century, puts its contribution to GDP at 2.37%. Though it is extremely difficult to quantify, the economic value of the eco-system services of the forests is vast. It is also generally agreed that much of the land-use decision that presently drives forest change takes relatively little account of these values. The challenge for policy makers is, therefore, to bring these values into the markets, cross-sectoral decisions, macro-economic

policy making, and into the development of economy in general.. Therefore, the knowledge regarding the factors which affecting this sector and its characteristics is important, both for countries with developed market economies and for those with economies in transition. European countries like Serbia, small and medium enterprises are recognized as a pillar of economic development.

In India, the MSME opportunity is to develop entrepreneurship and support growth led by innovation over the next decade by: (i) Significantly increasing the share of MSME contribution to GDP from the current 8 per cent to 15 per cent by 2020<sup>3</sup>; (ii) Generate employment levels to the extent of 50% of the overall employment, more than doubling the current MSME workforce of 106 million across agricultural, manufacturing and services sectors<sup>4</sup>; and (iii) Increasing the share of MSME contribution across key public and private industry sectors fulfilling increasing domestic demand, growth in exports, indigenization and import substitution. In an **UNECE** report, they stated that “...the core of the political and economic transformation of any country in transition is the creation of the private sector, the development of entrepreneurship and creation of small and medium sized enterprises. They are considered to be one of the principal driving forces in economic development” (**UNECE**, 2003). SMEs have a positive impact on the development of private ownership, entrepreneurial skills, job creation and diversification of economic activities, and can quickly adapt to market changes, contributing significantly to the trade and export (**UNECE**, 2003). When it comes to forestry, the situation is more complex, because it is a very specific area of the country’s economy. In that sense, as forestry in India is also in process of transition, with all sectors’ characteristics, it is important to know the mechanisms and factors which influence the formation and development of SMEs in forestry sector. The contribution of the forestry sector to the economic and social development can be increased by providing necessary support for the establishment and development of SMEs that base their business on forests. To properly plan the development of the private forestry sector and ensure the development of SMEs in forestry, it is necessary, in addition to wood products, to pay

special attention to non-wood forest products (NWFPs). In literature regarding SMEs for the various activities such as procurement, processing and selling of NWFP-SMEs is stated that the organization of these enterprises in India is mostly heterogeneous in nature, and production capacities are underutilized and often inadequate. One of the reasons for this may be the lack of adequate support, as it was identified that most of these enterprises do not have sufficient financial resources, nor do they have access to favorable bank loans (Nonić et al., 2013a).

It has been noticed that in many countries, there is a noticeable lack of support for development of SMEs in forestry and, if support exists, it is often inadequate or poorly targeted. Therefore, policy-makers may need policies that support the varying needs of different types of entrepreneur, rather than provide broad 'blanket' policies to all types of entrepreneur, irrespective of need or ability" (Westhead et al., 2005). Therefore, It is essential for these reasons that decision-makers have the necessary information about the types of enterprises in the private forestry sector, or in this case, NWFP-SMEs. SMEs in India, has achieved almost steady growth over the last couple of decades. Even though, the role of forest based SMEs in the industrial sector are growing rapidly and they have become a thrust area for India's future growth. The Indian market is growing and the Indian industry is making rapid progress in various Industries like manufacturing, information technology, real estates, textile and garments, retail, engineering, pharmaceuticals, food processing, agro and service sectors. Under the changing economic scenario the forest dependent SMEs have both the opportunities and challenges before them. Its importance for rural areas cannot be ignored, since entrepreneurship based on NWFPs can have a positive impact on the sustainable development of rural areas and the population income diversification. Research in future should be focused on the specific support measures in relation to different types of NWFP-SMEs. Detailed study on the different types of forest based SMEs is needed as a basis for formulation of subsidies/support measures in order to improve the entrepreneurship in NWFPs sector.



On the basis of above discussion, it can be said that Entrepreneurship Development makes a powerful impact on the economic development of the country. The success of the entrepreneur depends on the environmental factors such as social-political and economic, constitutional-legal, and technological factors which influence their activities thus leading to successful entrepreneurship. The socio-economic factors are the major key factors influencing the entrepreneurial behavior and operation of the business and thus the need for the study and the due influence. It can also be concluded that MSMEs segment can play a significant role in the emergence of the Indian economy. The development of this segment is extremely critical to meet the national imperatives of financial inclusion and generation of significant levels of employment across urban and rural areas and across the country. It has potential to nurture and support development of new age entrepreneurs who have the potential to create globally competitive businesses from India. Thus, **MSME** can be the backbone for the existing and future high growth businesses with both domestic and foreign companies investing in the 'Make in India' initiative and make significant impact in the area of indigenization. 'Make in India with zero defect and zero effect', is a significant opportunity. Prime Minister **Modi's** this new wave should enable the development of forest based MSME business faster in the future. A recent report of **KPMG** also confirms that India's GDP is expected to touch 8.5 per cent, with the country likely to be a USD 5 trillion economy by 2025. It can't be overlook that the MSME segment has the huge potential to emerge as a backbone for India's economy and it will act as an engine for growth, given the right set of supporting environment and enabling framework.

