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CONTENTS

EDITORIAL NOTES

We are feeling great satisfaction that the Journal of Economic & Commerce (JEC) is successfully completing the seventh years of publication and successfully indexed our journal in QLI Database of INSTITUTE FOR STUDIES IN INDUSTRIAL DEVELOPMENT. We are also proud of our Editorial Board for the *Journal of Economics & Commerce* ***(JEC), Which*** includes academicians in the fields of Economics and Commerce, who have marks of records of accomplishment in their respective disciplines and also share a burden of referee as per required from time to time. Ever since its inaugural publication in 2010, ***JEC*** has emerged as one of the most respected publications, encompassing both Economics and Commerce. We intend to build on this tradition with our present issue.

Over the years, ***JEC*** has endowed with a platform for the progression of knowledge and the quest of academic excellence. Many prominent scholars from different part of India have published inspiring high quality articles analogous to those in leading journals in the field. Even as maintaining its focus on contemporary developments in the broad areas of Economics and Commerce, the journal is now also pledged to the spreading out of research frontiers further.

Within this orientation the present issue of the journal provides a set of fifteen articles, which includes some special articles and case studies on burning issues of economics and commerce. In addition to this we have also kept our commitment towards promotion of new contributors and young researchers in the present issue.

As the last words, we would like to tell our respected readers that our forthcoming issues intend to focus for theoretical, applied, and methodological work, with emphasis on development of critical issues with the use of empirical evidences, and the edifice policy measures. The Editors welcome submissions in this spirit on vital issues concerning our economy and commerce, **with a token of note that these will strictly be referred before acceptance.**

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INFLATION & ECONOMIC GROWTH IN INDIA

Diwakar Dwivedi* NarSingh**

ABSTARCT

Economic stability and the required infrastructure are among the preconditions for sustained growth. Among the ways inflation can affect growth, an important avenue is the effect of inflation on investment. Low or moderate inflation is an indicator of macroeconomic stability and creates an environment conducive for investment. Countries with low or moderate rates of inflation have higher growth rates over the long-term compared with countries with high inflation rates. However, low inflation does not constitute a sufficient condition for growth. The Indian experience appears to support the above view as In India inflation has generally been kept under control. Keeping this in view the present paper tries to analyze the extent of relationship between economic growth and inflation.

Key Words : *economic growth; inflation; linkages; pre-reform; post reform*

INFLATION AND ECONOMIC GROWTH

Economic Development in India has consisted of a huge amount of continuous and sustained investment. In order to finance such investment, the Government had to resort to heavy, taxation, extensive borrowing and deficit financing. The first two methods of financing economic development consisted mainly of transferring financial resources from general public to the government and were broadly non-inflationary though indirect taxes definitely could push up prices through fueling cost push factors. The last method, viz. deficit financing, i.e. financing extra expenditure through borrowing from reserve bank- led to increase in the supply of money with the general public and consequently increase in the demand for goods and services. At the same time, the supply of consumption goods did not increase proportionately with the increase in the demand for them.

As, some inflationary pressure is inevitable, in an emerging economy like India. It is, however, significant that it does not interrupt the steady and rising momentum of economic growth. From the Sixth Plan (pre reform period) onwards, the rate of economic growth rose steadily in India. By the end of the tenth five year plan (post reform period), the rate of growth touched 9 per cent. Such a rate of inflation with equivalent and more rises in demand is bound to exert pressure on level of prices. At the same time, the rate of increase in production of essential agricultural goods may not match the increase in demand. This gives impetus to inherent inflationary pressure in the Indian economy. Accordingly, the control of inflation and maintenance of relatively stable prices are crucial for a successful implementation of plan programmes. But control of inflation needs herculean efforts because of various internal and external conditions: a). internally, bottlenecks in various critical sectors like power coal and rail transport and stagnant agricultural production; and b). externally, higher inflationary international environment and unfavorable terms of trade and heavy adverse balance of payments.

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Necessarily, therefore the control of inflation was given top priority in all five year plans and needed all the ingenuity and imagination of the government.

RECENT INFLATIONARY PRESSURE IN INDIA

In the year 2008, the whole sale price index (CPI), touched the level of 240.7 during the Ist week of August, against 213.7 on August 2007 (1993-94=100) signaling 12.63 per cent rise in CPI during the year, highest witness during the last year ten years. It crossed the limit of 5 per cent comfort zone as specified by RBI. However gradually inflation has shown a declining trend as there has been a fall in the rate of inflation due to recessionary trend such that rate of inflation has reached near zero or even negative between September 2008 and February 2009.CPI declined from 241.5 in September 2008to 227.6 in February 2009. Subsequent months of the year 2009, once again witnessed rapid rise in the level of prices and the whole sale price index climbed to 246.5 in December 2009, up from 229.7 in December 2008. Since then we find inflation rate nearing 8-10 per cent annually. Between April 2010 and December 2012, we find rate of inflation indicated by CPI to be above 7 per cent and in September 2011, reaching even the magic figure of 10 per cent.

Table: 1 Different Price Indices

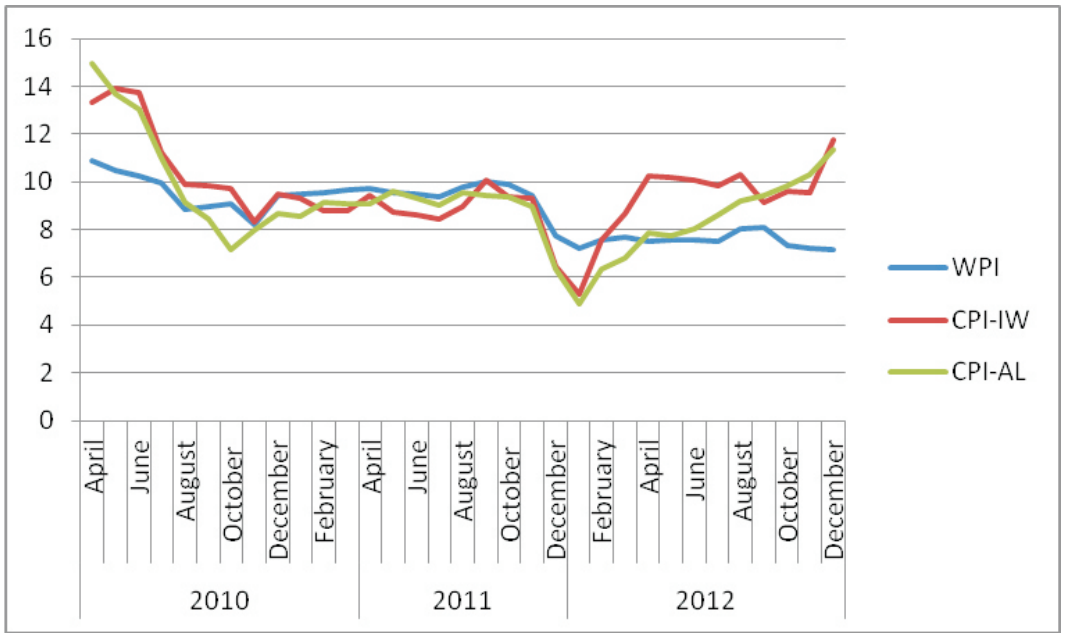
		CPI	CPI-IW	CPI-AL
2010	April	10.88	13.33	14.96
	May	10.48	13.91	13.68
	June	10.25	13.73	13.02
	July	9.98	11.25	11.02
	August	8.87	9.88	9.13
	September	8.98	9.82	8.43
	October	9.08	9.7	7.14
	November	8.2	8.33	7.99
	December	9.45	9.47	8.67
	January	9.47	9.3	8.55
	February	9.54	8.82	9.14
	March	9.68	8.82	9.11
2011	April	9.74	9.41	9.11
	May	9.56	8.72	9.63
	June	9.51	8.62	9.32
	July	9.36	8.43	9.03
	August	9.78	8.99	9.52
	September	10	10.06	9.43
	October	9.87	9.39	9.36
	November	9.46	9.34	8.95
	December	7.74	6.49	6.37
2012	January	7.23	5.32	4.92
	February	7.56	7.57	6.34
	March	7.69	8.65	6.84
	April	7.5	10.22	7.84
	May	7.55	10.16	7.77
	June	7.58	10.05	8.03
	July	7.52	9.84	8.61
	August	8.01	10.31	9.18
	September	8.07	9.14	9.43
	October	7.32	9.6	9.85
	November	7.24	9.55	10.31
	December	7.18	11.77	11.33

Source: Department of Industrial Policy Promotion, Central Statistical Organization IW: Industrial Workers, AL- Agricultural Laborers

Calculating the whole sale price index has always been a subject of criticism. Critics routinely raise their voice regarding flawed measurement of CPI. Considering this issue various parliamentary and other committees were formed by the government, although several recommendations were given by

the previous committees but government has always been hesitant to follow these recommendations. In 2005, a taskforce has been formed under the chair of Dr. Abhijeet Sen, member, Planning Commission recommended updating the base year; increasing the number of commodities and making changes in weightage given to different commodities. Such changes would give a higher rate of inflation and thus, the government is holding back its revision of CPI. The committee had recommended 2004-05 as the base year. Table. 1 exhibits the fact that a higher rate of inflation in terms of Consumer Price Index, for Industrial workers (IW) and Consumer Price Index terms for Agricultural Laborers (AL), as compared to whole sale price index (CPI). Same is also exhibited in Figure 1

Figure:1 Different Price Indices



Obviously there has been a gap between the perception of the government and that of common man, who is experiencing much greater retail inflation. While the government has been staring at a lower rate of inflation in terms of whole sale price index, the common man was experiencing a sharp rise in the wholesale prices of the food grains, especially rice, wheat and pulses, and besides that of vegetables and fruits. As the common man was experiencing double digit inflation according to one estimate, about another 10 crore people have been pushed below the line of poverty due to the impact of recent price Inflation.

METHODOLOGY

The certain useful statistical and econometric technique have been used in the present study for measuring inflation, Wholesale Price Index (CPI) and Consumer Price Index (CPI) have been used, whereas economic growth has been measured by Gross Domestic Product (GDP). In order To analyze the extent of relationship between economic growth and inflation and vice versa, the cointegration theory and two steps Error Correction Model (ECM) is used. Which was proposed by Engle-Granger (1987) two-step cointegration approach is used to check whether the dependent variable is

cointegrated with the independent variable; If both time series are integrated of the same order then it is possible to proceed with the estimation of the following cointegration regression:

$$G_t = {}_1 + \beta_1 I_t + \mu_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

$$I_t = {}_2 + \beta_2 G_t + e_t \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where G_t = economic growth rate, I_t = inflation rate at time t, and μ_t is standard residual term that measure the extent to which G_t and I_t are out of equilibrium. If μ_t and e_t are integration of order zero, I (0), then it can be said that both G_t and It are cointegrated no expectation of they would stay apart in the long term. Existence of cointegration suggests any available information on one variable could be used to predict the other.

According to the cointegration theory, there could be an existence of long-term relationship between two steps in a bivariate association only if they the variables are stationary or if each step equation is at least integrated of the same order (Campbell and Perron, 1991). That is, if two series are integrated of the same order, I (D) for D = 0, 1, 2… then the two steps are termed as; the two variables is meaningful and not spurious and on long-run information is lost. Thus, the first step is to test for the existence of stationarity between the variables; growth rate (G) and inflation rate (I).

First, the Dickey and Fuller (1979) test is run then the Augmented Dickey and Fuller (1981) test with and without a time trend. The latter allows for higher autocorrelation in residuals.

$$X_t = {}_1 + \beta\pi_1 X_{t-1} + \sum_{i=1} \rho_1 X_{t-i} + e_{1t} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

These tests are carried out for both variables by replacing X_t with G_t and I_t in equations (2) (for the DF-ADF tests)

Results of unit root tests are reported in tables 2 and 3. This suggests that both GDP (G) and inflation (I) bears zero order integration for India.

Table: 2 Average inflation and growth rates

	CPI Based Inflation Rate	Growth Rate
Mean	7.53	6.2
Standard Deviation	3.93	2.88

Time Duration: 1983-2010

Table: 3 DF & ADF UNIT ROOT TEST

DF & ADF UNIT ROOT TEST RESULTS TESTING VARIABLES		
VARIABLES	DF	ADF
I	6.22	-1.9
G	-4.47	-3.91

T*he variables are significant at 1%, 5% and 10% levels of significance* comparing critical t statistics as computed by MacKinnon (1991).

Next, we examine the cointegrating relationship between economic growth and inflation. First, cointegrating equations (1) and (2) are estimated.

Results of cointegration tests and estimates of the cointegrating parameters are reported in tables 4 and 5. They show that growth rates and inflation rates are cointegrated. The empirical evidence also implies that there is a long-run relationship between growth rates and inflation rates and the interesting finding, is that the relationship between inflation and growth rate is negative.

These findings have important policy implications –inflation is harmful rather than helpful to growth. Caution is needed since higher inflation may trigger inflationary spirals beyond a safe level as implied by larger inflation elasticities.

Table: 4 **Error correction model GDP on CPI**

		Regression Results DEPENDENT VARIABLE: d(GDP)	(1983-2010)	
VARIABLE	COEFF.	STD. ERROR	T-STATISTIC	PROBABILITY
d(GDP(-1)	-0.01577	0.197284	-0.059641	0.9101
d(CPI)	-0.51363	0.123933	-4.003681	0.005
d(CPI(-2)	-0.10265	0.09094	-1.297009	0.2323
d(CPI(-1)	0.21675	0.106145	1.945067	0.211
d(CPI(-3)	0.112759	0.092051	1.106721	0.2851
Res(-1)	-0.89886	0.242332	-3.119042	0.0039
C	0.193668	0.497071	0.401472	0.5911
R-Sq.0	0.696959	F-STATISTIC	14.21709	
SE REGRESSION	1.996799			
SS RESID.	139.2616			
D-W	2.21037			

Table: 5 **Error correction model for CPI on GDP**

		Regression Results DEPENDENT VARIABLE: d(CPI)	(1983-2010)	
VARIABLE	COEFF.	STD. ERROR	T-STATISTIC	PROBABILITY
d(GDP)	-0.39297	0.139883	-1.997861	0.0191
d(CPI(-1)	0.188429	0.135672	1.531655	0.1236
d(GDP(-2)	0.159971	0.185809	1.009931	0.2729
d(GDP(-3)	0.039561	0.179234	0.330096	0.66101
ResCPI(-1)	-0.82456	0.201235	4.1718	0.0003
C	-0.22487	0.5719	0.414761	0.5987
R-Sq.	0.677213		F-STATITIC	5.56601
SE REGRESSION	2.26786			
SS RESID.	221.336			
D-W	1.563541			

Tables 4.10 and 4.11 presents the estimated coefficients of the error correction model (long-term effects) and the lagged values of the two equations (short-term effects). The estimated coefficients of the error correction term $\rho_{1,}$ and ρ_2 are at 5 % level of significance from growth rates to inflation and vice versa with required (negative) signs. This exhibits the fact that if the two equations are stayed

away from equilibrium, as exhibited in the cointegrating analysis (1) and (2), growth rates will adjust to reduce the equilibrium error and vice versa.

CONCLUSION

The present paper has been influenced by the recent developments in the economic theory on the linkages between inflation and economic growth and the contemporary contradictory evidence put forth on the basis of the analysis on developed and developing economies. For this purpose cointegration and error correction models have been performed to empirically examine long-run and short-run phenomenon of the growth-inflation linkages in India using annual data. With an objective to examine whether any such relationship exist between the two. The analysis result brings forth the fact that the inflation and economic growth are negatively related. Second, inflation causes greater changes in growth rates than the effect of GDP growth rate on Inflation. These findings have important policy implications.

Moreover it concludes that that any rise in inflation with reference to the previous period adversely affects GDP growth rate. , hence the policy makers have to opt for the measures which always maintains downward pressure on inflation, without taking care of threshold level. Furthermore, the government should always remember that the common man and the decision makers do not welcome inflation that carries enormous effects on the consumption pattern, which subsequently affects the output demanded.

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LOCAL PUBLIC POLICY ABOUT ENVIRONMENT FOR SUPPORT AND INDUSTRIAL ESTATE PROJECT IN WEST THAILAND BORDER

Mr. Nattawut Makhumtup*

ABSTRACT

The world is changing rapidly due to the fierce competitions around the world. The changes are obvious and dynamics especially in terms of the economic growth. Over the past fifty years the world has increased in economic growth but it is not a sustainable change. Despite the high economic improvement, the environment is deteriorating tremendously. The establishment of mega project to support economic growth has significant impact on the resource management. Resource management is seen as conflict between the developers who are from private and public sectors and the civil citizens who are affected by the changes in the environment due to those mega projects. Government leadership local, key to motivating and driving the necessary societal change, is currently lacking in many countries. The governments from popular vote by citizen in own local can solve the problem because they have a power lawful for tools management in own local. It's a public policy for environment. However the public policy for environment must have to pay attention from government leaders local.