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# Agricultural Credit And Farmers Indebtedness In India

*\*Mr.Kiran Shankar Pawar*

## **Abstract:**

Agriculture is a dominant sector of our economy and credit plays an important role in increasing agriculture production. Availability and access to timely, adequate and low cost credit from institutional sources is of great importance particularly to small and marginal farmers. Need for agricultural credit arises because modern farm technology is costly and the personal

resources of the farmers are inadequate. Indebtedness however, need not necessarily have a negative connotation. Indebtedness also implies accessibility to credit. This paper examines the proportion of institutional and non-institutional credit supply in India and Institutional credit and indebtedness of farmers in India.

Key words: Farmers, Agricultural credit, Indebtedness,

## **Introduction:**

Agriculture is a dominant sector of our economy and credit plays an important role in increasing agriculture production. Availability and access to timely, adequate and low cost credit from institutional sources is of great importance particularly to small and marginal farmers. Along with other inputs, credit is essential for establishing sustainable and profitable farming systems. Experience has shown that easy access to financial services at affordable cost positively affects the productivity, asset formation and income and food security of the rural poor.

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\*Associate Professor, Sadashivrao Mandlik, Mahavidyalaya, Murgud. Tal-Kagal, Dist-Kolhapur.

Need for agricultural credit arises because modern farm technology is costly and the personal resources of the farmers are inadequate. Provision of credit, as an input is essential for widespread use of improved agricultural methods.

Rural farmer households require credit for a number of reasons, which consist of both income generation and non-income purposes. Short term requirements of credit to meet the working capital needs and long term credit needs for the capital goods for farm sectors are well recognized, savings of these farmers being small, any other needs such as health related expenditure, social requirement are also met through borrowings. This becomes necessary in the absence of any social security or other risk improvement schemes. Farmers' unproductive needs are often not met by the institutional sources. Indeed institutional sources have been unable to meet the demand for credit that the neediest ones get eliminate from the system. Given extensive indebtedness and resulting suicide by the farmers, hence it is important to examine the nature and extent of farmers' indebtedness.

Rural and agricultural credit system in India has a long history. Moneylenders, Traders and other informal sources have traditionally been providing credit to the rural people, generally at exorbitant rate of interests. The presence of institutional finance in rural India dates back to as early as 1793 when the system of taccavi loans were introduced through which loans are provided to the agricultural at low rate of interest. The Land Improvement Loans Act of 1883 was the first consolidated law aimed at providing agricultural loans.

The various phases of institutional credit delivery system may be understood by analyzing the background policy interference in the Indian rural financial system. There are three phases of the rural credit delivery system. First phase (1904-1969) encompassed the dominance of the credit co-operatives; the second phase (1969-1991) was noticeable by the introduction of commercial banks into the rural credit delivery system through their nationalization in 1969 and priority sector lending policy and setting up of the Regional Rural Banks (RRBS) all over India in 1975 RRBs supply

low cost banking facilities to the weaker sections of rural area. The third phase introduced the financial sector reforms, characterized by the transformation of credit institutions into financially viable, organizationally strong and operationally efficient units and also the beginning of microfinance.

At the time of Independence, the most important source of agricultural credit was the moneylenders. In 1951 moneylenders accounted for as much as 71.6 percent of rural credit. Money lenders charged exorbitant rate of interest ranging from 18 percent to 50 percent or even more. They often manipulated accounts to their advantages by not entering the returned and interest paid into the account. They also forced the farmers to sell the agricultural produce to them at low prices. Long-term loans were often advanced against the security of land and moneylenders often manipulated things in such a way as to seize the land.

Over the years, the operations of the moneylenders have declined in view of debt relief legislations, the system of licensing moneylenders and restrictions on the use and transfer of land as security.

**Table No. 1**

**Proportion of Institutional and Non-Institutional Rural Credit in India**

Type of Credit Agency	1951	1961	1971	1981	1991	2002	2013
<b>Institutional Agencies</b>	<b>7.2</b>	<b>14.8</b>	<b>29.2</b>	<b>61.2</b>	<b>64.0</b>	<b>57.1</b>	<b>59.8</b>
Government	3.3	5.3	6.7	4.0	5.7	2.3	2.1
Co-op. Societies/Banks	3.1	9.1	20.1	28.6	18.6	27.3	14.8
Commercial Banks & RRBs	0.8	0.4	2.2	28.0	29.0	24.5	48.9
Insurance, Provident Fund and Other Institutions	--	--	0.2	0.6	10.7	3.0	--
<b>Non-Institutional Agencies</b>	<b>92.8</b>	<b>85.2</b>	<b>70.8</b>	<b>38.8</b>	<b>36.0</b>	<b>42.9</b>	<b>40.2</b>
Landlords	1.5	0.9	8.6	4.0	4.0	1.0	0.8
Agricultural Moneylenders	24.9	45.9	23.1	8.6	6.3	10.0	25.8
Professional Moneylenders	44.8	14.9	13.8	8.3	9.4	19.6	
Traders and Commission Agents	5.5	7.7	8.7	3.4	7.1	2.6	2.9
Relatives and Friends	14.2	6.8	13.8	9.0	6.7	7.1	9.1
Others	1.9	8.9	2.8	5.5	2.5	2.6	1.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Various issues of All India Debt and Investment Surveys, NSSO