Key Words : *Local, Public policy, Dawei deep seaport and industrial estate project, Environment.*

INTRODUCTION

Dawei deep seaport and industrial estate project is one of the largest project the western region of Thailand bridging logistic route between Thailand and Myanmar. The project will pass over the Phu Nam Ron village in Kanchanaburi province, a community at the border between Thailand and Myanmar. Investors are developing basic infrastructure in the areas which affect the local environment. The decision for such development need decision making and participation from the community in relating to assessing the impact of developers of infrastructure for the mega projects. The community is aware of the possible damages created by the development and would like to protect its environment. Therefore, local initiative in protecting the natural resources is the heart of writing this thesis. The community would like to independently manage their community without waiting for the government aid. The purpose of this research is the proof that local initiative is the promising road for sustainable development in natural resources and environment. Moreover this research aims to create effective guideline for working coordination between the community and affiliated institutions.

Dawei deep seaport and industrial estate project is constructed to create logistic route linking Southeast Asia region. The fast establishment of the mega project has led to fast paced development in

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Ban Phu Nam Ron in Kanchanaburi province which is located along the Thai-Myanmmar border. The objectives of this my paper is to 1) study the possible impact of the Dawei deep seaport and industrial project on the environment; 2) study the perception of the local community in preparing for the impact of the mega project on the environment; 3) to develop the guideline for environmental protection for the local community. The study applied qualitative method of focus group in collecting the data. The result has shown that the Dawei deep seaport and industrial estate project does have impact on the natural resources and the environment in the local community. The guidelines derived from the participatory focus group are composed of the following three policies. The first policy is to enhance the management capacity of the government officers at the local administration. The second policy is to promote participatory action within the local community in order to enhance their strong will in protecting the environment. The third policy is to create participatory effort among the local government, the civil society, and the private sector in managing the environment. The three policies will allow the community to adapt sustainably to the changes of their surrounding due to the Dawei seaport and industrial estate project while at the same time conserve their environment.

OBJECTIVES

1. Study the impact of Dawei deep seaport and industrial estate project and transborder corridor link on the environment at ban phunamron village Kanchanaburi province
2. Study the community opinions in preparing for the environmental impact of Dawei deep seaport and industrial estate project and transborder corridor link at ban phunamron village Kanchanaburi province
3. Develop community policy recommendation for natural resources management and environmental protection which is caused by Dawei deep seaport and industrial estate project and transborder corridor link

METHODOLOGY

Objective of this my paper is to study community opinion regarding the impact of the mega project on the environment. Stakeholders include citizen in the village, leaders, government officers, and private sector involved with the investment.

This is a write paper which study guideline for environmental mitigation from the Dawei deep seaport mega project. The samples are selected using purposive sampling and snow ball or chain sampling. The research design includes group discussion and in depth interview with the selected samples. Interview and discussion questions are conducted according to the theories and conceptual framework. Research techniques include content analysis from the primary data collection of interview and group discussion.

RESULT/DISCUSSION

Impact of Dawei deep seaport and industrial estate project and transborder corridor link on the environment at ban phunamron village Kanchanaburi province.

My paper has shown that there are 10 factors that cause environmental degradation in Ban Phu Nam Ron Village in Kanchanaburi province. The first impact is on city planning related to natural resources conservation. The second factor is the impact on the local government budget. The local government has to use the budget in managing resources more than it used to. Third factor is the impact on project planning by the community. Public participations increase as there are more problems in the area. The forth impact is the increase in garbage and waste. There are increasing number of temporary population due to the construction and it's harder to manage wastes that occur in the area. The fifth factor is the increase of transportation in the community. The traffic digestion causes air pollutions by

traveling through dirt road. Moreover there is increasing concern for transporting toxic wastes into the area. The seventh factor is the result of soil degradation due to the increase in construction. The eighth reason is the impact of private sectors establishing construction in the area. The result is increasing forest cut in the natural resources conservation. The next impact is on the disappearance of traditional occupation.

Community opinions in preparing for the environmental impact of Dawei deep seaport and industrial estate project and transborder corridor link at ban phunamron village Kanchanaburi province.

From focus group, the community has developed guideline for environmental management along three dimensions as follows. The first dimension is to collaborate with the local government in solving two areas. The first area is to ask for public participation in city planning that is related to natural resources conservation. Therefore the community will have to emphasize on the long term vision for community growth. The second area is to ask for preparedness related to local budget within the community. The local government assumed that higher budget is needed for managing the resources. Therefore the community must set guideline in reforming the tax system in order to increase in its revenue. The guideline includes surveying and registering businesseswithin the area. The database will be helpful in gaining taxes and use the budget for environmental purposes.

The second dimension is concerned with the adaptation of the community. The result has shown that there are two areas where the community needs to adapt to the new changes. The first factor deals with the internal management where the community needs to collaborate in town meetings for decision making. Local initiatives through public meeting will ensure for sustained solutions for the affected people within the community. The second internal factor is to prepare for the possible problems of soil degradation. Since soil is considered as the valuable resources for the community, it is important for the community to protect its input from being exploited by the private and the public sector. Therefore the community must start a village watch in order to increase awareness. The second factor deals with the external environment that the community needs to adapt to. The external factors involve for areas of preparing for the increase in waste and garbage, preparing for the increase in transportation, preparing for the damage that could happen to the water resources, and preparing for the loss of traditional occupation in the community.

The third dimension involves asking for collaboration with the private and public sector within the area. The first preparation deals with the collaboration of the community the public sector. Thecommunity will need to work with the government in the issue related with property rights, and the rights for the community to independently manage their own natural resources. The reasoning for self-management stems from the conflicts that occurred in the previous infrastructure construction in other provinces of Thailand. Therefore there is the need to create community power for dealing with the conflict of interest within the area. The second preparation deals with the collaboration with the private sector. The private sectors have roles in making the causation for the natural resources depreciation. Therefore the community need to start a forum with private sector in setting guidelines in creating less impact on the environment.

In order to develop a feasible policy recommendation, the research has analyzed the strength and limitation of the community in order to formulate possible local community participation in the future. SWOT analysis was conducted to analyze the strength and weakness of the citizens in the area and the community itself.

The strengths of household include the deep understanding of the households regarding the impact of the mega project on the natural resources and environment. Therefore, they are motivated to participate for the community in solving the problem. Moreover, they are capable of setting up a new

occupation in the area like ecotourism for each of the household. The strength of the community includes leadership with objective vision and therefore can be the center for initiating any changes of public meetings. In terms of weakness, the household lacks the knowledge in setting up a sustainable occupation which also helps preserve the environment. Moreover, they lack the budget and inputs in setting up tourism attraction. The weakness for the community also related with the lack of budget and knowledge for managing the natural resources. They need more understanding on how to set up a conservative tourism or how to manage recycle products and waste management in the area.

Community policy recommendation for natural resources management and environmental protection which is caused by Dawei deep seaport and industrial estate project and transborder corridor link.

CONCLUSION

Community policy recommendations were developed according to the focus group discussion. There are three policies related to protecting natural resources and environment from the mega project in the village as follows. The first policy is to collaborate with the local government in managing city planning and budgeting. The first policy is to create capacity for the local government to implement the natural resources management. The first step is to work with the civil engineering in the local government in planning the village structure for natural resources conservation. Moreover, the community will engage more actively in making decision of restructuring the tax system for better revenue collection. The second policy involves providing facilities in public participation in order to empower the community. Public participation is essential in maneuvering the projects within the concern of natural resources and environment. Public hearing and forum will enable the community to strengthen forces in protecting the natural resources, including soil and water. The third policy involves setting regulations and standard between the public and private sectors. The regulations involve the issue of setting property rights and the rights in construction in the area. Moreover the regulations will set protection rights for conserving the environment within the area.

RECOMMENDATION

The recommendation for this my paper is to formulate the policies in the community as mention in section 6.3 above. In order to establish these policies, the local government needs to build confidence for the community by collaborate with the villagers in implementing the policy related with city planning objectively. In terms of public participation, the local government should follow the Environment Decree (B.E 2535) in order to allow the citizen to check for transparency and information when it is necessary. In terms of collaboration with private and public sectors, the community should work in order to decrease possible conflicts and resistance which could exist in the future.

RECOMMENDATION FOR FUTURE JOURNAL

Recommendations for further my paper include understanding the impact of the mega project in various points of views. Moreover, each area of studies have unique setting and culture which needs to scrutinize in detail how the establishment of the megaprojects could have the effects on the community. The first recommendation is to study the preparation for the impact of the construction on the environment before implementing the projects. Moreover each of the areas are different, therefore preparation must be made exclusively for each of the area. The second recommendation is to consider the impact of the project on the community on the other side of the border. Since Thailand is entering the ASEAN Economic Community (AEC) in 2015, there is a need to conduct research in the neighboring countries in order to see if the impact from the bridging country could have impact on the villages. The third recommendation is to study the changes in the economic, social, political, and

cultural dimensions that could occur because of the movement of the megaproject construction. Lastly, in the future, there should be collaboration between Thailand and neighboring countries in studying the impact of the projects together.

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CORPORATE SOCIAL RESPONSIBILITY- OPPORTUNITIES AND CHALLENGES IN INDIAN FIRMS

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ABSTARCT

Corporate Social Responsibility plays vital role in winning the customer's confidence that will help growing the business. Many organizations actively conduct campaigns to create awareness among corporate, civic bodies, and government bodies about the importance of corporate social responsibility. Corporate social responsibility is a process in which all companies come together as one and take part in the welfare of the society. It is often referred to as business responsibility and an organization's action on environmental, ethical, social and economic issues. New legal mandates were imposed to ensure equal employment opportunities, product safety, worker safety, and environmental protection. Companies with high CSR standards are able to demonstrate their responsibilities to the stock holders, employees, customers, and the general public. The paper discusses the role of corporate social responsibility. Paper also underlines the major issues/challenges faced by Indian firms, and suggests remedial measures for effective implementation of CSR initiatives.

Keywords : *Corporate Social Responsibility, Issues, Challenges.*

INTRODUCTION

Today Businesses are an integral part of the society. Michael Sabia, President and Chief Executive Officer of BCE Inc., has said, "Corporations are also social institutions. The role of business, according to this model, is to create value for its shareholders and also creates value for society, manifesting itself as a win-win proposition. Corporate success during these days is highly based on continued good relations with a wide range of individuals, groups and institutions. The term corporate responsibility has been captioned under many names including corporate citizenship, social responsibility.

CSR as described by Lord Holme and Richard Watts in 'Making Good Business Sense'. Society began to expect business to voluntarily participate in solving societal problems whether they had caused those problems or not. Report on Business Magazine recently noted that "many business leaders now believe that doing good for others means doing good for shareholders as well."

According to the Indian Corporate, Sustainable development implies optimizing financial position while not depleting social and environmental aspects and CSR implies supporting issues related to children, women and environment. It has become progressively projected in the Indian corporate setting because organizations have recognized that besides growing their businesses, it is also important to shape responsible and supportable relationships with the community at large.

NEED OF CORPORATE SOCIAL RESPONSIBILITY

Corporate Social Responsibility main aim is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees,

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communities, stakeholders and all other members of the public spare. There are many numbers of business models developed in order to achieve CSR objectives. Being a good corporate citizen the companies have to be internally well governed and externally responsible. In other words, CSR and corporate governance are two sides of the same coin.

The following are some of the drivers pushing business towards Corporate Social Responsibility.

1 **The Shrinking Role of Government:** Shrinking government resources, coupled with a distrust of regulations, has led to the exploration of voluntary and non-regulatory initiatives instead.

2 **Demands for Greater Disclosure** including customers, suppliers, employees, communities, investors, and activist organizations.

3 **Increased Customer Interest:** In a recent survey by Environics International, more than one in five consumers reported having either rewarded or punished companies based on their perceived social performance.

4 Growing Investor Pressure: The Social Investment Forum reports that in the US in 1999, there was more than $2 trillion worth of assets invested in portfolios that used screens linked to the environment and social responsibility. A separate survey by Environics International revealed that more than a quarter of share-owning Americans took into account ethical considerations when buying and selling stocks.

5 **Competitive Labour Markets:** Employees are increasingly looking beyond paychecks and benefits, and seeking out employers whose philosophies and operating practices match their own principles. In order to hire and retain skilled employees, companies are being forced to improve working conditions.

6 **Supplier Relations:** As stakeholders are becoming increasingly interested in business affairs, many companies are taking steps to ensure that their partners conduct themselves in a socially responsible manner are introducing codes of conduct for their suppliers, to ensure that other companies' policies or practices do not tarnish their reputation.

OPPORTUNITIES FOR STAKEHOLDERS

Corporate social responsibility (CSR) is an important function to accelerate the process of overall development and nation-building. India, the second most populous country in the world and home to the largest number of people in need of basic amenities, needs more intensive efforts as part of CSR covering the length and breadth of the country.Because of the growing size and power of multinational corporate houses, bond rating agencies and investment funds are exerting increasing influence. Some of the positive outcomes that can arise when businesses adopt a policy of social responsibility include:

Benefits for Corporate:

- Improved financial performance;
- Lower operating costs;
- Enhanced brand image and reputation;
- Increased sales and customer loyalty;
- Greater productivity and quality;
- More ability to attract and retain employees;
- Reduced regulatory oversight;
- Access to capital;
- Workforce diversity;
- Product safety and decreased liability

Benefits to the Community and the General Public:

- Charitable contributions
- Employee volunteer programs
- Corporate involvement in community education, employment and homelessness programs
- Product safety and quality

Environmental Benefits:

- Greater material recyclability;
- Better product durability and functionality;
- Greater use of renewable resources;
- Integration of environmental management tools into business plans, including life-cycle assessment and costing, environmental management standards, and eco-labeling.

A growing trend in large multinational corporations is the establishment of special committees within the board of directors to oversee CSR and sustainable business practices. There are many positive aspect of how companies have managed their CSR strategies well and are reaping the benefits.

CHALLENGES FOR INDIAN CORPORATE

The concept of corporate social responsibility is now firmly rooted on the global business agenda. But in order to move from theory to concrete action, many obstacles need to be overcome. A key challenge facing business is the need for more reliable indicators of progress in the field of CSR, along with the dissemination of CSR strategies. Transparency and dialogue can help to make a business appear more trustworthy, and push up the standards of other organizations at the same time.

A lack of understanding, inadequately trained personnel, non availability of authentic data and specific information on the kinds of CSR activities, coverage, policy etc. further adds to the reach and effectiveness of CSR programmes. But the situation is changing.

In his widely-cited book entitled Misguided Virtue: False Notions of Corporate Social Responsibility (2001) David Henderson argued forcefully against the way in which CSR broke from traditional corporate value-setting. He questioned the "lofty" and sometimes "unrealistic expectations" in CSR. Some argue that CSR is merely window–dressing, or an attempt to pre-empt the role of governments as a watchdog over powerful multinational corporations.

The Times survey pointed few of the following challenges/responses from participating organisations.

Lack of community participation in CSR activities

Need to build local capacities:

Issues of transparency:

Non-availability of well organised non-governmental organisations:

Visibility factor:

Narrow perception towards CSR initiatives:

Non-availability of clear CSR guidelines:

Lack of consensus on implementing CSR issues:

India's tryst with destiny heralded more than 60 years ago, is yet to be fulfilled. For all the progress that has undeniably been made, it is as if time has stood still in India's villages. The corporate India based in and around cities has been flourishing and marching ahead whereas rural India still remains desperately poor. In this connection the corporate India can play a key role in bridging the gap of urban and rural India.

The success of CSR lies in practicing it as a core part of a company's development strategy. It is important for the corporate sector to identify, promote and implement successful policies and practices that achieve triple bottom line results. It is a joint and shared responsibility of civil society, activist groups, Government and corporate sector to create appropriate means and avenues for the marginalized and bring them to the mainstream.

The CSR survey revealed, not surprisingly, those organisations targeted most of their activities close to home — providing services for people who live in villages, towns, and districts near where the organisation operates. Education, health, and the environment are the top priorities. More than likely, these priorities will continue.

To create a win-win situation, it is essential for all of us to work together to alleviate abject poverty and improve miserable living conditions that exist in rural India.

SUGGESTIONS

In order to meet the expectations of all our stakeholders, we must surround ourselves with all components of business and society. Corporate competitiveness is partly based on ability to adapt products, services and management to the challenges of constantly changing societies. To do this, we need to identify, support and develop the best CSR initiatives.

In order to crystal gaze the future of CSR in India and take time bound steps to mainstream it, few recommendations are suggested.

1. To create awareness about CSR amongst the general public to make CSR initiatives more effective.
2. CSR as a subject or discipline should be made compulsory at B-schools, in colleges and universities to sensitise students about social and development issues.
3. To develop partnerships between all stakeholders including the private sector, employees, local communities, the Government and society.
4. Extend CSR initiatives/activities to small, medium and large corporate houses.
5. CSR initiatives and programmes are taken up in urban areas and localities.
6. Corporate houses and NGOs should actively involved in pooling their resources and building synergies to implement best CSR practices to scale up projects and innovate new ones to reach out to more beneficiaries.
7. Government should recognizing and reward corporate houses/NGOs and their partners'in effective implementing projects for the poor and the underprivileged.
8. Partnerships between the Government and other interest groups have been well defined in policy documents at all levels and to develop common strategies to translate policy pronouncements into demonstrable action agendas.
9. Lay more focus on education, health, environment protection, livelihood, women empowerment, disaster management, green marketing, ethical practices, etc., and other social and community relevance issues.
10. To underline the Government's policy documents to ensure public co-operation'in planning process of CSR initiatives.
11. Innovative models are to be popularize among corporate in these areas
12. In order to push the development agenda in a mission mode, it is recommended that realistic and operational models are jointly explored and addressed.
13. A growing number of corporate feel that CSR is not just another form of indirect expense but is important for protecting the goodwill and reputation, defending attacks and increasing business competitiveness.