Table shows that institutional credit has increased from 7.2 percent in 1951 to 64 percent in 1991 and declined to 59.8 percent in 2013. Consequently, the share of non-institutional credit to agriculture sector decreased from 92.8 percent in 1951 to 36 percent in 1991 and again increased to 42.9 percent in 2002. The share of Government was increased from 3.3 percent in 1951 to 5.7 percent in 1991 and decreased to 2.1 percent in 2013. The share of Co-operative Banks and Societies increased from 3.1 percent in 1951 to 27.3 percent in 2002. The share of Commercial Banks and RRBs increased from 0.8 percent in 1951 to 24.5 percent in 2002 and 48.9 percent in 2013.

The share of Agricultural and Professional Moneylenders decreased from 69.7 percent in 1951 to 18.2 percent in 2002. The share of Professional Moneylenders was decreased tremendously from 44.8 percents in 1951 to 8.3 percent in 1981. The reason was the state government passed a legislation making it compulsory for moneylenders to register their activities. But the share of moneylenders again increased up to 19.6 percent in the year 2002. Also the share of landlords was increased from 1.5 percent in 1951 to 8.6 percent in 1971 and decreased up to 0.8 percent in 2013. The share of Relatives and Friends decreased from 14.2 percent in 1951 to 4.4 percent in 2010. The Commercial Banks, Co-operative Banks, RRBs have increased their disbursement of loans to the agricultural sector with 48.9 percent in 2013. The non-institutional credit was declined due to the influence of the institutional loan for providing agriculture credit.

Agricultural growth is crucial for alleviating rural poverty. Access to institutional credit to more farmers and appropriate quantity and quality of agricultural credit are crucial for realizing the full potential of agriculture as a profitable activity.

#### **AGRICULTURAL CREDIT AND INDEBTEDNESS IN INDIA:**

Institutional finance is important particularly in diversification and switching over to commercial and high value agriculture. Further, the small farmers whose operations and surpluses are very small could ill afford high cost loans from non-institutional agencies. Though, the World Bank, National Council of Applied

Economic Research, Rural Finance Access Survey conducted in Uttar Pradesh and Andhra Pradesh, indicated that the banks served primarily the needs of the richer rural borrowers: 44% of the large farmers were borrowers whereas 87% of the marginal farmers did not have access to credit. Access to institutional credit was particularly a problem for meeting unexpected expenditure and resulted in heavy dependence among poorer households on non-institutional sources, mostly traders, moneylenders and friends and relatives. The interest rate charged by informal sources was always quite high (48% per year). As per NSSO 59<sup>th</sup> round data, nearly 57.1 per cent of the loans outstanding at the farmer household level were from the formal institutions (24.5 per cent from banks and 27.3 per cent from the cooperatives), 19.6 per cent from the professional money lenders, 7.1 per cent from relatives and friends, 2.6 per cent from traders and the balance of 5.3 per cent from others including government (2.3 per cent). However, in Andhra Pradesh, Rajasthan, Manipur, Meghalaya the loan outstanding from professional moneylenders exceeded that from the banks and the cooperatives put together. The professional moneylenders had the largest percentage of farmer household indebted to them.

Indebtedness however, need not necessarily have a negative connotation. Indebtedness also implies accessibility to credit. Only when loan is taken under unfavorable terms or for non-income generation purpose and a farmer in turn is unable to repay over time and fall in perpetual indebtedness.

The reasons for indebtedness amongst farmers are many and one of the most important reasons is that farmers are not getting enough remuneration for their agricultural produce. This could possibly because of a sharp deceleration in the growth of prices of many agricultural commodities and increase in the cost of cultivation after the introduction of reforms. The uncertainty of weather as well as dependence on borrowed credit from an informal moneylender is also another reason. A direct outcome of the squeeze in farm incomes and dwindling employment opportunities has been a phenomenal rise in the level of indebtedness of the farmers.

**Table No. 2**  
**Number and Proportion of Indebted Farmer Households**  
**in Major States of India**

Sr. No.	State	Estimated Number of indebted Farmer Households('00)		Per cent of Indebted Farmer Households	
		2002	2012	2002	2012
1	Telangana	--	22,628	--	89.1
2	Andhra Pradesh	49,493	33,421	82.0	92.9
3	Tamil Nadu	28,954	26,780	74.5	82.5
4	Kerala	14,126	10,908	64.4	77.7
5	Karnataka	24,897	32,775	61.6	77.3
6	Rajasthan	27,828	40,055	52.4	61.8
7	Orissa	20,250	25,830	47.8	57.5
8	Maharashtra	36,098	40,672	54.8	57.3
9	Punjab	12,069	7,499	65.4	53.2
10	West Bengal	34,696	32,787	50.1	51.5
11	Uttar Pradesh	69,199	79,081	40.3	43.8
12	Gujarat	19,644	16,743	51.9	42.6
13	Bihar	23,383	30,156	33.0	42.5
14	Haryana	10,330	6,645	53.1	42.3
15	Chhattisgarh	11,092	9,538	40.2	37.2
16	Jharkhand	5,893	6,464	20.9	28.9
17	Himachal Pradesh	3,030	2,457	33.4	27.9
18	Assam	4,536	5,995	18.1	17.5
<b>All India</b>		<b>4,34,242</b>	<b>4,68,481</b>	<b>48.6</b>	<b>51.9</b>

Source: Various All India Debt and Investment Surveys .

Table No.2 shows that at the all India level, out of the 89.4 million farmer households (60.4 percent were farmer households) and out of them 48.6 per cent were indebted. The percentage of highest indebtedness was in Andhra Pradesh (82.0 percent) followed by Tamil Nadu (74.5 percent), Punjab (65.4 percent), Kerala (64.4



percent), Karnataka (61.6 percent) and Maharashtra (54.8 percent) in 2003. Indebtedness is relatively lesser (varying between 40 to 60 percent) in the states like Haryana, Rajasthan, Gujarat, Maharashtra, West Bengal, Orissa, Madhya Pradesh, and Tripura. Moderate incidence of indebtedness (varying between 20 to 40 percent) is seen in the northern states like Jammu and Kashmir, Himachal Pradesh, Bihar, Uttar Pradesh, Jharkhand and Chhattisgarh and north-eastern states of Nagaland, Mizoram and Manipur. It were the hilly states of the northeast and Uttarakhand which had the lowest incidence of indebtedness.

At all India level, out of the 90.2 million farmer households (57.8 percent were farmer households) and out of them 51.9 percent were indebted in 2012. The percentage of highest indebtedness was in Andhra Pradesh (92.9%) followed by Telangana (89 %), Tamil Nadu (82.5 %), Karnataka and Kerala (77%) and Maharashtra (57.3%) in 2012. Indebtedness is relatively lesser (Between 40 to 60 percent) in the states like Bihar, Gujarat, Madhya Pradesh, Orissa, Punjab, Uttar Pradesh and West Bengal. Moderate incidence of indebtedness (varying between 20 to 40 percent) is seen in the states like Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Chhattisgarh and Jharkhand.

Agricultural development, when correlated with the incidence of indebtedness gives a significant positive relation, that is, the states where the land of agricultural development is large are the ones having high incidence of indebtedness.

#### **CAUSES OF INDEBTEDNESS:**

Some causes of the farmers' indebtedness are as follows-

- 1) Uncertain monsoon
- 2) Low income of farmers
- 3) Poverty
- 4) Lack of education
- 5) Inherited debts
- 6) Unproductive expenditure of debt

- 7) Poor financial inclusion
- 8) Faulty money lending system
- 9) High costs of agricultural inputs
- 10) Exploitation by moneylenders

## CONCLUSION:

Agricultural credit plays an important role in agricultural production in India. The ostrich and the amount of agricultural credit have increased over the years. Several weaknesses have crept in which have affected the viability and sustainability of these institutions. Performance of agricultural credit in the reveals that though the overall flow of institutional credit has increase over the years but there are several gaps in the system like inadequate provision of credit to marginal and small farmers.

Indebtedness is the critical and basic issue of Indian farmers. Indian farmers are always facing the financial problems. Due to poverty and insufficient income, they need to borrow amount from various credit agencies. Low income and productivity farmers are unable to repay the debt within the period. They become defaulters and unpaid amount increases gradually.

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# How Islamic Finance Is Redefining Agri-Business

*\*Mr. Ssekabira Robert*

## **Introduction:**

Uganda's Agricultural sector is increasingly gaining a greater footing as a driver of Economic expansion heightening the need for financiers to re think their strategies .As the sector grows and being the back bone of the Ugandan Economy, Islamic finance providers have continued to deepen their investments to support the sector. Through Isalam financing, institutions plying in Islamic financing or finance are becoming critical in driving the growth of the Agricultural sector, curving a strong niches that is redefining the engagements between the two industries that is the financial sector and the Agribusiness.

Under Islamic finance, Isalam is an innovative financing contract considered appropriate for the production of primary commodities, especially in the Agricultural sector, where the farmers have direct needs for funds to purchase seeds. Fertilizers, farm implements as well as paying school fees and medical expenses. The structure allows the seller of the specified goods in terms of quality and quantity to undertake to deliver the same at an agreed future date against upfront payment of the full price. Normally sharia does not approve of any forward sales but Isalam transactions under certain conditions are permissible. The validity of Isalam Transactions depend upon the sellers paying the full payment for the specified quality and quantity of goods to be delivered at a specified future debt and place of delivery.