In this context, Indu Jain, Chairperson, The Times of India Group New Delhi rightly opined Corporate Social Responsibility Practices in India sets a realistic agenda of grassroots development through alliances and partnerships with sustainable development approaches. At the heart of solution lies intrinsic coming together of all stakeholders in shaping up a distinct route for an equitable and just social order...." which eventually paves way for harmonious convergence of innovative ideas with appropriate execution methodology.

CONCLUSION

There is evidence that the ethical conduct of companies exerts a growing influence on the stakeholder's decisions. Simply launching charitable trusts and foundations when the workplace environment is vitiated does not serve the company's purpose. Presently in India, it is hard for one sole entity to bring about change, as the gauge is vast. Large enterprises can no longer continue to focus only on economic performance, without paying attention to what is happening around them. Hence, the overriding conclusion is that companies need to be mature and realize that they must practice socially conscious policies.

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A COMPARATIVE STUDY OF VERTICAL AND HORIZONTAL DEVOLUTION OF XIIITH AND XIVTH FINANCE COMMISSION

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ABSTARCT

The Centre and State financial relations are always debatable regarding resource supremacy of Centre over the states. However expenditure on state services is increasing due to people's high expectations from the governments. This type of financial Imbalances are being look after time to time by the duly constituted Finance Commissions in their recommendations. In this respect 13th and 14th Finance Commissions have been given their recommendations to increase States' share in divisible Central taxes and duties. Therefore, the present paper makes a comparative study of these two Finance Commissions recommendations on vertical and horizontal devolution to bridge the resource gap between the Centre and states by promoting cooperative federalism.

Keywords : *Finance Commission, Horizontal and Vertical devolution.*

INTRODUCTION

India has a federal structure and the Constitution makes a clear division of fiscal powers between the Union and the State Governments. However, the residuary powers belong to the Union. Besides, the framers of Constitution were aware that the allocation of resources did not match enough for the assigned functions and the resource gap in the states might widen over the years. Therefore, they made provision for the devolution of financial resources from the Centre to the States. In this regard, a Finance Commission is appointed by the President of India in every five years or earlier under the Article 280 of the Constitution.

Under the federal system of India, there are three main methods are used to restore the resource balance between the Centre and the States i.e. tax sharing, loans and grants-in-aid. First, the tax sharing refers to the mode of tax collection by the Central Government and the tax proceeds are shared with the state governments on the basis of recommendation made by the Finance Commission appointed by President periodically. Second; if a state is interested in executing a particular project or find shortage of its revenue due to some natural disorder they can raised loans from Central government. Third, the grants are given as a help to each state governments to meet their requirement. The Central government gives grants to the state governments because they have deficient resources in comparison with their services. The Central government may also use its grants to bring some kind of uniformity and balance between functions and resources among the various states.

There is a problem in vertical and horizontal fiscal imbalances in India because central government has more elastic and lucrative sources in compare to state governments and all state governments are not in equal financial position and development level. So, it is important that how to remove vertical and horizontal fiscal imbalances. Vertical equity refers to unequal treatment of unequals and

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horizontal equity means equal treatment of equals. In this context, one of the important purposes of tax sharing and federal transfer of resources is to remove such inter-state horizontal and vertical imbalances.

The expenditure programmes of the state and local governments are continuous increasing due to increasing compulsions of welfare works like – education, public health, social welfare etc. On the other hand, most of the revenue sources under the control of state governments are of inelastic nature so that the growing expenditure cannot be met from little resources. However, the central source of revenue being much elastic, the central government possesses surplus resources. Such resource gaps between the centre and states are referred to as vertical fiscal imbalance. This vertical imbalance can be reduce by tax sharing between the centre and state governments. Besides, the remaining gap is to be filled by Central grants-in-aid which are not only a balancing factor but also a device of removing disparities in the standard of social services in different states. These grants are either conditional or unconditional or may be matching or unmatching.

The horizontal fiscal equity in a federal set-up seeks to achieve inter-personal equality in tax payment among the different states. If two persons in two states have equal income position, the tax liability of each on account of both federal and state taxes should be equal. This equity can be realized through equalization of 'fiscal residue'. The 'fiscal residue' refers to net benefits from tax-expenditure programmes i.e. benefits from expenditure minus disutility from tax payment. Thus, the fiscal residue is derived from budget operations of the government. The horizontal fiscal balance achieved through inter-state transfer of resources. Such fiscal transfers will equalize per capita income in different states. Thus, only under such situation, either equal amount of per capita tax or per capita public expenditure can bring about inter-personal fiscal equity. Therefore, horizontal equity can be increased through transfer of resources from richer to poorer states.

The general perception about the awards of Finance Commissions is that they estimate revenue gaps of states and device measures for gap filling. This type of complain may not good for the recommendations of 7th and 8th Finance commissions because its award was not simply gap filling rather it attempted to achieve the twin objectives of a more equal relationship between the centre and the states and interstate equity. This trend was reversed by the successive Finance Commission and sizable amount of grants-in-aid is given to cover revenue deficit of the states by the 9th to 11th Finance Commission. However, the 10th Finance Commission formulated an alternative scheme of vertical sharing between the Centre and States. The XIth Finance Commission recommended 28 percent share of centre taxes and duties to the states and further recommended additional 1.5 percent share in Union taxes and duties to the states separately. The XIIthFinance Commission has fixed share of taxes to states in Central taxes and duties at 30.5 percent while overall transfers to states in Central gross revenue has fixed at 38 percent.

Comparative analysis of XIIIth&XIVth Finance Commission's Recommendations :

The XIIIth Finance Commission was constituted under the chairmanship of Dr. Vijay Kelkar to make its recommendation for the period of 2010 to 2015. The Commission was asked to make recommendations relating to tax devolution between the centre and states, grants-in-aid to states and measures needed to augment the consolidated trend of a state to supplement the resources of the Panchayats and Municipalities. The Commission will also review the state of finances of the Union and states regarding the operation of the State Debt consolidation and Relief Facility during 2005-2010. In addition, the Commission will also review the road map for fiscal adjustments and suggest tomaintain the gains of fiscal consolidation during the period of 2010-2015.

The XIII[th] Finance Commission has noted that the buoyancy of centre taxes has been higher than those of the states. The commission has recommended that the share of states in total central tax revenue to be increased, so that the revenue of centre and state taxes equalises in post devolution stage. On the other hand, the Commission has also noted that the states have higher 'fixed costs' than the Centre as reflected in their higher share of committed expenditure in total non-plan expenditure relative to the Centre. In addition, the borrowing powers of the states are restricted and they have to bear additional fiscal burden of Sixth Central Pay Commission for the period of 2010-2015. The Commission has also observed that the poor states get less subsidies on food, fertilizers and petroleum as these associated with efficiency of administrative arrangements and fiscal capacity to provide additional subsidies. Therefore, theXIII[th] Finance Commission recommended 32 percent share to the states in net proceeds of sharable central taxes to achieve vertical equity. But indicative ceiling on all revenue account transfer from the Centre to States raised at 39.5 percent by the 13[th] Finance Commission.

The approach of XIII[th] Finance Commission towards horizontal devolution is to achieve equalisation instead of equity. The Commission believed that efficiency and fiscal equalization both are feasible by using available instruments i.e. devolution and grants. The Commission adopted the following criteria and weights for determination of state's share in Central sharable taxes to bring horizontal equalisation.

Table 1 : Criteria and Weights for Tax Devolution of XIIth Finance Commission

S. No.	Criteria	Weight
1.	Population	25.0 percent
2.	Area	10.0 percent
3.	Fiscal Capacity distance	47.5 percent
4.	Fiscal discipline	17.5 percent

Source : Government of India, Report of the XIII[th] Finance Commission (2010-15) p. 122

The table-1 shows that the maximum weightage is given to Fiscal Capacity distance criterion by the XIII[th] F.C. and Fiscal distance is obtained for each state by the distance of its estimated per capita revenue from the estimated per capita revenue of Haryana which is the second highest state in the per capita income ranking after Goa. However, Rs.100 per capita revenue entitlement has been assigned for both states Haryana and Goa. These per capita entitlements are then multiplied by the respective population data of 1971 Census of each state to arrive at the share of each state in tax devolution.

The XIII[th] F.C. has allocated states share in the Central taxes and duties by using above formula and their respective shares are mentioned in the table 2.

Table 2 : Share of States in Central Taxes & Duties and Grants-in-aid under XIIIth Finance Commission

S. No.	States	Share of Central taxes & duties (Rs. in crores)	% share of Central taxes & duties	Share of Grants in aid (Rs. in crores)	% share of grants-in-aid	Total Transfer (Rs. in crores)	% of total transfer
1	Andhra Pradesh	100616	6.938	13532.3	5.233	114148.3	6.688
2	Arunachal Pradesh	4755.6	0.328	4348.2	1.682	9103.8	0.533
3	Assam	52620.6	3.634	5215.1	2.017	57835.7	3.389
4	Bihar	158341.2	10.917	14602.8	5.647	172944	10.133
5	Chhatisgarh	35825.2	2.474	6175.5	2.388	42000.7	2.461
6	Goa	3857.8	0.266	516.2	0.2	4374	0.256
7	Gujarat	44107.1	3.041	9682.9	3.745	53790	3.152
8	Haryana	15199.5	1.05	4270.8	1.652	19470.3	1.141
9	Himachal Pradesh	11327.3	0.782	10364.4	4.008	21691.7	1.271
10	Jammu-Kashmir	20182.7	1.394	20255.9	7.833	40438.6	2.369
11	Jharkhand	40640.3	2.806	7238.4	2.799	47878.7	2.805
12	Karnataka	62774.9	4.335	11601.4	4.487	74376.3	4.358
13	Kerala	33954.3	2.345	6371.5	2.464	40325.8	2.363
14	Madhya Pradesh	103268.9	7.131	13324.5	5.153	116593.4	6.832
15	Maharashtra	75406.9	5.207	16302.8	6.305	91709.7	5.374
16	Manipur	6541.2	0.452	7026.3	2.717	13567.5	0.795
17	Meghalaya	5918.5	0.409	3923.9	1.517	9842.4	0.577
18	Mizoram	3901.3	0.269	4904	1.897	8805.3	0.516
19	Nagaland	4552.9	0.314	9191.3	3.555	13744.2	0.805
20	Orissa	69316.1	4.787	9658.8	3.735	78974.9	4.627
21	Punjab	20146.4	1.391	5540.3	2.143	25686.7	1.505
22	Rajasthan	84892.2	5.862	12949.8	5.008	97842	5.733
23	Sikkim	3466.8	0.239	1058.8	0.409	4525.6	0.265
24	Tamil Nadu	72070.4	4.977	11366.9	4.396	83437.3	4.889
25	Tripura	7411.5	0.512	5716.1	2.211	13127.6	0.769
26	Uttarpradesh	295397.1	19.708	26742.9	10.342	312140	18.289
27	Uttarakhand	16245.1	1.122	4063	1.571	20308.1	1.19
28	West Bengal	105358.6	7.276	12638.7	4.888	117997.3	6.703
		1458096.0	**100**	**258581.0**	**100**	**1706679.9**	**100**

Source : Report of the XIIIth Finance Commission (Dutt and Sundharam, Indian Economy, 69[th] ed., S. Chand Publishing Co. Pvt. Ltd., New Delhi, 2014, p. 1017)

The XIII[th] Finance Commission has recommended 32 percent share of States in net proceeds of shareable Central taxes for the award period. According to the formula that has accepted by the Finance Commission for horizontal devolution, the highest percentage share in Central taxes and duties were goes to Uttar Pradesh (i.e. 19.708 percent) followed by Bihar, West Bengal, Madhya Pradesh and Andhra Pradesh respectively while lowest share was allocated to the states like Sikkim (0.239 percent), Goa, Mizoram, Nagaland and Arunachal Pradesh respectively. Similarly, the percentage share of States in grants-in-aid were the highest in Uttar Pradesh followed by Jammu-Kashmir, Maharashtra, Bihar and Andhra Pradesh whereas the lowest share were allocated to the Goa (0.2 percent), Sikkim, Meghalaya, Uttarakhand and Haryana respectively. As far as the percentage of total transfer (i.e. taxes and grants-in-aid) is concerned, Uttar Pradesh again at the top followed by Bihar, West Bengal, Madhya Pradesh while the lowest percentage states were Goa (0.256 percent), Sikkim, Mizoram, Arunachal Pradesh and Meghalaya respectively.

Another important component of Finance Commission transfers are grants-in-aid and it has varied from earlier Commission to this Commission. The XIII[th]F.C. has recommended several categories of grants-in-aid amounting in aggregate to Rs.318581 crore that constitutes 18.03 percent of total transfers as shown in table-3.

Table 3 : Grants-in-aid to States by XIII[th] Finance Commission

S. No.	Item	Amount (` Crore)
1.	Local Bodies	87519
2.	Disaster Relief (including capacity building)	26373
3.	Post-devolution non-Plan revenue deficit	51800
4.	Performance incentive	1500
5.	Elementary education	24068
6.	Environment (i) Protection of forest (` 5000) (ii) Renewable energy (` 5000) (iii) Water sector management (` 5000)	15000
7.	Improving outcomes (i) Reduction in infant mortality rate (` 5000) (ii) Improvement in supply of justice (` 5000) (iii) Incentive for issuing UIDs (` 2989) (iv) District Innovation Fund (` 616) (v) Improvement of statistical systems at state and district level. (` 616) (vi) Employee and pension data base (` 225)	14446
8.	Maintenance of roads and bridges	19930
9.	State Specific	27945
10.	Implementation of model G.S.T.	50000
Total		**318581**

Source : Report of XIII[th] F.C. (2010-15), p. 204.

This is clear from the table-3 that the XIII[th] F.C. has recommended the lowest ever Non-Plan Revenue Deficit grant to states equals to 16.26 percent of total grants. The Commission has also considered two new terms of reference and has recommended grants for them worth Rs.14446 crore for improving outcomes and Rs.15000 crore for management of ecology, environment and climate change consistent with sustainable development. The Commission has also recommended grants for local bodies for the period of 2010-15 worth Rs.87519 crore and has recommended the criteria and weights as given in table-4.

Table 4 :Criteria and Weights for Grants to Local Bodies by XIII[th] Finance Commission (in Percent)

S. No.	Item	PRIs	ULBs
1.	Population	50	50
2.	Area	10	10
3.	Distance from highest per capita sectoral income	10	20
4.	Index of devolution	15	15
5.	SC/ST proportion in the population	10	–
6.	FC Local body grants utilization index	5	5
Total		100	100

Source : Report of XIII[th] F.C. (2010-15), p. 177

The above table 4 shows that the weights allocated for distance from highest per capita sectoral income is double for ULBs (i.e. 20 percent) in compare to PRIs (i.e. 10 percent) but the weightage of 10 percent is given only to PRIs for SC/ST proportion in the population. However, rest of the allocated weights is the same for both ULBs and PRI

The XIVth Finance Commission was constituted under the chairmanship of Dr.Y.V.Reddy to give recommendation for the period of 2015-2020 and it recommended 42 percent share of central taxes & duties to the States.

The XIV[th] F.C. has adopted new criterion of forest cover for horizontal devolution. Similarly, it has also considered the latest population estimates of 2011 census to cover demographic changes since 1971 census. As far as income criterion is concerned, the F.C. has provided Goa, Sikkim and Haryana. The same distance as obtained for the State with the smallest distance of income with Haryana. Further, the Finance Commission has given 15 percent weight to area of the State, but the 2 percent floor limit is fixed for smaller States. The following criteria and weights are adopted by the XIV[th] F.C. for horizontal devolution to the States.

Table 5 : Criteria and Weights for the Devolution of XIVth Finance Commission

S.No.	Criteria	Weights (in percent)
1.	Population (1971)	17.5
2.	Demographic changes (2011)	10.0
3.	Income Distance	50.0
4.	Area	15.0
5.	Forest cover	7.5

Source : Report of XIV[th] F.C. (2015-20), p. 95.

The XIV[th] Finance Commission recommended that the share of States in net proceeds of sharable Central taxes is 42 percent for vertical devolution which is 10 percent higher than the previous commission. This increased divisible pool has significant impact on the States like Uttar Pradesh, Bihar, Madhya Pradesh, West Bengal and United Andhra Pradesh. On the other hand, Arunachal Pradesh, Chhatisgarh, Madhya Pradesh, Karnataka and Jharkhand are the major gainers due to change in the horizontal devolution formula, especially the inclusion of a new criterion of forest cover with the weight of 7.5 percent. As far as grants-in-aid is concerned, there is increase in the amount around 10 percent point partly due to restricting grants. If we include grants-in-aid into 42 percent tax share, the overall stationary provision may go upto about 45 percent which is 7 percent higher compared to about 38 percent share of XIII[th] Finance Commission.

The XIV[th]Finance Commission has recommended 42 percent share of Central taxes and duties to the states and it is presented in Table-6.