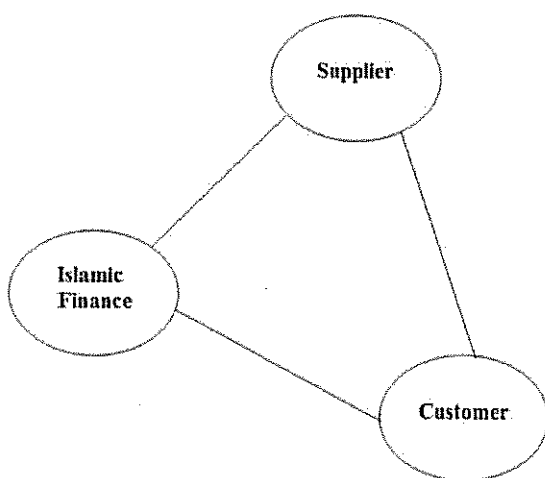
The main objectives behind the legitimacy of the Isalam sale is to relieve people of their hardships in undertaking trading and financing activities. The Salam price is generally lower than the price of a spot sale, the bank, when executing a Isalam contract with a farmer, can also have a parallel Isalam contract with another party

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\*Research Student, Dept. of Economics, Shivaji University, Kolhapur

buying the goods after delivery. Since the parallel Islam period is shorter and the price of the end purchaser pay is higher, the bank stands to benefit. The end buyer of the parallel Islam facility makes a unilateral promise to the bank to purchase at a pre-set price, of the specified commodity.

The first Islam contract and the parallel contract must be independent and should reflect that the bank is a buyer in the former and the seller in the latter. The two contracts must be tied together, making the performance of one contingent upon the other. However, Commodities that cannot be described by type, quality and quantity can not be subject of sales under this contract; such contract is not permitted where the commodity involved in the sale is money or form of currency.



### HOW IT WORKS

The rice farmer in LIRA District can approach a bank to finance him to engage in the production of 50 tonnes of Rice of a specified quality at a negotiated price and at an agreed date and place of delivery. The bank pays the agreed price on the spot awaiting the delivery of the rice. The bank can simultaneously enter in to an independent Islam contract to sell 70 tonnes of the specified quality to a third party ( a whole seller) for instance at a higher price at an agreed date and price of delivery after the actual delivery by the farmer who is the bank client.

It is important to note that should the farmer fail to deliver the rice as agreed or deliveries substandard rice, the bank can seek whatever recourse it has against him but cannot rid itself of the liability to deliver to the whole seller. The farmer or the seller is under obligation to deliver as per the terms agreed.

### **BENEFITS**

Isalam sales can help promote Agricultural productivity by reducing the risk arising out of uncertainties of market price of farmer produce especially during harsh seasons. It should be noted that Agriculture is the back bone of Ugandan Economy. It is our wisest pursuit because it will in the end contribute most to the real wealth, good morals and happiness' However, with imported products increasing in the Ugandan market. As well, it is killing off local products as consumers tend to go for the imports as they have higher quality and are cheaper. This in turn causes the farmers to look for finances from corporations at an interest further increasing their cost of production.

### **TECHNOLOGY AND YOUTH**

For example, farmers have expressed interest to start their own Agriculture Bank and processing plants as the existing scarce processing plants have become expensive with attendant high cost of production were the sector modernized, price would be more favorable to small farmers. Such that locally produced products would be able to compete with imported ones. Technology is an added advantage in the agriculture sector as it is helping farmers around the world to produce high quality yields. It is also an attraction to the youth as they would be motivated to join the sector if technology was a part of it. The youth indeed in Uganda and other age segments look at technology as a way of reducing cost and increasing yields.

According to research so far done, the average age of a farmer in Uganda is 60 years which goes to show that a large number of the youth don't participate in the sector despite the fact that they make up the majority population segment in the Country. Agribusiness has done a lot to entice the youth to embrace and take up

agriculture in numbers but still the number of people taking up agriculture is low as more people are enticed by other sectors some like the real estate have peaked of recent in Uganda and this has really hit the Agricultural sector and its future values to diminish. Government needs to ensure projects that will enhance fertilizers plants are being constructed and farmers given access to loans in the shortest time possible.

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## Peace And Harmony In Islam And Buddhism: Some Reflections

\* *Abida Iqbal Lone*

### *Abstract*

It is well known fact that today the whole world has become a battlefield where religion encourages love, peace and unity among the human beings but people fight with each other without knowing right and wrong path of religion. Religion is a tool which helps people to live in the society without harming anyone. Every religion has important teachings which it has offered to humankind. Christianity teaches love and sacrifice; Judaism, the values of spiritual wisdom and tradition; Islam emphasizes universal brotherhood and equality while Buddhism advocates compassion and mindfulness.

Just as communal peace is a key ingredient to avoid civil unrest, the being of ones heart at peace is restrains to avoid personal unrest. The Quran emphasizes peace and reconciliation as basic to all social and even international relations. As mentioned in the Quran, Paradise, which is the reward for the pious, is a place of serenity. One of the ninety- nine names of ALLAH is Salaam, which means peace. Throughout history, Muslims and Buddhist have made every effort to establish peace and serenity everywhere in all divergent fields. Over the course of history, the general approach of Muslims and Buddhist has been supportive of maintaining peace, spreading an environment of serenity and trust, and constructing a civilization of love, compassion, and mercy to share with other people in peace. We need to find a common usage of terminology that leaves followers of two religions open for dialogue. There are some concepts in Islam that are very similar to Buddhist ones. It is interesting to note some things between Buddhism and Islam. Just as Sufis recite the name of God, Buddhist praises the names of Manjushri. Thus; there are practices that are understandable to both Muslims and Buddhists. In both religions, there's a big emphasis on generosity and everyone being equal.

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\*Research Scholar, Govt .Hamadia Arts andCommerceCollege, Bhopal M.P.

**ISLAM:** The literary meanings of the word Islam is “to submit or to conciliate” whereas the idiomatic meaning predicts that Islam is the religion of peace, it means the teachings of Islam repeats that man should submit to the laws of Allah, the Creator, the Nourisher and the Sustainer of the entire universe. The laws and code of conduct of life revealed by Almighty Allah and taught by His prophets spread love, peace, justice, brotherhood, equality and tolerance. In Arabic language, the word “Islam” etymologically means peace, security, safety and equity. Islam as a religion was not only preached and propagated by Hazarat Muhammad (peace be upon him) but all the prophets sent by Almighty Allah did preach and practise the religion of Islam. “In accordance with the creeds and teaching of Islam, human life has two main reasons and objectives to exist and prevail: individually man should be provided with all essential fundamentals and laws to live a peaceful and respectable life, collectively essential measures should be taken to invest all human energy, power, wisdom for general good, collective welfare and over all progress and development of the society at global level, so that the march of civilization may proceed to the state of perfection and better world; moreover, the balance between the individual and society vice versa integration and interrelatedness between the single component and collective body may also be maintained and adjusted to carry on the future course of things. The sort of check and balance propounded by Islam does not allow individual to peripheral the rights of society and vice versa”.\*1

It is Islam which laid the foundation of universal brotherhood, and condemned all sorts of discrimination based on caste, creed, colour, riches and possession. The Holy Quran, the last and final revelation of Allah to the last prophet, Hazarat Muhammad (p.b.u.h), categorically reveals:

“O mankind! We created you from a single (pair) of a male and female and made you into nations and tribes, that ye may know each other (Not that ye may despise each other). Verily the most honoured of you in the sight of God is (he who) is the most righteous of you – and God has full knowledge and is well acquainted (with all things).”\*2



Besides, the last prophet of Allah, Hazarat Muhammad (p.b.u.h) also taught and restated the same message to humanity: "O people! Verily your Lord is One and your father is one. All of you belong to the ancestry of Adam and Adam was created from clay. An Arab is not superior to a non-Arab, neither is a non-Arab superior to an Arab. Similarly the white has no superiority over the black nor does the black have superiority over the white: except in piety. Verily the noblest among you is the most pious."\*3

Thus, Islam has provided complete code of conduct for human life and has along with well-expressed doctrines of faith, ways and means of worship so that by acting upon the ruling actions of Islam man may live a peaceful and respectable life.

***Buddhism:*** In Buddhism, we can identify four Brahmaviharas or four sublime positions. These include Metta, karuna, Mudita, and Upekkha. These important Buddhist teachings are relevant for global peace and harmony in the modern world. Metta can be defined as sincere wish for the welfare and happiness of all living beings. Limitless love and kindness towards the animal kingdom and plant kingdom is emphasized in the principals of Metta. It is important for all living beings in this world to practice loving kindness equality without any discrimination of race, colour, caste or language.

Karuna or compassion means a good attitude towards those who suffer due to various reasons .In present day, karuna is important for the helpless people, patients and poor families.

Mudita or sympathetic joy' is to appreciate welfare other and progress of other people.

Upekka means 'discerning rightly and viewing justly' or looking impartially without attachment or aversion for any group of individual. Equanimity teaches us not to have an ill balanced attitude. Therefore sublime status is extremely vital for building global peace and harmony among people living in this world.\*4

The history presents no example of the teaching of high moral values like what Buddha presented. His teachings focused on the ways and means to refine and control bodily desires, which culminate in materialism, jealousy, selfishness, anger and revenge, he rather restated the principles which could inject the sense of integrity, peace, justice, affection, brotherhood, sympathy, non-violence and equality, which are the chief constituents of Buddhism. It is praiseworthy to mention that marvellous teachings of Buddhism directed humanity to the right path in the times of oppression, cruelty, selfishness and injustice.\*5

*“To avoid all evil, to cultivate good, and to cleanse one's mind — this is the teaching of the Buddha's.”\*6*

Buddha believes that if any individual intends to abstain from all kinds of sins and wishes to live with piety and forethought must adopt seclusion, practise ascetic life style and exercise simplicity in wearing, eating and drinking. Besides, he needs to avoid profligacy, pretention, affectation and vanities. The person who abides by these teachings of Buddha by letter and spirit is called Bikhsu. When one becomes Bikhsu, he acts upon these commandments of Buddha to attain Nirvana.

*He will not kill any living organism*

*He will not commit theft*

*He will not commit adultery*

*He will not speak lie*

*He will not get used to any kind of addiction*

*He will not have food after afternoon*

*He will keep himself away from the music and dance parties*

*He will not practise affectation or ostentation and will not use perfumes*

*He will not sit on any comfortable seat, chair or bed He will keep himself away from gold and silver.\*7*

There are some similar commandments and laws of Islam and Buddhism:

**1. Laws and Injunctions of Islam about human life:** the laws, on which foundation of Islamic society and civilization is based on, the foremost among these laws is the law of life and its security. Piety of human soul and positivity, truthfulness and selflessness in human action are the most praiseworthy doctrines of Islam, whose parallel can ever be found in any religion of the world.