Table 6 : Share of States in Central taxes& duties and Grants-in-aid under XIVth Finance Commission

S. No.	States	Share of Central taxes & duties (Rs. in crores)	% share of Central taxes & duties	Share of Grants in aid (Rs. in crores)	% shareof grants-in-aid	Total Transfer (Rs. in crores)	% of total transfer
1	Andhra Pradesh	169969.45	4.305	36588.89	6.81	206558.34	4.60
2	Arunachal Pradesh	54090.16	1.37	1321.95	0.25	55412.11	1.24
3	Assam	130724.47	3.311	12053.12	2.24	142777.59	3.18
4	Bihar	381631.75	9.666	26026.07	4.84	407657.83	9.09
5	Chhatisgarh	121604.15	3.08	8028.04	1.49	129632.20	2.89
6	Goa	14924.14	0.378	371.62	0.07	15295.77	0.34
7	Gujarat	121762.08	3.084	18546.12	3.45	140308.21	3.13
8	Haryana	42798.34	1.084	7492.46	1.39	50290.81	1.12
9	Himachal Pradesh	28150.57	0.713	43810.57	8.15	71961.14	1.60
10	Jammu-Kashmir	73199.39	1.854	65703.37	12.23	138902.76	3.10
11	Jharkhand	123933.6	3.139	9770.29	1.82	133703.88	2.98
12	Karnataka	186078.1	4.713	16520.54	3.07	202598.59	4.52
13	Kerala	98704.68	2.5	18116.96	3.37	116821.64	2.60
14	Madhya Pradesh	298009.2	7.548	23075.95	4.29	321085.10	7.16
15	Maharashtra	217979.4	5.521	34824.54	6.48	252803.94	5.64
16	Manipur	24360.31	0.617	10700.76	1.99	35061.07	0.78
17	Meghalaya	25347.36	0.642	1921.52	0.36	27268.88	0.61
18	Mizoram	18161.66	0.46	12387.21	2.31	30548.87	0.68
19	Nagaland	19661.97	0.498	18651.48	3.47	38313.45	0.85
20	Orissa	183274.8	4.642	14339.79	2.67	197614.63	4.41
21	Punjab	62262.91	1.577	8482.07	1.58	70744.98	1.58
22	Rajasthan	216952.9	5.495	23630.75	4.40	240583.63	5.36
23	Sikkim	14489.85	0.367	353.39	0.07	14843.24	0.33
24	Tamil Nadu	158835.6	4.023	20385.74	3.79	179221.30	4.00
25	Telangana	96217.32	2.437	10127.18	1.88	106344.50	2.37
26	Tripura	25347.36	0.642	5815.78	1.08	31163.14	0.69
27	Uttarpradesh	709054.9	17.959	49381.77	9.19	758436.67	16.91
28	Uttarakhand	41534.93	1.052	3740.52	0.70	45275.45	1.01
29	West Bengal	289165.2	7.324	35160.54	6.54	324325.76	7.23
		3948187	**100**	**537354**	**100.00**	**4485541**	**100.00**

Source : Report of XIV[th] Finance Commission.

The current Commission has considered some new criteria for horizontal devolution that affect state's share in the central taxes and duties. The states that in loss with comparison to XIII[th]F.C. in terms of decreased percentage share in the Central taxes and duties are Assam, Bihar, Himachal Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and Uttarakhand but rest of the states are benefitted by the new horizontal devolution formula. Similarly, the states that benefitted in terms of percentage share in grants-in-aid are Assam, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Mizoram, West Bengal including Andhra Pradesh and Telengana together. These all benefitting states have deficit in their revenue accounts and have got revenue deficit grants from the XIV[th] Finance Commission. However, Kerala, Manipur, Meghalaya, Nagaland and Tripura had also in Revenue

deficit but their percentage share of grants-in-aid have decreased in comparison to the XIIIth Finance Commission. As far as percentage of total transfer is concerned, the states like Assam, Bihar, Gujarat, Haryana, Manipur, Orissa, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh and Uttarakhand all are in loss due to their decreased share in comparison to XIIIth Finance Commission. However, share in Central taxes and duties and total transfer in absolute terms of all states have increased in XIVth Finance Commission with comparison to the XIIIth Finance Commission.

There is significant change from previous commission regarding principles governing grants-in-aid to states by the Centre. The XIVth Finance Commission has recommended distribution of grants to the States using 2011 population data with weight of 90 percent and area with weight of 10 percent. The grant of each state will be divided into two – a grant to duly constituted Panchayats and a grant to duly constituted Municipalities, on the basis of rural and urban population of the State according to 2011 Census data. This grant is fixed for each State and for each year. Further, grants will be provided into two parts – a basic grant and performance grant. In the case of Gram Panchayats, the 90 percent grant will be the basic grant and 10 percent will be the performance grant. In the case of municipalities, the division between the basic and performance grant will be a 80 : 20 bases. Besides, the Commission has also provided grants to all states under State Disaster Relief Fund (SDRF) and Revenue Deficit grant to only 11 revenue deficit states. The table-7 shows amount of grants allocated to states under different heads. Although amount of grants-in-aid to absolute terms has increased for most of the states except Arunachal Pradesh, Goa, Meghalaya, Sikkim and Uttarakhand in compare to the XIIIth Finance Commission. This situation would make the task of reducing existing regional inequalities more difficult as these states are relatively in weak financial position.

Table 7 : Total Grants-in-aid to States by XIV[th] Finance Commission

(Rs. in crores)

S.No.	States	SDRF	Basic Grants		Performance Grants		Revenue Deficit Grants	Total Grants
			Rural Local Bodies	Urban Local Bodies	Rural Local Bodies	Urban Local Bodies		
1	Andhra Pradesh	2186	7788.68	2908.64	865.41	727.76	22113.00	36589.49
2	Arunachal Pradesh	258	737.93	195.22	81.99	48.81		1321.95
3	Assam	2287	4874.92	776.43	541.66	194.11	3379.00	12053.12
4	Bihar	2332	18916.05	2140.99	2101.78	535.25		26026.07
5	Chhatisgarh	1196	4719.72	1270.33	524.41	317.58		8028.04
6	Goa	18	120.39	175.88	13.38	43.97		371.62
7	Gujarat	3504	7771.26	5125.91	863.47	1281.48		18546.12
8	Haryana	1529	3495.17	1663.95	388.35	415.99		7492.46
9	Himachal Pradesh	1174	1628.82	161.42	180.98	40.35	40625.00	43810.57
10	Jammu-Kashmir	1268	3117.36	1044.51	346.37	261.13	59666.00	65703.37
11	Jharkhand	1809	5442.07	1531.64	604.67	382.91		9770.29
12	Karnataka	1375	8359.79	4685.5	928.87	1171.38		16520.54
13	Kerala	919	3615.85	2931.48	401.76	732.87	9516.00	18116.96
14	Madhya Pradesh	4363	12200.72	4141.27	1335.64	1035.32		23075.95
15	Maharashtra	7376	13532.11	9930.29	1503.57	2482.57		34824.54
16	Manipur	95	185.44	138.18	20.60	34.54	10227.00	10700.76
17	Meghalaya	120	0.00	25.22	0.00	6.30	1770.00	1921.52
18	Mizoram	84	0.00	96.17	0.00	24.04	12183.00	12387.21
19	Nagaland	49	0.00	101.98	0.00	25.50	18475.00	18651.48
20	Orissa	3717	7965.28	1417.98	885.03	354.50		14339.79
21	Punjab	1938	3682.02	1962.35	409.11	490.59		8482.07
22	Rajasthan	5484	12270.27	3610.5	1363.36	902.62		23630.75
23	Sikkim	155	133.64	39.91	14.85	9.98		353.40
24	Tamil Nadu	3376	7899.69	6585.85	877.74	1646.46		20385.74
25	Telangana	1363	4837.75	2711.12	537.53	677.78		10127.18
26	Tripura	154	302.11	178.48	33.57	44.62	5103.00	5815.78
27	Uttarpradesh	3356	32198.90	8199.37	3577.66	2049.84		49381.77
28	Uttarakhand	1042	1694.42	652.66	188.27	163.17		3740.52
29	West Bengal	2569	12772.60	5311.81	1419.18	1327.95	11760.00	35160.54
	Total	**55096**	**180262.96**	**69715.05**	**20009.21**	**17428.77**	**194821.00**	**537354.00**

Source : Report of XIV[th] Finance Commission, p. 463, 464, 465 & 468

It is clear from the above analysis that all states stands to gain from the XIVth Finance Commission (FCC) transfers in absolute terms. In terms of the impact based on NSDP, the benefits of the FFC transfers is being the highest for Chhatisgarh, Bihar and Jharkhand among the General Category States (GCS) and for states like Andhra Pradesh, Mizoram and Jammu and Kashmir among the special category state (SCS). While in terms of state's own tax revenue, the largest gains accrue to GCSslike Bihar, Jharkhand and Chhatisgarh and among SCS like Andhra Pradesh, Mizoram and Nagaland.

CONCLUSION

Thus, the XIVth Finance Commission transfers are progressive especially for GCS and the correlation between per capita NSDP and FFC transfer per capita is – 0.72. This indicates that FFC recommendations are equalizing the income and fiscal disparities between the major states. However, it is less progressive than XIIIth Finance Commission because correlation coefficient between NSDP per capita and TFC transfer per capita (average of 2011-12, 2012-13 and 2013-14) is 0.84.

The XIVth Finance Commission has some limitations. The FFC has reverted Income Distance formula that used by the XIIth Finance Commission. The XIIIth Finance Commission differentiated between average tax to GDP ratios of general and special category states to accommodate the fiscal disadvantage of special category states in order to work their entitlement into devolution formula instead of restoring to deficit grants. The FFC has had to retain deficit grants to special category states along with some other general category states with legacy problems. There is also a provision that the share of tax devolution should be 38 percent of divisible pool in the first year and maintained at that level unless there is agreement on the new institutional mechanism to revert it to the 42 percent share of tax devolution. Normal Central Assistance (NCA) likely to be included into the 42 percent. This NCA is united and formula based and the formula is endorsed by the National Development Council (NDC), it may be continued as at present until NDC or its successor further decides. Finally, increase can be accommodated only by rolling back other transfers to states as part of plan flows and it is left to the centre's discretion. Apart these demerit, the XIVth Finance Commission has done better by granting more revenue transfer to the states and promoting cooperative and competitive federalism in the country.

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SOCIO-ECONOMIC CHARACTERISTICS OF MIGRANTS RURAL HOUSEHOLDS IN UTTAR PRADESH, INDIA

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ABSTARCT

Migration is socio-economic process and it is one of the important demographic factors. At present rural out-migration is major factor that influence rural development. It has both positive and negative impact in rural economy by receiving remittances and loss of productive member from the village. Therefore this study has been planned with two specific objectives- to study the factors rural out-migration and to examine the impacts of remittances on rural economy and agriculture. Study is based on primary survey that was conducted during May to October 2011in two districts of Bundelkhand region, Uttar Pradesh. There were 360 households has been selected equally migrant (MH) and non migrant household (NMH). Study reveals that economy of migrant household is better than non-migrant households. MH has leased in and leased out of their land more than NMH. Cropping intensity among MH was higher. MH are more exposed about the health seeking behaviour, new agriculture technology and conscious about the time management.

Keywords : *Rural out-migration, Socio-economic status, remittances*

INTRODUCTION

Rural out-migration has positive and negative impacts on rural economy and agricultural operations. It is occurring because of globalisation, liberalization and privatization of local economy and local population under the process of international migration. It is a socioeconomic process which changes the population and economic structures of a region, both in the place of migrants' origin and destination in both internal migration and international migration. Migration occurs for various reasons (*Census of India*, 2001; *NSSO*, 2010). Women in India, for example, often migrate to their husband's place of residence due to marriage. Men on the other hand, usually migrate for reasons related to work (*Lusome* and *Bhagat*, 2006).

The economic structure also undergoes changes due to the process of migration (*Acemoglu* and *Robinson, 2002, p.1*). Rural out-migration is 'bane & boon' and it results in loss of labour, but there is gain in terms of remittances to the households at the place of origin. This is also true in case of international migration and may be similar in terms of the effect of remittance on the local economy. Owing to loss of labour there is an impact on the economy at the place of origin of out-migrants and an economic transformation due to remittances. The economic dynamics is interesting to the study as out-migration brings about changes in the structures that have been built in the rural areas.

Migration in India is associated with two sets of factors: one is that migration of people is motivated by a desire to access better employment opportunities, higher wages, good quality education and health conditions and better life style at the migrant's place of destination. Another argument is that migration

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occurs due to push or distress factors at home (place of origin) such as the lack of employment, low wage rates, agricultural failure, debt, drought and natural calamities (*Bhaduri* and *Marglin*, 1990, *Haan*, 1999, *Srivastava*; 2005 and *Kundu*, 2007b). Migration can also be considered as labour based migration when there is job in the villages and land based migration when land productivity differs (*Prabu*, 2012a).

Martin and *Zurcher* (2008) showed that people are migrating because of economic as well as non-economic factors. Economic factors in this regard are labour recruitment or guest workers (demand-pull) and unemployment or underemployment, low wages (farmers whose crops fail) (supply-push) and job and wage information flows (network). Noneconomic factors are as family unification (demand pull), fleeing war and persecution (supply-push) and communications, transportation, assistance organizations, desire for new experience/adventure (network). Demographic and economic variations also encourage migration, but it takes networks or links between areas to support actual moves. Indian village studies show rural to urban migration transforming socioeconomic, political and cultural shape of the Indian villages.

Taylor (2001) has viewed migration both in terms of an optimistic and pessimistic scenario. The optimistic view is that migration reduces poverty in source area by shifting population from the rural areas to the urban areas and by receiving remittances benefits at the place of origin. The pessimistic view is that migration reduces income at place of origin because the marginal products of the migrants' member are large prior to migration. “Many of the world's migrants come from rural areas, where agriculture is growing, and occupational migrants come from farm jobs and geographic migrants come from rural areas” (*Taylor, 2006)*. “This change affects the agricultural sector, and agricultural households for two reasons. First, migration means losing a member of the family workforce, and second, migration enables a family to receive cash remittances” (*Damon*, 2010, p.2).

India is now in transition phase of economic development. Development is dynamic in nature that led to growth, modernized, empowered to the people with the opportunity of human resource development. People tends to move to the place where they feel respect, dignity, economic prosperity, equality, harmony and related cultural taboo, social system and comfortable to live.

METHODOLOGY

Study is based secondary and primary quantitative as well as qualitative data collected during May to October 2011. Quantitative data was collected through structured interview schedule whereas Focus Group Discussion (FGD) conducted for qualitative data. There were 360 households has been selected randomly from six villages in two districts of bundelkhand Region of Uttar Pradesh. Districts were selected based on highest and lowest rural out-migration rate based on census 2001. The villages were selected based on three distant location i.e., nearer to main town (< 10 Kms), 10 to 20 kms and more than 20 Kms keeping in mind migration patterns differential. There were three categories of households- large, medium, and small & marginal landholdings.

The reference period was three to five years for examining the impact of rural out-migration on household economy and agriculture. Because effects of remittances appears after three years.

CONCEPTUAL FRAMEWORK

Figure 1 depicts the flow of rural out-migration and its impact on rural economy, rural labour market, and agriculture. Rural out-migration is influenced by four factors. These are economic, social, environmental and MGNREGA. They are increased or decreased rural out-migration. Former three factors are pro- rural out-migration and later one (MGNREGA) is anti-rural out-migration. MGRNREGA was introduced to check rural out-migration by generating employment in rural areas, but it does not full the purpose.

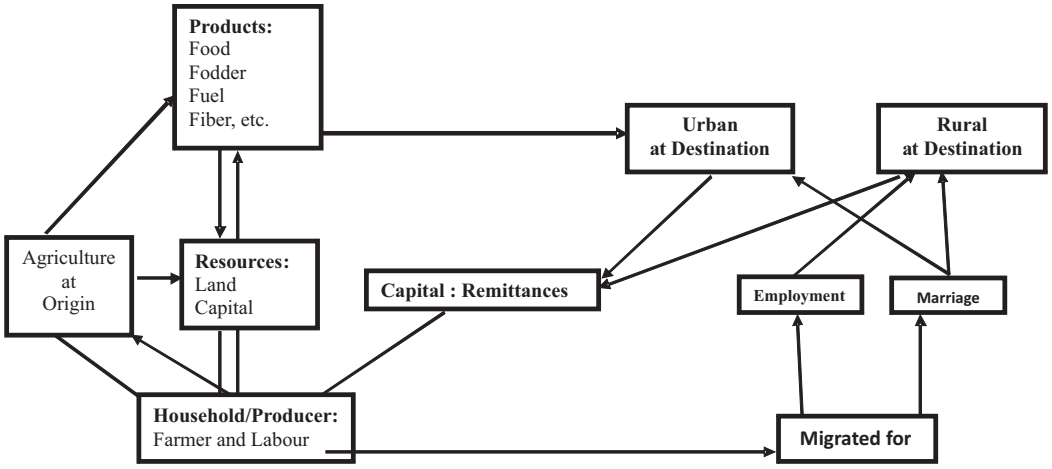

Figure 1: Conceptual framework for rural out migration and agriculture

RESULTS AND DISCUSSIONS

Results contain the profile of the sampled villages followed by background information of the respondents and the magnitude and reasons of rural out-migration. I have tried to understand the phenomenon of rural out-migration. I present our findings based on the primary survey the back drop of which was discussed in methodology. First discuss profile of the study villages followed by background information of the respondents and characteristics of migrant households.

PROFILE OF THE STUDY VILLAGES

As mentioned, the three selected villages in each district were from two different directions based on the distance from the main town in Banda and Hamirpur district. According to the Census of India (2001) the total population of Banda is more (2.5 Lakhs) than Hamirpur (1.8 Lakh). The total population of the Scheduled Castes in Hamirpur (23 per cent of total population) is higher than in Banda district (21 per cent)(CENSUS OF INDIA, 2001). In Table 1 we present data related to our study villages. Table 1 indicate that among the three villages in Hamirpur district, Karhiya has the larger area (2284 Ha) and the higher population (4992) with 808 households, whereas in Banda district, Pachnehi has largest population (5099 and 820 households).

All the villages were well connected with transport facilities (road and railways), had at least one school and primary health centre (Karhiya and Pachnehi has CHC), and there electricity in all the villages in both districts. All the villages have irrigation facilities. In Banda district, Mahua has a canal and tube well but Pachnehi and Lama have only tube well. No canal facilities for irrigation purpose were there in the villages of Hamirpur district. We have also seen that Lama, Pachnehi and Mahua villages have government tube-well for irrigation facilities whereas none of the selected villages in Hamirpur district have government tube-well for the same.

As shown in Table 1, in Banda district, around 62 to 70 per cent of the households are migrant households (MHs).Among the social groups, 80 to 85 per cent of the SCs households are migrant household. Most of the members of migrant households have migrated for short duration. In Hamirpur district this percentage was lower. It has observed that the villages that are situated near to the main town, there are less number of MHs as compared to the distant villages. The reason for this is that most of the people from villages near town are going to the town for work and return on the same day. It cannot consider them as migrant as they are commuters. People from distant villages have migrated

for a long duration to the other state especially NCR-Delhi, Punjab and Haryana (Gurgaon and Faridabad) and Gujarat (Surat).

Table 1: Area, Households and Population of the Study Villages

Name of Village	Total Area(Ha)	Number of Households	*Migrant household (%)	Population (per cent)					
				TP	TM	TF	TSC	MSC	FSC
Banda				**1537334**	**54.3**	**46.2**	**21.5**	**54.2**	**46.5**
Lama	1164	630	391 (62.5)	3751	53.5	47.1	32.3	52.1	48.4
Pachnehi	1900	820	533 (65.3)	5099	55.6	45.6	21.4	54.4	46.2
Mahua	1161	759	531 (69.6)	4265	54.4	46.2	29.6	55.6	45.3
Total	**4225**	**2209**	1455 (65.9)						
Hamirpur				**1043724**	**54.4**	**46.8**	**23.7**	**54.4**	**46.4**
Urdana	662	241	157 (65.2)	1664	54.3	46.6	9.5	62.3	38.7
Chandi	614	264	175 (66.6)	1696	55.7	45.5	30.4	56.2	44.6
Karhiya	2284	808	542 (67.5)	4992	54.9	46.3	27.3	54.1	46.3
Total	**3560**	**1313**	**874 (66.6)**						

Note: TP-Total Population, TM-Total male, TF-Total female, TSC-Total Schedule caste (SC), MSC-Male SC, FSC-Female SC. *Primary survey

Source: Census of India, 2001

It also found that wage rate in agriculture and non-agriculture varies from village to village in both districts. Wage rates for agriculture work are higher than non-agricultural work such as construction. For agriculture, a farmer has to pay Rs. 120 to 180 per man-day according to the nature of work. On the other hand, the wage rate for construction work is Rs. 130 to 150 per man-day. There are variations in wage rates between male and female. The females are getting wage rate about Rs. 10 to 30 less than their male counterparts. We have observed that labour has to work for 8 hours in construction work but, in agriculture labour is working for more than 8 hours. For example, a farmer is irrigating their land; they want to finish this work on the same day to avoid seepage and evaporation of water. That may be the reasons for variation in the wage rate in agricultural and non-agricultural work.

BACKGROUND INFORMATION OF THE RESPONDENTS

The background information of respondent (farmers) is given in Table 2. Almost all the respondents were more than 24 years old in both districts. In the study villages of two districts nearly half of the farmers belong to the OBC group (48.9 per cent) followed by other castes (36.9 Per cent) and scheduled Castes (14.2 per cent). In Banda district more than half (62.8 per cent) of the households were OBCs, and in the migrant households, 71.1 per cent were OBCs. Likewise in Hamirpur district, people belonging to OBCs were basically migrants.

A vast majority (90.3 per cent) of the respondents were literate in both districts. Literacy percentage in Banda district (84.4) is lower than that of Hamirpur district (96.1). Further, it has been seen that migrants' household have more literate persons (92.2 per cent) compared to non-migrant households (89.3 per cent). Members of migrant households were more literate and achieved higher education than the members of non-migrant households (Table 3).

Family size is directly related to agricultural development and change in the cropping pattern. Large family size and joint family supply uninterrupted labour for agriculture, whereas small family and nuclear family has to depend upon outside labour for agriculture. In Banda district, single family occurrence (59.4 per cent) was higher than in Hamirpur district (40.6 per cent). Table 3 also show that migrant households have large family size than non-migrant households in both districts.

I have divided the farmers into three categories i.e., small, medium and large according to the size of

landholdings 1 to 2 hectare, 2.1 to 5 hectare and 6 hectare and above respectively (not shown in table). I have selected equal number of small, medium and large farmer.

Most of the households have mobile phones and televisions. The interest in radio has decreased in the rural areas, which may be because of mobile FM, CD players and MP3. A discernible gap exists between Banda and Hamirpur with regard to possession of having Mobile phones and TVs. Table 3 shows that migrant households have more communication facilities in both districts, because they have remittances.

Table 2: Background Information of the Respondents (In percentage)

	Item	District (Per cent)								
		Banda			Hamirpur			Total		
		NMH	MH	Total	NMH	MH	Total	NMH	MH	Total
1	**Age Group**									
	25-45	42.2	34.4	38.3	27.8	27.8	27.8	35.0	31.1	33.1
	46-55	24.4	25.6	25.0	33.3	38.9	36.1	28.9	32.2	30.6
	56+	33.3	40.0	36.7	38.9	33.3	36.1	36.1	36.7	36.4
	Mean	47	50	48	50	49	49	49	49	49
2	**Social Group**									
	Schedule Caste	15.6	13.3	14.4	18.9	8.9	13.9	17.2	11.1	14.2
	OBCs	54.4	71.1	62.8	28.9	41.1	35.0	41.7	56.1	48.9
	Other Caste	30.0	15.6	22.8	52.2	50.0	51.1	41.1	32.8	36.9
3	**Level of Education**									
	Illiterate	16.7	14.4	15.6	6.7	1.1	3.9	11.7	7.8	9.7
	Primary	21.1	18.9	20.0	25.6	27.8	26.7	23.3	23.3	23.3
	Middle	33.3	36.7	35.0	32.2	37.8	35.0	32.8	37.2	35.0
	Up to Graduation	26.7	20.0	23.3	25.6	21.1	23.3	26.1	20.6	23.3
	Post Graduate	2.2	10.0	6.1	10.0	12.2	11.1	6.1	11.1	8.6
4	**Type of family**									
	Single	54.6	65.1	59.4	36.7	44.4	40.6	45.6	60.0	52.8
	Joint	45.4	34.9	41.6	63.3	55.6	59.4	54.4	40.0	47.2
5	**Loan Status**									
	Yes	43.3	43.3	43.3	5.6	7.8	6.7	24.4	25.6	25
	No	56.7	56.7	56.7	94.4	92.2	93.3	75.6	74.4	75
	Total (N)	**90**	**90**	**180**	**90**	**90**	**180**	**180**	**180**	**360**

Note: NMH=Non migrant household, MH=Migrant household

The impacts of Kisan Credit Cards (KCC) among the farmers have different views. All the marginal and small farmers said that KCC is beneficial scheme of the government because they have got subsidy in the loan and need not to returns. On the other hand medium and large farmers were not happy with KCC because of high interest rate. Some of them have sold their land to return loans. One-fourth of the farmers (25.0 per cent) have borrowed agricultural loan from Regional Rural Banks (RRBs) and government commercial banks. None of them have loan from private or money lenders as they are aware of the high interest rates. Banda district's farmers have borrowed loan more than Hamirpur district's farmers (Table 2).

Table 3: Association between Migration Status of Household and Background Characteristics

	Item	Banda(N=180)				Hamirpur (N=180)				Total (N=360)			
		NMH	MH	Total(N)	Chi-sq.	NMH	MH	Total(N)	Chi-sq.	NMH	MH	Total(N)	Chi-sq.
1	**Age**												
	25-45	55.1	44.9	**69**	1.278	53.0	47.0	**50**	.769	52.9	47.1	**119**	.747
	46-55	48.9	51.1	**45**		46.2	53.8	**65**		47.3	52.7	**110**	
	56+	45.5	54.5	**66**		53.8	46.2	**65**		49.6	50.4	**131**	
2	**Caste**												
	Schedule Caste	53.8	46.2	**26**	6.267*	68.0	32.0	**25**	5.204*	60.8	39.2	**51**	7.905*
	Other Backward Castes	43.4	56.6	**113**		41.3	58.7	**63**		42.6	57.4	**176**	
	Other caste	65.9	34.1	**41**		51.1	48.9	**92**		55.6	44.4	**133**	
3	**Education level**												
	Illiterate	53.6	46.4	**28**	.416	85.7	14.3	**7**	4.116	60.0	40.0	**35**	1.917
	Primary	52.8	47.2	**36**		47.9	52.1	**48**		50.0	50.0	**84**	
	Middle	47.6	52.4	**63**		46.0	54.0	**63**		46.8	53.2	**126**	
	Graduation and above	49.1	50.9	**53**		51.6	48.4	**62**		50.4	49.6	**115**	
4	**Family size**												
	2 to 5	55.3	44.7	**76**	1.600	50.7	49.3	**73**	.099	53.0	47.0	**149**	1.153
	6 to 8	44.8	55.2	**67**		48.5	51.5	**66**		46.6	53.4	**133**	
	9+	48.6	51.4	**37**		51.2	48.8	**41**		50	50	**78**	
5	**Landholding (ha)**												
	1 to 2	51.2	48.8	**82**	4.380	36.6	63.4	**41**	6.643*	46.3	53.7	**123**	1.375
	2.1 to 5	54.0	46.0	**63**		45.9	54.1	**61**		50.0	50.0	**124**	
	6 and above	40.0	60.0	**35**		60.3	39.7	**78**		54.0	46.0	**113**	
6	**Means of Communication***												
	TV	38.0	62.0	**25**	5.621*	32.2	67.8	**100**	.360	56.0	44.0	**125**	2.757*
	Mobile	41.2	59.8	**80**	.810	47.0	53.0	**166**	7.745*	44.1	56.4	**246**	3.286*
	Radio	33.3	66.7	**15**	1.818	73.5	26.5	**34**	9.283**	61.2	38.8	**49**	2.858*

*Multiple responses

The reason for this dominance in loan transaction in Banda district was not clear. One of the possible reasons can be under reporting by the farmers of Hamirpur, because during the survey it was observed that the farmers were trying to conceal information about their household property and loan and bank accounts.

Table 4: Nature of Landholding, Source of Irrigation, Farm Machinery and Farm Animals

	Item	District (in per cent)								
		Banda			Hamirpur			Total		
		NMH	MH	Total	NMH	MH	Total	NMH	MH	Total
1	**Nature of landholding**									
	Un-irrigated land	14.4	30.7	22.3	0.0	0.0	0.0	7.2	15.0	11.1
	Irrigated land	85.6	69.3	77.7	100	100	100	92.8	85	88.9
2	**Source of irrigation**									
	Own	30.0	15.6	22.8	52.2	51.2	51.1	41.1	32.8	36.9
	Hired	70.0	84.4	77.2	47.8	48.8	48.9	58.9	67.2	63.1
3	**Has Tractor**									
	No	91.1	93.3	92.2	77.8	90.0	83.9	84.4	91.7	88.1
	Yes	8.9	6.7	7.8	22.2	10.0	16.1	15.6	8.3	11.9
4	**Domestic animal***									
	Cow in HHs	41.1	42.2	41.7	4.4	7.8	6.1	22.8	25	23.9
	Buffalo in HH	47.8	48.9	48.3	98.9	96.7	97.8	73.3	72.8	73.1
	Goat in HH	23.3	32.2	27.8	13.3	21.1	17.2	18.3	26.7	22.5
	Bull in HH	45.1	31.1	43.1	32.2	21.1	26.2	38.7	26.1	34.6
	Total (N)	**90**	**90**	**180**	**90**	**90**	**180**	**180**	**180**	**360**

*Multiple responses

IRRIGATION FACILITIES, FARM MACHINERY AND FARM ANIMALS

The nature of landholding in two districts shows that in Hamirpur all the households have irrigated land but in Banda nearly three fourths (77.7 per cent) of households have irrigated land (Table 4). The reason for this is that Hamirpur is more developed district than Banda. The source of irrigation also shows Hamirpur is relatively better district, while in Hamirpur those who have irrigated lands nearly half (51.1 per cent) of them have own tube-well and remaining half hired water for irrigation. In

Banda, the percentage (77.2) of households that hired water is more than that having own source of irrigation (22.8). There are no difference between migrant households (MHs) and non-migrant households (NMHs). Again in Banda while very few households have own tractors (7.8 per cent), in Hamirpur the percentage who own tractors is nearly twice (16.1 per cent) of Banda.

Farm animals and agriculture are interrelated and dependent on each other. Farm animals provide compost for agriculture and dung cakes as a source of energy for cooking. At the same time, agriculture provides animal feed. Cows, buffaloes, bullocks and goats are kept as farm animals in this region. With respect to domestic farm animals in Hamirpur, almost all the households (98.9 per cent) have buffalo but in Banda nearly half (48.3 per cent) of the households have buffalo. However, in Banda district nearly half of the households have cows and bulls. There are no major differences in both MHs and NMHs in Hamirpur with respect to domestic animals.

From the above, we conclude that Hamirpur district is more developed than Banda districts in terms of socio-economic conditions. Education of level of the respondents is higher in Hamirpur district than Banda district. We have observed that productivity of land is higher in Hamirpur than land of Banda.

Now we present data about the rural out-migration and discuss as magnitude of migration and reasons for out-migration. We have described duration of migration (short and long), causes of out-migration such as economic, social, political, and environment. There are 91.1 per cent of the MHs from which one male has migrated from both districts. Two males have migrated from 8.9 per cent of the MHs in both districts. Our interest is on male migration and here we have considered first male member of the households who is older than other out-migrated members of the MHs.

CHARACTERISTICS OF MIGRANT HOUSEHOLDS (MHS)

Rural out-migration is a common phenomenon in the rural areas of India. Some rural areas have higher rural out-migration than other areas. These appear to be because of socio-economic conditions. We have discussed the reasons and magnitude of rural out-migration based on the primary survey that was conducted in Hamirpur and Banda districts in Bundelkhand region, Uttar Pradesh (UP).

Rural out-migration is not new phenomenon and most of the migrants are males who have migrated for earnings. Table 5 shows that more than half (55.6 per cent) of the MHs were those households where members ever have migrated in the past for any reason and the rest 44.4 per cent of the households added new members in the MHs category. In the Banda district, analysis shows that 74.4 per cent of MHs were those from which one or more members of household ever have migrated in the past for any reason, whereas in Hamirpur 36.7 per cent of MHs belong to this category. It shows that people of Hamirpur district started out-migrating from the village only recently, whereas in Banda district this tradition has been there for a long period.

Table 5: Characteristics of Male Migrants in Banda and Hamirpur

	Item	District		
		Banda	Hamirpur	Total
1	**Household members ever migrated in past**			
	No	25.6	63.3	44.4
	Yes	74.4	36.7	55.6
2	**Number of out-migrated male**			
	1	92.2	90.0	91.1
	2	7.8	10.0	8.9
3	**Education level of migrated male**			
	Illiterate	25.6	21.1	23.3
	Primary and middle	67.8	57.8	62.8
	Matric and above	6.7	21.1	13.9
4	**Duration of migration**			
	Short duration (less than 6 month)	63.3	71.1	67.2
	Medium duration (> 6 months and <12 month)	32.2	20.0	26.1
	More than 12 months	4.4	8.9	6.7
5	**Number of times migrated in a year**			
	Once	0.0	23.3	11.7
	Twice	56.7	23.3	40.0
	Thrice	43.3	53.3	48.3
6	**Residence of migrant-urban/rural**			
	Urban	78.9	83.3	81.1
	Rural	21.1	16.7	18.9
7	**Reason for choice of migrant's place**			
	More Income	88.9	92.2	90.6
	Other	11.1	7.8	9.4
8	**Working status before migration**			
	Labour	60.0	31.1	45.6
	Agriculture in own	40.0	68.9	54.4
	Total (N)	**90**	**90**	**180**

Some of the farmers have revealed that their sons have migrated for earning, if they failed once in high school or senior secondary school. They also explained the reason for this that they have spent a lot of money on children's education and if children failed in any class, they cannot afford their next year education cost in same standard of class. They want children to drop school and migrate to urban areas for earning. Most of the out-migrated male members (57.8 to 67.8 per cent) were educated up to primary level in both the districts.