The Holy Quran has mentioned the first act of crime and violence, in which a man killed another, and regards it as the first evil action of human history which paved way for the ultimate disintegration, decay and downfall of mankind. Hence, it became indispensable to teach man to respect and take care of the life of other livings. It was to be inculcated that every living thing has a right to live, exist and prevail. After mentioning this terrible act of murder, the Holy Quran reveals that: "On that account we ordained for the children of Israel that if any one killed a person unless it be for avenging a murder or for spreading mischief in the land it would be as if he slew the whole people and if any one saved a life it would be as if he saved the life of the whole people."\*8

The above-cited verse reiterates that the murder of one person is tantamount to killing all human beings whereas saving the life of one person is likely to save the whole mankind. While mentioning the characteristics of virtuous man, Allah Almighty reveals in the Holy Quran that: "Those who make not with God any other god, nor slay such life as God has made sacred"\*9

To highlight the importance of piety and abstinence from evil indulgence, it was further revealed that: "Take not life which God hath made sacred except by way of justice and law"\*10

Hazarat Anas bin Malak quotes that the Holy Prophet Hazrat Muhammad (P.B.U.H) said that the four among all major sins were to associate any partner with Allah, to commit a murder, to disobey parents and to speak lie.\*11

The Holy Prophet in his last sermon delivered at the eve of Hajj said: "I apprise you that your lives, your property and your honour are similarly as sacred to one another as this sacred day of this sacred month in this sacred town, soon you will be meeting your Lord and He will ask you about your actions.\*12

Islam propagates strict laws and codes to punish those who spread mischief, commit murder and indulge in terrorism and bloodshed, invoke extremist practices in the society, for them there will be far severe punishment on the Day of Judgment.

If any Islamic state is circumstantially bound to wage war or it is imposed upon them, even then if a person from the enemy side begs for asylum, he must be provided with secure asylum and he should be accompanied to the safe place he intends to go to. "If anyone amongst the Pagans asks thee for asylum, grant it to him so that he may hear the word of God and then escort him to where he can be securing that is because they are men without knowledge."\*13

Islam prefers and appreciates to set the war prisoner free and forbids inflicting torture and misery upon them. Besides, Islam strongly propounds that women, children, the aged, physically or mentally impaired and sick will not be harmed in the battlefield or at warfronts.

Whatever ethical and moral values the present day civilized world possess and boasts of, Islam has its due share in it because the teachings of Islam commenced in the epoch of decadence, disintegration, downfall of values and ethics to the extent that life itself lost its worth and was molested and destroyed with no remorse or regret.

**2. *Abstinence from Committing Theft:*** The second commandment of Buddha for becoming Bikhshu is about the safety of property. It is an undeniable fact that property and possession causes disputes and scuffle in the society, the situation further aggravates if the property or possession is achieved or accumulated by unfair and illegal means. One among many other illegal means of taking possession of other's

property is theft, which ensures uncertainty, disintegration, conflict and quarrels in the society.\*14

**3. To avoid Adultery:** The third commandment of Buddha is not to indulge in adultery. As adultery or extramarital sex spreads decadence, disputes and downfall of values in the society,\*15 so Islam has also forbidden illegitimate ways and means employed for the fulfilment of carnal desires. Adultery is one of that illegitimate ways of fulfilling sensual desires therefore the Holy Quran ascertains it as one of the dreadful sins/crimes. Almighty Allah reveals: “Nor come close to adultery for it is a shameful (deed) and an evil, opening the road (to other evil).”\*16

The Holy Prophet pledged a promise from the believers: Narrated Ubdah bin As-saamit: Allah’s Apostle said while a group of his companions were around him: Swear allegiance to me for: Not to join anything in worship along with Allah, not to steal, not to commit illegal sexual intercourse, not to kill your children, not accuse an innocent person (to spread such an accusation among people), not to be disobedient (when ordered) to do good deed. The prophet added: whoever amongst you fulfils his pledge will be rewarded by Allah.\*17

Islam owing the seamless consequences and adverse after-effects of adultery has ordained it an act subject to punishment. The Holy Quran prescribes the punishment for adultery as under:

“The women and man guilty of adultery or fornication, flog each of them with a hundred stripes. Let not compassion move you in their case, in a matter prescribed by God, if ye believe in God and the Last Day and let a party of the believers witness their punishment.\*18

**4. Fourth Commandment of Buddha about Prevention from Speaking False:** It is a fact that lies is the mother of all social evils; it begets disputes, breach of trust and pollutes the peace, truth and justice. Truth has always royal road to peace and prosperity notwithstanding some jerks and jolts bound to impede its way\*19. Buddha

forbids from telling lie and commands to follow the path of truthfulness. Likewise, Islam also ordains its believers to abstain from speaking lie, and to practice truthfulness in life. The Holy Quran reveals: "O ye who believe! Fear God and be with those who are true (in word and deed)."<sup>20</sup>

The Holy Prophet said: Narrated Abdullah: The Prophet (S.A.W.S) said: "Truthfulness leads to righteousness, and righteousness leads to paradise, and a man keeps on telling the truth until he becomes a truthful person. Falsehood leads to Al-Fajur (i.e. wickedness, evil doing) and Al Fajur (wickedness) leads to the (Hell) fire, and a man may keep on telling lies till he is written before Allah, a liar."<sup>21</sup>