Short duration migrants are those who are away from household for a period of two to six months for work or seeking work (NSSO, 2010).Table 5 shows that 67.2 per cent of the males have migrated for short duration (less than six months) followed by medium duration (26.1 per cent). The larger number of the migrant households had members who migrated three times in a single year during the reference period, followed by households where members migrated twice a year. Between the selected districts, it was found that from Banda district more than half (56.7 per cent) of the members of MHs migrated

two times a year whereas from Hamirpur district 53.3 per cent of member of MHs migrated three times that migrated in a year. A member of the household migrates mostly whenever there is no work in the village and returns back from the urban to the rural areas. The data indicates that household members migrate from village whenever there is an agricultural off season and return home when agricultural works starts, whenever the household needs family labour for the agricultural and other work in the village. Circular migration is defined as a migration episode lasting two or more months and which starts and ends in the place of origin. Seasonal migrants are those who follow a circular migration pattern annually or semi-annually for a few months during the agricultural off-season (*Tong* and *Piotriowski*, 2010). In the Bundelkhand region, most of the migration is short duration and seasonal in nature. *Mazumdar, et al*., (2013) reported that 20 per cent of females and 23 per cent of males were circular migrants and 9 per cent of them were short-term seasonal migrants (p.56).

Almost all the migrant members are living in the Delhi/NCR region and few of them have migrated to Surat (Gujarat) and Ludhiana (Punjab). The vast majority of migrants were living in the urban areas. Most of them (more than 90 per cent) said that the reason for migration to that particular place was high income followed by other. These other reasons are attachment of relatives and friends. The migrants from Banda district who were living in urban areas were slightly fewer in number than those from Hamirpur district. Some of them have migrated intra-state. There were 85 per cent of them who have migrated to Delhi and NCR region specially Noida and Ghaziabad in UP and Gurgaon and Faridabad in Haryana. Others have migrated to the Surat, Gujarat and to rural areas of Punjab.

REASONS FOR RURAL OUT-MIGRATION

The various studies show that a major reason of out-migration is economic. Data from National Sample Survey Organization (NSSO, 2010) reveals that rural people migrated because of four reasons e.g., economic, educational, social and others. The figures in the Table 6 reveal that the highest per cent (55.4) of rural household members have migrated for economic reason. These reasons include, in search of better employment, in search of employment, to take up employment/better employment, transfer of service/ contract, business, and post retirement. The next important reason for migration is migration on account of education (26.6 per cent). The percentage of migrants reporting social and other reasons is 2.7 and 15.3 respectively. Other studies have also shown that economic reasons are the primary factors for rural people to move to urban areas. *Kundu et al.,* (2008) reveals that majority of people are moving because of economic reason. The workers migrate in rural to rural areas mainly due to wage differentials (*Sengupta and Ghosal, 2011,* p.85).

Table 6: Percentage distribution of reasons for rural to urban migration, 2008

Reason	Per cent
Economic	55.4
Education	26.6
Social	2.7
Other	15.3

Note- **Economic:** In search of better employment, In search of employment, to take up employment / better employment, Transfer of service/ contract, Business, Post retirement, **Education**, **Social** and **Others:** Acquisition of own house/ flat, Proximity to place of work, Natural disaster (drought, flood, tsunami, etc.), Social / political problems (riots, terrorism, Political refugee, bad law and order, etc.), Displacement by development project, Health care.

Source: NSSO, 2010

Population Census of India (2001) listed six main reasons of migration during 1991 to 2001 (Table 7). These reasons were- Work/employment, business, education, marriage, moved after birth, moved with household. Some other reasons were also included in Census. Highest per cent of the people have

migrated because of marriage or moved with the household. Marriage based migration was most among be female migrants and this pattern was high in the rural areas during 1991 to 2001. Working age populations have migrated mostly due to employment related issues. As expected, people in the age group 24 and below have mostly migrated for education. Children have mostly migrated with their parents or with the household.

Table 7: Reasons of Migration During 1991 to 2001 in Rural Uttar Pradesh

		Reasons of Migration						
All ages	Total Migrant	Work/ Employment	Business	Education	Marriage	After birth	With household	Others
Rural	81.8	73.5	67.6	70.7	90.5	65.7	68.5	74.6
Urban	18.2	26.5	32.4	29.3	9.5	34.3	31.5	25.4
Total	**277141616**	**29317999**	**2757435**	**3274122**	**153514819**	**15327059**	**41280125**	**31670057**
Rural_Total	**226667548**	9.5	0.8	1.0	61.3	4.4	12.5	10.4
0-14	**20226597**	0.7	0.0	3.4	0.6	31.6	37.8	25.8
15-19	**13089511**	6.5	0.4	6.1	39.8	10.8	21.2	15.1
20-24	**25675689**	7.6	0.5	1.5	68.2	3.0	9.9	9.2
25-29	**28572797**	9.5	0.7	0.4	71.3	1.5	8.8	7.8
30-34	**26838440**	11.0	1.0	0.2	71.0	1.0	8.6	7.2
35-39	**25347574**	12.3	1.1	0.2	69.2	0.8	9.0	7.3
40-59	**59634106**	13.0	1.1	0.2	67.6	0.7	9.0	8.3
60-79	**24236390**	7.6	0.8	0.2	69.6	0.6	10.2	10.9
80+	**2650519**	5.9	0.8	0.2	65.7	0.5	13.0	13.9

Source: Census of India, 2001

In our survey, we have identified four reasons of rural out-migration in the Bundelkhand region of UP. Two of these were economic reasons for out-migration i.e., migration for earning at destination (urban areas) and no work/unemployment at the place of origin (rural areas). Half of the migrant households (50.0 per cent) responded that their household member migrated for make an earning. This pattern was found in both districts, but the Hamirpur (53.3 per cent) shows higher percentages in this case than Banda district (46.7 per cent). There was rural out-migration due to no work or low wage rate in the village. There were 40.0 per cent of the households in Banda and 46.7 per cent of households in Hamirpur reported that its member out-migrated due to unavailability of work and low wage rate in the village. Some of them also mentioned that they have migrated because of lack of interest in the work available in the village (Table 8).

Table 8: Reasons of Rural Out-migration of Household Members by District

	Reasons of Out-migration	District		
		Banda	Hamirpur	Total
1	Earning*	46.7	53.3	50.0
2	No work in the Village/Low wage*	40.0	46.7	43.3
3	Conflict in the village**	5.6	0.0	2.8
4	Working in Village against our social status/respect**	7.8	0.0	3.9
Total (N)		**90**	**90**	**180**

Note: *Economic and **Social reason

Table 9: Reasons of Rural Out-migration of Household Members by Social Group

	Reasons of Out-migration	Social Group			
		SCs	OBCs	Others	Total (%)
1	Earning*	**55.0**	49.5	49.2	50.0
2	No work in the Village/Low wage*	**40.0**	46.5	39.0	43.3
3	Conflict in the village**	5.0	4.0	0.0	2.8
4	Working in Village against our respect**	--	--	11.9	3.9
Total (N)		**20**	**101**	**59**	**180**

Note: *Economic and **Social reason

There were two social causes of rural out-migration in Banda district i.e., 'conflict in the village' and 'high caste people not interested to work in the village as it was against their social status or social respect. In both areas (rural and urban) the caste feelings are dominant social characteristic present in this region. Caste based discrimination and fighting for the minor issues was also prevalent in this region. There were 5.6 per cent of the Migrant households where members had migrated from the village because of the conflict in the village with someone for various reasons in Banda. These conflicts were caste based jealousy, love affairs among inter-caste male and female, murder, robbery and election based conflict. However, around 11.9 per cent of them (other caste) migrated because they don't prefer to work in the village as it hurt their caste prestige (Table 9). A majority of them were belonged to the high caste households. *Gupta* (2009) also observed the case of a high caste woman whose husband was unemployed and there was no agriculture due to drought was refused a job under MGNREGA. The gram sarpanch argued over that how it was impossible or demeaning for an upper caste woman to go to work. Table 9 further shows that other castes (non SC/OBC) have not migrated because of conflict in the villages. The people who have migrated due to conflict were SCs (5.0 per cent) followed by OBCs (4.0 per cent).

Another reason for out-migration is consecutive drought (environmental factor) for long duration in the Bundelkhand region. *Martin* and *Zurcher* (2008) have reported two main reasons of migration i.e., economic and non-economic. Environmental changes also forced long-term population migration in rural areas. PAA (2012) found that flooding has moderate relation to migration of people but crop failure has a strong relationship with the mobility of people. Thus there are many factors for rural out-migration, but economic reasons were stronger than others reasons such as conflict and natural disasters.

MGNREGA was introduced in rural areas to check rural out-migration. But, most of the villagers blame that its wage rate is one of the reasons for rural out-migration of labour. Labour is not accepting less than MGNREGA wage rate for agricultural and non-agricultural work. MGNREGA wage rate is base rate in the rural areas. If there is no work under MGNREGA, they preferred to migrate nearby cities or distant urban areas and refused to work that is harder than MGNREGA work and low rate. A group of large farmers expressed that

"Labours are not accepting our wage rate for any work, they (labours) will migrate from village, but they will not work in our field and household".

WORKING STATUS OF MALE MIGRANTS

Ultimate aim of migration is high income and to in search of better jobs. A position of migrant at destination has linked with earning and saving. Earning and saving is also varying in different working status of migrant. Skilled worker is earning higher than construction worker. The highest

percentage (72.2) of the migrants were working as labour in construction companies, loading and deloading trucks, white washing among all the social groups. There are not much differences in working status of migrant in both districts. Table 10 shows that migrants (27.8 per cent) from Banda district were mostly working as labour whereas migrants (37.8 per cent) from Hamirpur district were working in companies. The reason for the variation in the working status of migrants from both districts is clear from the Table 10. Education level of migrants from Hamirpur was high and that is the reason why these migrants have more chances to get jobs in companies. In Punjab/Haryana they were working as agricultural labour and construction workers. Among the social groups, there are big gap seems in terms of working status of migrants. Table 10 shows that migrants from the SCs households were working as labourers.

Table 10: Working Status of Male Migrant at Place of Destination by Social Group

District and Work status	Social Group (per cent)			
	SC	OBC	Others	Total
Banda				
Skilled work*	16.7	28.1	35.7	27.8
Non-skilled work**	83.3	71.9	64.3	72.2
Total (N)	**12**	**64**	**14**	**90**
Hamirpur				
Skilled work*	25.0	43.2	35.6	37.8
Non-skilled work**	75.0	56.8	64.4	62.2
Total (N)	**8**	**37**	**45**	**90**
Total				
Skilled work*	20.0	33.7	35.6	32.8
Non-skilled work**	80.0	66.3	64.4	67.2
Total (N)	**20**	**101**	**59**	**180**

*As security guard, helper, supervisor, **Construction work, agriculture work

The respondents were asked about the kind of work members of the household were engaged in before migration. It was found that most of the migrants were working in agriculture in their own farm before migration. There were 54.4 per cent of the MHs reported that migrant members were working in their own farm, and this percentage was 68.9 in Hamirpur and 40.0 per cent in Banda. It was also found that 60.0 per cent of the migrants of Banda district were working as labour before migration from the village. In Hamirpur district agriculture is in better condition in terms of irrigation facilities and input use. It is also observed that farmers of the Hamirpur district are more conscious about the use of new technology in agriculture such as hybrid seeds etc., as compared to the farmers of the Banda district.

Table 11: Odds Ratio for Rural Out-Migration for Banda and Hamirpur district

	Item	Banda (N=180)		Hamirpur (N=180)		Total (N=360)	
		Exp(B)	Sig.	Exp(B)	Sig.	Exp(B)	Sig.
1	**Distance of the village from main city**						
	Nearest (<10Kms) ®	--	0.258	--	0.289	--	0.000
	Nearer (10-15Kms)	1.921	0.278	1.426	0.646	1.417	0.348
	Distant (> 15 Kms)	3.878	0.116	0.507	0.400	0.365	0.006
2	**Caste**						
	Schedule Caste ®	--	0.009	--	0.344	--	0.033
	Other Backward Castes	2.213	0.199	2.243	0.340	2.725	0.017
	General	0.291	0.169	5.453	0.145	1.667	0.380
3	**Level of Education**						
	Illiterate ®	--	0.270	NA	--	--	0.796
	Primary	0.922	0.902	--	0.899	0.966	0.046
	Middle	2.217	0.190	0.899	0.847	1.332	0.557
	Graduation and above	2.191	0.201	0.753	0.644	1.095	0.852
4	**Type Farmers**						
	Marginal and small farmer ®	--	0.045	--	0.544	--	0.818
	Medium farmer	0.675	0.436	0.652	0.512	1.028	0.929
	Large farmer	3.681	0.091	0.455	0.271	1.258	0.548
5	**Type of family**						
	Single ®	--	--	--	--	--	--
	Joint	0.493	0.077	0.229	0.023	0.361	0.001
6	**Family size**						
	2 to 5 ®	--	0.852	--	0.640	--	0.356
	6 to 8	1.196	0.693	1.774	0.365	1.579	0.154
	9+	0.842	0.857	1.813	0.495	1.327	0.613
7	**Has Tractor**						
	No ®	--	--	--	--	--	--
	Yes	0.305	0.202	0.191	0.019	0.308	0.016
	Constant	**0.269**	**0.104**	**0.171**	**0.175**	**0.008**	**0.018**

Multi-variate analysis (Binary logistic regression) shows net effects of independent variables on the dependent variables. The odds ratio in Table 11 indicates that males are living in the nearer villages are one and half times more likely rural out-migration than that in the nearest villages. But, the males less likely to be out-migrated are from the villages that are located far distances from the main town. This pattern was however found different between both the districts. In Banda district males from distant (far off) villages are nearly four times (3.9) more likely to experience out-migration followed by households in which are nearer villages about two times more likely to migrate than the nearest villages. The reason behind this pattern in Banda is unclear but we know that in Banda district socio-economic and agriculture is not as good as in Hamirpur district. Perhaps most of the rural population in Banda district prefer to migrate from the village for their livelihood. The wage rate is low in the distant villages and that may be the reason for more migration from these villages.

Migration patterns also vary among the various social groups. Male from Other Backward Caste (OBCs) and high caste household has more chance to migrate from the village than a male from Schedule Castes (SCs) households in both the districts. But in Banda district, members from high caste households were less likely to migrate from the village than reference category, whereas in Hamirpur district member from high caste household were more than five times (5.45) more likely to

migrate from the village than from SCs households. In Hamirpur district the possible reason for members of high caste households to migrate may be a feeling of uncomfortable in terms of social position to work in the village as labour and hence they prefer to leave the village. But, in Banda district members from high caste households were less likely to migrate, because they may have land to cultivate and there may be low labour availability in the village, so they do opt for farming instead going outside or leaving the village.

The level of education and rate of migration have a positive relationship. Literate people were more likely to migrate than the illiterate group. As expected, the highly educated people give less preference to agricultural work and migrate in search of non-agricultural work. This is the reason of high rate of migration among educated people. In Hamirpur district however, odds ratio shows opposite figures in term of level of education and migration, i.e., highly educated people were less likely to migrated (Table 11). The reason why highly educated people have low chances of migration in not clear, but only possibility is that they are low in number in the study of sample.

Type of family and family size also influences rural out-migration. The odds ratio in Table 11 indicates that joint families were less likely to migrate than single or nuclear families. Even here again the reason may be the availability of sufficient family labour for agriculture and hence they did not prefer to migrate from the village.

As expected we found in Table 11 that households which have a tractor were less likely to migrate than those do not have tractor in the household. The tractor is an indication of mechanization in agriculture and reduction in human labour requirement. Male of these households were preferred agriculture work and avoid shortage of labour and tractor is a means of employment for household members. This may be the reason for low chance of male migration from households that has tractor.

Here we can speculate that a man leaves the village for satisfaction and promises of more income from the urban areas. But, while they earn money, and increase bank balances, they cannot understand what are they losing in the urban areas. Indirectly they are losing their traditional business (agriculture and animal husbandry) and also health because they do not have access to safe drinking water in the slums and neither do they have clear air to breathe. In many cases that we observed in the rural areas (and which were beyond our survey instrument contents) there were those in which people migrated to urban areas about 4 to 5 years earlier and they earned and spent the money with no savings for themselves or for family members back home. Whenever they returned to home they brought only clothes and the very next day, they were seen asking money from their neighbours for meals. If the migrant is single he can save money, but if the whole family migrates then they cannot save money is what most of the migrants reported during our informal discussion. So, migrants faced various problems at migrant place (destination) and household has faced labour shortages in agriculture in place of migrant origin.

CONCLUSIONS

We conclude that migrants' households faced more labour shortage due to out-migration of member of households as well as members of other rural households. The major causes of rural out-migration were found economic and social reason. Younger age male, educated, from OBCs and other caste households were more out-migrated for short duration to urban areas especially Delhi/NCR and Surat, and to rural Punjab and Haryana. Study reveals that economy of migrant household is better than non-migrant households. MH has leased in and leased out of their land more than NMH. Cropping intensity among MH was higher. MH are more exposed about the health seeking behaviour, new agriculture technology and conscious about the time management.