Narrated Abu Bakra: Allah's Apostle inculcated thrice: "Shall I not inform you of the biggest of the great sins?" we said yes O Allah's apostle. He said, "To join partners in worship with Allah, to be undutiful to one's parents" the Prophet set up after he had been reclining and added, "And I warn you against giving forged statement and a false witness, I warn you against giving forged statement and false witness." The Prophet keeps on saying that warning till we thought that he would not stop.<sup>22</sup>

**5. *Abstinence from Addiction to attain the state of Nirvana:*** Buddha in his fifth commandment emphasizes altogether abstinence from all sorts of addiction. It is a fact that the use of drug and intoxicant material affects the faculties of human, the reasoning faculties for time being remains suspended therefore one fails to distinguish between vice and virtue, good and bad; as the result, it casts adverse impact upon the society and leads to ultimate downfall, decadence and unending disputes or quarrels.<sup>23</sup>

Islam being the religion of peace and prudence also commands its believer to abstain from all kinds of addiction, not only this, but terms addiction as Haram (impermissible unlawful/ illegitimate and its use is likely to commit sin and subject to punishment) and there are clear-cut laws of punishment for the consumer of intoxicant materials and drugs of addiction. The Holy Quran reveals: "O ye who believe, intoxicants, and gambling (Dedication to) stones and (divination by) arrows are an abomination of

Satan's handiwork. Eschew such (abomination) that ye may prosper. Satan's plan is (but) to excite enmity and hatred between you with intoxicants and gambling, and hinder you from the remembrance of God and from prayer will you not then abstain.\*24

Though originally the Arabic word Khamar meant only wine made from grapes, and it was also applied to the liquors made from wheat, barley, dried grapes, dates and honey. The Holy Prophet (S.A.W.S) applied the prohibition to all the intoxicants, and there are traditions that clearly support this, for instance: Narrated Aisha; Allah's Apostle was asked about Al-Bit: he said that all drinks that intoxicate are unlawful (to drink).\*25

Narrated Ibn Umar: "Umar stood up on the pulpit and said: Now then prohibition of alcoholic drinks have been revealed and those drinks are prepared from five things i.e. grapes, dates, honey, wheat or barley and an alcoholic drinks is that disturbs the mind.\*26

In this connection the Holy Prophet laid down the general principle: if a large dose of something is intoxicant, then its smallest dose also is unlawful, and if a cup of everything is intoxicant then a drop of it also is unlawful.\*27

So,there many other laws which have similarities between Islam and Buddhism.....

Now the question arises, was man fundamentally inclined towards bloodshed and oppression? Is shedding blood innate part of human nature? Has the man evolved present day civilized values and peaceful entity having undergone the period of barbarism and oppression? Is the man not provided with a system?Which can control the involving factors leading towards such abnormalities and could refine the conduct of man?

We believe that it is religion, which has played pivotal role in bringing man out from the life of animal state and barbarism, to this refined and civilized mode of peaceful

existence. It is a well-established fact that various religions from ancient to present time have introduced humanity with moral injunctions, the code of conduct, mutual respect and harmonious co-existence which have turned this world into a peaceful place and the man has acquired the status of civilized and cultured species.

The objective study of human history reveals that religion has always endeavoured to resist the speedy course of dissolution of human values and ever increasing uncertainty and translate it into still higher moral values and standards of ethics. It had been possible that man himself would have annihilated his own existence as being obsessed with the notion of oppression, barbarism, brutality and forcibly acquired possession, but the teachings of different religions sparked from all across the globe and enlightened the gloomy vistas of human mind and propagated the values of peace, fraternity, equality, sacrifice and sense of responsibility.

It is a well-established fact that all religious teachings condemned barbarism, oppression, brutality and exploitation of any sort and promoted peace, justice, brotherhood, equality and liberty. As we have comparatively analysed and evaluated in the teachings of two great religions i.e. Islam and Buddhism.

It is a well-known fact that the peace in the world gets disturbed when an individual or a group or part of the society faces danger and violence inflicted upon them by others. The most important thing for man is life itself; if life is in the state of danger, it leads to intensive violence and destruction of the world at large. For that, all the religions of the world give much importance to life

All ancient or modern religions of world like Buddhism, Zoroastrianism, Judaism, Christianity, Jainism or Islam emphasize and endeavour for the uplift of highest moral and ethical values to be instilled in human being to obtain discipline and good will in global perspective. Some of the religions strictly command for proper observance and submission to the laws whereas the other religions do not require strict allegiance so far the code or laws are concerned yet they nourish and treat human emotions and direct them for the general good of the society. Overall, all religions aim at moral and



ethical uplift of man, to install positivity in him and infuse the spirit of sacrifice, equality, affection, brotherhood and justice in mankind.

Thus, all these facts testify that all religions, with some differences of pattern, propagate the message of love, equality, brotherhood, justice and equity in the age of materialistic-accumulation, race and greed-ridden epoch where individual profits and benefit overwhelm collective cause and general welfare of mankind.

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