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INFLUENCE OF PERSONAL AND SITUATIONAL FACTORS ON EMPLOYEE ENGAGEMENT AT WORKPLACE; AND OUTCOMES OF EMPLOYEE ENGAGEMENT: A CONCEPTUAL STUDY

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ABSTRACT

Employee Engagement has become Buzz world in Business Circles and though various studies have been carried on this but being a concept since only 1990 and for India work on this has been done in recent years, there is ample scope to understand and study the subject from all perspective. The paper considers views of both consulting organizations and the researchers to find out the widest possible study of antecedents or predictors and consequences of Employee Engagement. In this paper has dealt with the concept in detail. Both personal and situational factors have been discussed in detail specially the various HRM practices, Job Characteristics, , Locus of Control, and Organizational Climate effecting Employee Engagement. The Work attitudes of Employee Satisfaction, Organizational Commitment and Employee Involvement too have been discussed. The research has helped to build a conceptual framework of the various variables which lead to Employee Engagement at work place. This literature survey has also helped in finding out some of factors like Work Values and Personal Beliefs may play significant role leading to Employee Engagement at work place. Very little Research work has been done on work values, and Personal Belief based on spiritual philosophy, and their effect on Employee Engagement. Therefore this work can be foundation of many future researches on the above mentioned gaps in the literature.

Keywords : *Employee engagement, Leadership, Work values.*

OBJECTIVES OF THE STUDY

. The objectives are stated as following:

1. To find out the relationship between employee engagement and personal attributes such as, demographic background, age, tenure in organization, dispositions such as positive and negative affectivity, or internal or external control attributions etc.

2. To find out the relationship between employee engagement and situational factors such as Organizational Climate (support, values, participation, Growth, fair treatment, leadership style of supervisor, and Job Characteristics.

STATEMENT OF THE PROBLEM

The study will investigate the contribution of personal attributes and situational factors in affecting the employee engagement. The personal attributes will be studied in terms of Personality, Locus of Control, demographic background, age, tenure in organization, dispositions such as positive and negative affectivity, or internal or external control attributions. The situational factors will be studied in terms of Organizational Climate and Job Characteristics.

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INTRODUCTION: FOUNDATION OF STUDY ON EMPLOYEE ENGAGEMENT

Understanding Employee Engagement by recent articles and surveys Dynamics of Employee Engagement concept: Discussion of various elements of Employee Engagement

Employee engagement defined: An engaged employee is physically, emotionally and mentally involved in their work and put their discretionary efforts in work. (i). **Engagement factors** are:

- Emotional attachment
- Involvement
- Commitment
- Motivation through organizational and personal growth
- Satisfaction
- Empowerment

Hay Group, Gallup Watson Wyatt and DDI surveys (2012)

• There have been a number of research studies across a wide range of industries and countries to identify the benefits of employee engagement in the organizations. The outcome of such studies indicate that organizations with higher level of employee engagement outperform their competitors in terms of performance and profitability, whereas companies with low levels of employee engagement witness fall in profits and operating margin.

• It is also suggested by current studies that employee engagement will be influenced by employee perceptions of job importance, his clarity of job expectations, career advancement opportunities, regular feed back with superiors, quality of working relationship with subordinates, superiors and peers and perceptions of the work place ethos and values.

• It would be wrong to equate employee satisfaction with the level of engagement. Employee satisfaction and loyalty does not necessarily mean that employee is really engaged. It is again found in a study by Gallup that no matter how long employees stay with the organization or how satisfied they are with their job, only an average of 29% are typically fully engaged and willing to give discretionary effort. Another 49% would be indifferent and remaining 22% would be actively disengaged. It is possible that employees are self motivated and dedicated to their job but sometimes they do not engage themselves with the organization. Engaging employees would be something more than merely keeping them satisfied and retained.

(Article posted on 2-5-12 on Passion HR Google group by Anil Kausik regarding Hay Group, Gallup Watson Wyatt Surveys)

To summarize employee engagement as combination of various attitudes and attributes is prime concern for Industry because through various surveys it has been found correlated to productivity, customer satisfaction, and positively effecting profitability.

REVIEW OF LITERATURE

1. Employee Engagement: It can be a state of Individual's involvement and satisfaction with the work which one is doing along with enthusiasm. Whether they feel their work is important and meaningful, and whether their interactions with coworkers and supervisors are rewarding (May D.R.et al -2004). ***The concept of employee engagement was well brought by Kahn (1990 p.694) as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances". Schaufeli et al (2002) explained employee engagement as "a positive fulfilling, work related state of mind that is characterized by vigor, dedication and absorption"*** A study of nearly 8000 business

units in 36 companies found that in comparison to other companies, those whose employees had high –average levels of engagement had higher level of customer satisfaction, were more productive, had higher profits, and had lower level of turnover and accident (James K. et al -2002). Wyatt's (2007-08) Workforce Survey found that, key drivers of engagement are customer focus, compensation and benefits, performance management and communication. Employee Engagement can lead to better financial performance. Highly engaged employees are committed and focused, and are two and half times more likely to better performers than their peers. Such employees intend to stay for longer time in their companies. Engaged employees were five times less likely to have safety incidents, and incidents were less serious (Lockwood N.R. "Leveraging Employee Engagement for competitive advantage" 2007))

In the Employee Engagement studies following have been found as predictors of Employee engagement (May D.R et al 2004, and Harter J.K. et al 2003)

1. Clear job guidelines
2. Personal control /autonomy over job performance
3. Performing work consistently with one's identity

There are combinations of cognitive and emotional antecedents' variables. Studies have found that job predictors of engagement may change, depending on aspects of employee sample or working conditions acting as moderating variables (Britt T.W., 1999, Britt T.W., 2005)

Other Studies About effect of Organizational Climate related dimensions and personal attributes like self efficacy and core self evaluation on Employee Engagement and related attitudes. Demographics effect on Employee Engagement too is discussed.

1. Situational / Organizational Factors effect employee satisfaction which in turn affects employee loyalty (Ali Turkyilmaz et al 2011):

a. Empowerment and Participation, Working Condition, Reward and Recognition, Team Work, Training and Development influences Employee Satisfaction and that effects Employee Loyalty[30](Establishing relation between employee loyalty and satisfaction, following model was proposed which established link between both loyalty and satisfaction: Empowerment and Participation, Working Condition, Reward and Recognition, Team Work, Training and Development influences Employee Satisfaction and that in turn effects Employee Loyalty. Findings are that training, and personal development, were most effective factors in Public Sector Social Security Institution in Turkey.)

2) The study (Jasna Auer Antoncic et al 2011) finds Employee Satisfaction leads to Positive outcomes like intrapreneurship and growth[31].(The various drivers of Intrapreneurship and firm growth are factors of employee satisfaction namely remuneration, benefits, Organization culture, employee loyalty, general satisfaction with work, and employee relationships.)

3) "High Involvement HRM practices have positive effect on Organizational Performance (Study by Moideenkutty Unnikammu et al (2010) :

a) Comparing the same size and type of firm, and PE ratio it was found that high involvement management practices were having positive correlation with performance and market valuation[32].

b) Organization Factors leads to Employee Satisfaction that in turn positively affects Efficiency and Customer Focus."

4) A study by (Bontis Nick, et al 2011) founds that autonomy and challenging work contribute to employee satisfaction, and that employee satisfaction and information sharing relate to greater reported efficiency and customer focus.

a. A Study by Waters L. K. (1974) about Environmental Factors effecting Employee Satisfaction: The five factor scores and 22 organizational climate scales were correlated with the seven job-related attitude and behavior measures; Factor V (Management and Peer Support or Employee Centered Orientation) was to some significant degree important to almost the entire job-related attitude areas. This factor and Factor I (Effective Organizational Structure) were most salient in satisfaction with Interpersonal Relationships and Opportunities for Recognizable Advancement. Factor II, emphasizing work autonomy, was most related to job involvement, and Factor IV, emphasizing high standards and challenge was most related to intrinsic motivation and satisfaction with Task-Involved Self- Realization.} From these results involving radio and TV employees, (various climate dimensions were differentially related to several job-related attitude areas.)

5) In a study of Boran Toker, (2011), of demographics' effect on level of satisfaction among Academicians and related staff as following:

Major findings were that the Academicians derived job satisfaction through social status was highest, and compensation was lowest. Their Job satisfaction level was moderately high; Study also revealed that Professors derived higher level of job satisfaction than Instructor, and research assistants. Study also revealed that age, education, and tenure of present university were significantly correlated with job satisfaction where as Marital status and gender were not significantly correlated.

6) The study of Jing Fenwick Feng (2010) it was found that Employee Satisfaction effects Performance and reduce staff turnover Supportive climates tend to be associated with higher organizational performance in terms of financial performance, staff satisfaction, and customer satisfaction in small retail pharmacies, and may reduce staff turnover.

7) Study of Mendelson Morris B., et al (2009) about HRM Practices affects Employee Satisfaction. Study focused on High Involvement work Systems and their positive relationship to employee attitudes:

Findings were that High involvement work system demonstrated concurrent validity positive correlation with Affective commitment and job satisfaction and negative correlation with continuance commitment. High involvement work practices which were taken into model were extensive training, decentralized decision making, employment security, information sharing, selective hiring, contingent compensation, transformational leadership, and reduced status distinctions; and method used was confirmatory factor analysis.

8) Study of Lawrence R. James et al (1977) about Organizational Motivational Climate affects Employee Satisfaction: Research paper "Relationship between Psychological Climate and VIE model for Work Study" found out that correlation between Psychological climate and Valence-Instrumentality- Expectancy Components were significant. In the study Principal Component Analysis was conducted for Psychological Component, Valence, Instrumentality, and Expectancy Components.

9) Study of Elbeyi Pelit et al (2011) about Environmental Factors effects Employee Satisfaction: In the research paper the "effects of Employee Empowerment on effect Employee Satisfaction a study" it was found that Physical Conditions at work place and Relations with the colleagues were the positively related to job satisfaction and unfair payment was the most negatively related with job satisfaction. Through regression analysis it was known that if Psychological Empowerment and Behavior Empowerment are taken as whole it has very significant effect on job Satisfaction.

10) Study of Osman Intan et al (2011) about HRM Practices effects Productivity: [The regression analysis shows that three main HR practices seem to have the highest influence on organizational

performance: 1 Employee relations and communication 2 Career planning; and 3 job/ work design, 2. Shows that [HR practices have an impact of nearly 50 percent on firm performance.].

11) A study by Annelies E.M. et al (2011) about Organization Climate influences Organizational Commitment [Climate quality was related to commitment above and beyond individual climate perceptions. However, this concerned the climate dimensions of cooperation and innovation, but not reward. Climate strength moderated the relationship between individual cooperation and innovation perceptions, and commitment.]

12) A study by Sakari, Taipale et al (2011) about Organizational Environmental Factors affects Employee Engagement [The level of work engagement varies not only between countries but also between those four economic sectors within each country. Additionally, findings indicate that {Demands decrease work engagement while autonomy and support increase it}.]

13) Pati Surya Prakash et al (2010) in their study about Self-efficacy, Organizational Support & Supervisor Support influence on Empowerment found out that Self-efficacy, Organizational Support & Supervisor Support influence empowerment dimensions of opportunity, support, resources and information.

14) In their Research Paper Rich Bruce Louis, Lepine Jeffrey A., Crawford Eean R. (2010) about Employee Engagement, its Antecedents and Effects found out that engagement mediates relationships between value congruence, core self-evaluations, and perceived organizational support at one hand as antecedent of Engagement and task performance and organizational citizenship behavior as effects of Engagement at other hand. Engagement as mediator was also able exceeded job satisfaction, Job involvement, and intrinsic motivation as mediator which were also included in study as mediators.

15) Bhuvanaiah Tejaswi and Raya R. P. (2015) in their conceptual research paper "Mechanism of Improved Performance: Intrinsic Motivation and Employee Engagement" found out that opportunities for growth and development , decision making authority, Empowerment and Supportive work environment, and Leadership which instills a sense of purpose are four key drivers of Employee Engagement.

4. Locus of Control: Previous Research has stated that a person's internal-external locus of control effects one's performance and job satisfaction (Dailey, 1980). Some individuals believe that they decide their fate on their own. Others see themselves as dependent on fate, Those who believe they control their destinies, are called "internals", whereas the other who see their lives as being controlled by outside forces, are called "externals" (Rotter, 1966). Locus of control orientations has a powerful effect in work environments, both for workers and the organizations (Locke, 1983;). Spector (1982) suggested that locus of control effects number of variables in organizational settings, including motivation, performance, satisfaction, and turnover. Locke (1983) and Spector (1982) found that individuals with an internal locus of control are more motivated, perform better on the job, express higher job satisfaction, and have lower attrition rates than "externals".

Spector (1982) suggested that "internals", were best suited for professional or managerial jobs, and are likely to perform better and be more satisfied. Dailey's (1980) study of 281 scientists addressed the relationship between locus of control and task variability, task difficulty, and job performance. He found that persons with an internal locus of control were more satisfied, motivated and had a high level of participation within their jobs. Kasperson (1982) conducted a study of hospital employees, which revealed a high positive correlation between negative attitudes and external locus of control, which resulted in a low satisfaction level. Those with positive attitudes are generally more satisfied with outcomes because of the amount of control they have to make things happen.

Knoop (1981) discovered a relationship between "internals", and how they looked at their jobs in terms of skill variety, task uniqueness and consequence, self-sufficiency, and feedback from the job. "Internals", felt that they were given more opportunities to engage in positive work outcomes. They felt more involved and felt that they had the power to make decisions. **A** study conducted by Cummins (1989) examined the relationship between social support and locus of control in determining job satisfaction levels and stress. He surveyed a sample of 96 students of business administration at a university in the southwestern United States. "Internals" developed ways to shield stress while "Externals" relied on supervisory support to reduce stress.

5. Job Characteristics : Various Researches has shown that changing various aspects of the job itself may indeed lead to higher levels of motivation, satisfaction and worker productivity .it has been demonstrated that an employee's affective response to work may be more directly related to the structural characteristics of the job than to the individual characteristics of the worker (Griffin, 1991; Stone & Porter, 1985). In the work environment, interaction of personal attributes of worker and job characteristics may have important implications for a variety of work outcomes. It is also deducted from Research that diversity in orientations toward work could lead to differential responses to the same work environment (O'Reilly, 1977) or, as Hackman and Lawler (1971) suggest, individuals may perceive the same job characteristics quite differently. O'Reilly (1977) noted that there has been considerable amount of evidence establishing to the importance of individual differences in work behavior. Many theorists and researchers maintain that to increase employee performance it is necessary to enrich the employee's job (Hackman & Lawler, 1971; Umstot, Bell, & Mitchell, 1976; Hackman & Oldham, 1975). One of the most recognized models for this job redesign and enrichment approach is the Job Characteristics Model (Hackman & Oldham, 1975). According to this model, individuals who have a desire for growth, possess the knowledge and skills to perform a job well, are relatively happy with the work context and are predicted to prosper in a job environment that is high in motivating potential (Kulik, Oldham & Hackman, 1987).In many of the Researches job characteristics research has been to understand the manner in which workers respond to a set of job characteristics present in the work environment (Hackman & Lawler, 1971). Thus, the Hackman and Oldham (1975) Job Characteristics Model examines the responses of individuals to their jobs as a function of job characteristics and individual characteristics.

6. Work Values: Study of Mishra B., Sharma B.R. & Bhaskar A. U.(2015)[61] findings reveal that among the personal factors it is age, experience, and positive work values are impacting on Employee Engagement and five Situational variables are impacting critically on Employee Engagement (1)participative management; (2) communication; (3) career opportunity;(4) job content, and (5) pay. Another study by Sharma Baldev R & Raina A D.(2013) about Employee Engagement Predictors in the Indian Segment of a Global Media Organization also concluded that positively influential personal factors were positive work ethics, and internal locus of control and critical influential situational factors were (a) job content, (b) objectivity, and (c) benefits.

7. Indian Beliefs effect: A Study by ***Mulla Zubin R.*** and ***Krishnan Venkat R. (2012)*** found out that students and executives in India widely believe the heart of Indian philosophy belief in the law of karma, moksha (freedom from the cycle of birth and death), and atma (divinity of all beings), deeply pervade the consciousness of Indians and affect their behavior in the workplace, and their attitudes towards others. The study established that beliefs in Indian philosophy lead to Organizational citizenship behaviors at work place.

DISCUSSION &CONCEPTUAL FRAMEWORK ESTABLISHED BASED ON THE STUDY

The literature survey has established the contribution of personal attributes and situational factors in affecting the employee engagement. The following are the factors established by survey:

The Personal Attributes (Dispositional Factors):

The personal attributes such as Personality, Locus of Control, Work Values, Personal beliefs like Karma theory, abiding of one to its own dharma (commitment towards one's duties), Moksha, and Atma, demographic background, age, tenure in organization, dispositions such as positive and negative affectivity, and locus of control in relation to the Organizational Commitment, and Job satisfaction.

The situational factors have been studied in terms of Organizational Climate and Job Characteristics: (support, values, participation, Growth, fair treatment, and the leadership style of one's supervisor etc),

Organizational Climate::

The Organizational Climate which is an umbrella term has been studied in terms of its following dimensions:

1) Fair treatment
2) Career Opportunity
3) Communication- **communication about goals, performance etc.**
4) Grievance Handling
5) Perceptions of the ethos and values of the organization.
6) Objectivity and Rationality
7) Participative Management
8) Recognition and Appreciation
9) Training and Education, Continuous improvement and lifelong learning
10) **Work/life balance:** vacation and time-off policies, flexi timing
11) **Growth:** skills development
12) Overall work environment: - empathic behavior of manager, quality of working relationship with subordinates, superiors and peers; cooperation within organization, the leadership style of one's supervisor, and top level management commitment for employee engagement policies
13) **Physical work environment:** what you need to do your job, all resources being provided
14) **Pride in the company:** direction, vision,
15) Benefits and HRM Practices: Individual Incentives Systems, Group Incentives, Goal Setting, Feedback, customer focus, Bonus, Reward, Pay Dispersion Equity, ESOPs
16) Employee Welfare: Health Emphasis and Insurance, Family Assistance and Friendliness, Encouraging and Rewarding Voluntary activities, Flexi Hours etc.
17) Social Interaction among employees: Employee Recreation,

Job Characteristics:

Following job factors were found:

1) **Nature of work:** interesting, variety, satisfying, challenging; (sense of autonomy, contribution to organization and job importance), and emphasizing high standards, personal control/autonomy, regular feed back with superiors, and perceptions of the ethos and values of the organization, important and meaningful

2) Role clarity: understanding of job/role, clarity of job expectations, Effective organizational Characteristics, clear job guidelines

Job Satisfaction, Organizational Commitment, Job involvement, and intrinsic motivation:.

On the above factors it was found that Employee Engagement is also influenced by other job related attitudes like Job Satisfaction, Organizational Commitment, Job involvement, and intrinsic motivation.

OUTCOMES OF EMPLOYEE ENGAGEMENT

Employee engagement influences performance, customer focus and Intrapreneurship characteristics namely initiative, creativity, and innovations in organizations

IMPLICATIONS FOR THEORYAND PRACTICE

There are various implications of this study. Firstly, this study provides valuable insights based on literature survey and practical surveys carried word-wide Various Researches. It has discussed in through different research papers various dispositional and situational factors which are affecting Employee Engagement. In the study, literature survey underlines the importance of locus of control and therefore this concept need to be looked by practitioners that how by rewarding behavior of internal locus of control persons, we can motivate externals too and change their behavior subtly and another aspect is how confidence can be inculcated in people by empowering them to make them subtly shift to internal locus of control.

Presently most of the Research studies have focused on personal factors like Personality, Locus of Control (Self Efficacy, self leadership, core self evaluation), and demographics, personal attitudes (positive, and negative dispositions towards persons things and events), overall optimistic pessimistic attitudes. But this study has discussed some paper on work ethics and work values too which are useful in fixing personal factors deciding employee engagement. Other personal factor Personal beliefs based on spiritual philosophy need to be looked in detail because one paper in as discussed in this paper has hinted they are vital deciding personal disposing. Need is more felt with reference to Indian Context.

New contribution by paper

The literature survey done by author establishes that both dispositional and situational factors play role in influencing Employee Engagement but there is absence of study of effect of Indian Beliefs as dispositional factor on Employee Engagement. There is need of doing the same because as founded by some social sciences paper the beliefs have strong positive impact on Emotional Intelligence and Organizational Citizenship Behavior. The Indian Beliefs namely Karma theory, Moksha (freedom from the cycle of birth and death), and Atman (divinity of all beings), having impact on Organizational Citizenship Behavior. Therefore they may also have also impact on Employee Engagement.

LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The scope of this paper is to study influence of situational and personal factor on employee engagement. Different type of papers have been discussed but still due to limitation of time more papers on drivers of Employee Engagement like self leadership, Personality, and Empowerment could not be discussed to understand and refine further concept of Employee Engagement.

In paper already the future areas of research have been discussed. In both empirical and conceptual areas there is tremendous scope to work on personal work values, and spiritual beliefs of persons in a particular society. Also how situational factors like purpose of organizations, following of ethical values, contributions to immediate need of society and being socially responsible organization effects Employee Engagement and should be other areas of Research.

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EXPORT PERFORMANCE OF INDIAN ENGINEERING GOODS IN THE POST WTO

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ABSTRACT

The engineering sector has become the most important item group in country's export and also accounts for 3 per cent of India's GDP. India's exports of engineering goods grew at 16.05 per cent (CAGR) during 1995-96 to 2013-14. The massive share of engineering goods in total exports illustrates the growing importance of engineering goods in country's export. . However, the share of Indian engineering exports in global market is not significant and much lower compared to developed countries. The present paper analyse the performance and competitiveness of Indian engineering goods in the post WTO period.

Keywords: *Compound Annual Growth Rate, Export Destination, Competitiveness*

INTRODUCTION

The engineering sector has become the most important item group in country's export and also accounts for 3 per cent of India's GDP. India's exports of engineering goods grew at 16.05 per cent (CAGR) during 1995-96 to 2013-14. Among the engineering goods transport equipment showed the highest CAGR in post-WTO period (table 1).

Table 1: Compound Annual Growth Rate of Selected Engineering Goods

(In per cent)

Commodity / Year	1995-96 to 2013-14
C. Engineering Goods	**16.05**
1. lron & Steel	17.5
2. Manufacture of Metals	12.9
3. Machinery and Instruments	11.5
4. Transport Equipment	21.5
5. Electronic Goods	11.6
6. Other Engineering Goods	18.68

Source: Calculation is based on data collected from RBI, Handbook of Statistics on Indian Economy.

In the post-WTO period, the value of export of engineering goods has continuously show an increasing trend and registered export of US$ 4391 million in 1995-96 and US$ 64078.5 million in 2013-14(table 2). Throughout the period, it has registered positive growth rate except for period 1998-99 (-16.34 per cent), due to East Asian crisis and again in year2009-10 (-19.6 per cent) due to global recession, with its share in total exports falling to 18.2%. Engineering exports bounced back to high growth rate in 2010-11 presenting robust performance across various other sectors.

Table 2 depicts the growth rate of selected engineering goods.

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India is currently a relatively small player in the world Electronics market but in the next few years its market share is expected to increase. Electronics is the largest and fastest growing manufacturing industry in the world, and is expected to reach USD 2.4 Trillion by 2020. As per report published by Frost & Sullivan, the Indian Electronics Industry will cross US$ 350 billion by the year 2020. The main segment expected to be contributing to this growth are Wireless, Consumer Electronics, Aerospace and Defence, Medical Devices, Identification and Security Solutions.

Table 2: Growth Rate of selected Engineering Goods

(Growth Rate in per cent)

Commodity / Year	1995-96	2001-02	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2012-13	2013-14	2014-15
Engineering Goods (value in Million Dollars	**4391.0**	**6957.8**	**21718.8**	**29567.2**	**37365.2**	**47285.6**	**38271.3**	**68784.1**	**59165.5**	**64078.5**	**73114.6**
% change	**25.17**	**2.04**	**25.19**	**36.13**	**26.37**	**26.54**	**-19.6**	**79.42**	**-13.9**	**8.30**	**14.10**
Iron & Steel		-12.6	-9.5	47.63	3.97	6.90	-37.8	81.65	-2.4	14.4	0.1
Manufacture of Metals		-0.3	24.6	20.0	38.8	7.1	-26.8	70.3	2.4	-1.0	23.7
Machinery and Instruments		6.5	30.6	32.4	35.8	19.9	-12.9	25.1	2.6	6.7	17.5
Transport Equipment		-3.4	52.8	14.5	41.9	58.8	-11.9	86.1	-8.6	17.4	26.6
Electronic Goods		11.2	18.5	31.3	19.1	104.2	-23.6	62.7	-8.9	-4.2	-24.0
Other Engineering Goods		-10.1	43.69	99.71	13.40	-6.41	-14.08	-	-	-	-

Source: Calculation is based on data taken from Government of India, Economic Survey and RBI Bulletin (various issues)

The Table 3 depicts that the share of engineering goods in total manufactured export has increased by significant margin in post-WTO period from 18.49 per cent in 1995-96 to 35.92 per cent in 2011-12 but then declined to 23.54 per cent in 2014-15. This massive share illustrates the growing importance of engineering goods in country's export. Among the engineering goods, the share of transport equipment and machinery and instrument was highest with 3.89 per cent and 3.49 per cent in 1995-96 and 7.7 per cent and 5.8 per cent in 2014-15. The share of iron & steel in total manufactured exports has fluctuated and registered 2.93 per cent in 1995-96, 5.10 per cent in 2003-04 and then fall to 2.8 per cent in 2014-15. The share of manufactured of metals has continuously rise in the post-WTO period from 3.48 per cent in 1995-96 to 5.1 per cent in 2014-15, except during the period of global recession. The share of electronic goods was 1.36 per cent in 1995-96, 3.67 per cent in 2011-12 and 1.8 per cent in 2014-15.

Table 3: Share of Selected Engineering Goods in India's Total Manufactured Exports (*In per cent)*

COMMODITIES	1995-96	1997-98	1999-00	2001-02	2003-04	2005-06	2007-08	2009-10	2011-12	2013-14	2014-15
II.MANUFACTURED GOODS											
C.ENGINEERING GOODS	**18.49**	**20.10**	**17.34**	**20.85**	**35.58**	**29.93**	**36.28**	**33.22**	**35.92**	**20.38**	**23.54**
1.Iron & steel	2.93	3.29	2.80	2.69	5.10	4.89	5.29	3.14	3.45	2.9	2.8
2.Manufacture of metals	3.48	3.85	4.12	4.80	5.00	5.83	6.84	4.79	5.14	4.4	5.1
3.Machinery &instrument	3.49	4.40	2.29	5.19	5.72	6.99	8.86	8.28	7.69	5.2	5.8
4.Transport equipment	3.89	3.50	3.98	3.05	4.03	5.95	6.82	8.52	11.19	6.4	7.7
5.Electronic goods	2.82	2.86	2.22	3.51	3.56	2.99	3.26	4.73	4.76	2.3	1.8
6.other Engineering goods	1.36	2.08	1.41	1.58	2.14	3.36	5.19	3.73	3.67	-	-

Source: Calculated from data taken from Government of India, Economic Survey and RBI Bulletin (various issues).

INDIAN ENGINEERING EXPORTS: KEY MARKETS

In post-WTO period, USA, UAE, Singapore, UK, Germany, Saudi Arabia and Italy continue to be the major markets for Indian engineering products, accounting for 43% of Indian engineering exports (see table 4). The U.S.A. is the top most destinations for Indian engineering goods with share of 13.73 per cent in 1995-96 and 11.12 per cent in 2014-15. U.A.E. is another most important destination after Singapore with share of 6.21 per cent in 1995-96 and 8.18 per cent in 2014-15. The developed countries are the major market for export of Indian engineering goods. While in 2004, the country's engineering exports constituted 0.33% of total imports from the G-7 countries, the corresponding figure for 2008 was 0.47%. G-7 countries provide a market for 30% of India's total engineering exports. India's major exports to developed countries remain products of low technology (LT).

On the other hand, there has been continuous decline in share of developing countries in country's export destination of engineering goods. The share of Bangladesh, Hong Kong and Malaysia has declined from 4.66, 3.20 and 3.03 per cent in 1995-96 to 2.01, 0.23 and 2.88 per cent in 2014-15. The government must take initiative to capture the market share of developing countries for export of Indian engineering goods.

Table 4: Export Destination for Indian Engineering Goods

(value in Million Dollars and share in per cent)

	1995-96	2000-01	2005-06	2007-08	2009-10	2011-12	2013-14	2014-15
Bangladesh	204.7 **(4.66)**	202.4 **(2.97)**	358.7 **(1.65)**	411 **(1.09)**	577.7 **(1.50)**	786.6 **(1.17)**	1336.1 **(2.08)**	1475.4 **(2.01)**
Germany	206.8 **(4.71)**	283 **(4.15)**	841.4 **(3.87)**	1568.4 **4.19)**	1762.4 **(4.60)**	2615.3 **(3.89)**	2175 **(3.39)**	2253 **(3.08)**
Hong Kong	140.5 **(3.20)**	222.8 **(3.27)**	318.7 **(1.47)**	431.5 **(1.15)**	482 **(1.26)**	545.9 **(0.81)**	155.3 **(0.24)**	170.4 **(0.23)**
Italy	75.3 **(1.71)**	197.5 **(2.89)**	653.7 **(3.00)**	1341.2 **(3.59)**	1242.8 **(3.24)**	1707.1 **(2.54)**	1638.1 **(2.55)**	1762.7 **(2.41)**
Malaysia	133.2 **(3.03)**	242.1 **(3.55)**	371.4 **(1.71)**	799.2 **(2.13)**	1068.5 **(2.79)**	1114.3 **(1.66)**	911.9 **(1.42)**	2107.3 **(2.88)**
Singapore	280.2 **(6.38)**	313.8 **(4.60)**	1173.4 **(5.40)**	1839.9 **(4.92)**	2529.1 **(6.60)**	5089.2 **(7.58)**	2894.8 **(4.51)**	2469.9 **(3.37)**
Sri Lanka	147.3 **(3.35)**	217.6 **(3.19)**	663.1 **(3.05)**	732.9 **(1.96)**	597.1 **(1.56)**	1940.8 **(2.89)**	2133 **(3.32)**	3774 **(5.16)**
U.A.E.	272.7 **(6.21)**	444.7 **(6.52)**	1835.4 **(8.45)**	2845.4 **(7.61)**	2459.1 **(6.42)**	4863.7 **(7.25)**	5179.6 **(8.08)**	5982.8 **(8.18)**
U.K.	321.1 **(7.31)**	430.3 **(6.30)**	1077.1 **(4.96)**	1543.5 **(4.13)**	1729.3 **(4.52)**	2451 **(3.65)**	2567.8 **(4.00)**	2739.8 **(3.74)**
U.S.A	603 **(13.73)**	1221.8 **(17.92)**	3395.1 **(15.63)**	5120.4 **(13.70)**	4221.1 **(11.03)**	8164.8 **(12.17)**	6464.2 **(10.08)**	8132.5 **(11.12)**
Others	2006.1 **(45.68)**	3042.5 **(44.62)**	11030.8 **(50.79)**	20731.8 **(55.48)**	21602.2 **(56.44)**	37814.4 **(56.36)**	38622.7 **(60.27)**	42246.5 **(57.78)**
Total	4391	6818.6	21718.8	37365.2	38271.3	67093.1	64078.5	73114.6

Note: Figure in bracket represents the share

Source: Calculation is based on data collected from RBI, Handbook of Statistics on Indian Economy.

COMPETITIVENESS IN ENGINEERING PRODUCTS

From the table 5 given below, we can highlight that among the selected engineering goods except for iron & steel and manufacturers of meals the other item shares comparative disadvantage. The manufacturers of metals showed RCA only in past decade. One does not see much increase in the RCA index of selected engineering goods. Prior to post-WTO period iron & steel item exhibited a comparative disadvantage but since 1995 it has revealed comparative advantage. Prior to 1991-92, the iron and steel industry in India was under the shackles of government control. It is during the policy reforms of 1991-92, that the industry was allowed to break away from the list of those reserved for the public sector. It was also freed from the obligation of compulsory licensing under the Industries Act 1951. In fact, in 1992, the industry was accorded the status of a 'high priority industry' for automatic approval for foreign equity investment up to 51%. Deregulation of price and distribution of steel was also granted by the government of India. In addition to these benefits, the import duty on imports of raw material for steel production was also reduced leading to lower cost of production. The Export-Import (EXIM) Policy of 1997-2002, also permitted free exports of all items of iron and steel. This change in policy stance enabled the sector to gain advantage. Thus deregulation accompanied by India's endowments of iron ore and non-coking coal have assisted in the sector attaining comparative advantage. The other transport equipment showed RCA in 2010 (1.27) which is a good signal for coming years.

Thus, it could be seen that India does not enjoys RCA in export of high technology products which calls for greater attention on the part of government to make country technically advance in production methods and strategy.

Table 5: Revealed Comparative Advantage of Selected Engineering Goods in Post-WTO Period

	1995	1997	1999	2001	2003	2005	2007	2009	2010	2013
ENGINEERING GOODS										
Iron and steel	1.05	1.37	1.00	1.4	2.06	1.63	1.79	1.50	1.85	1.56
Manufactures of metals n.e.s.	0.90	0.99	0.87	1.4	1.28	1.32	1.19	0.94	1.00	1.19
Power-generating machinery & equipment	0.23	0.28	0.04	0.16	0.30	0.38	0.56	0.60	0.51	0.52
Machinery specialized for particular industries	0.25	0.31	0.19	0.34	0.43	0.44	0.44	0.49	0.44	0.53
Metal-working machinery	0.25	0.35	0.13	0.47	0.63	0.41	0.42	0.41	0.34	0.35
General industrial machinery & equipment & machine parts thereof	0.12	0.18	0.08	0.06	0.38	0.50	0.67	0.50	0.53	0.58
Office machinery and ADP equipment	0.15	0.15	0.70	0	0.13	0.10	-	-	-	0.06
Telecommunication and sound recording and reproducing apparatus and equipment	0.12	0.08	-	0	-	-	-	-	0.28	0.35
Electrical machinery, apparatus and appliances	0.31	0.15	0.06	0	0.25	0.26	0.31	0.59	0.32	0.27
Road vehicles (including air cushion vehicles)	0.31	0.25	0.78	0.0	0.28	0.35	0.33	0.31	0.60	0.59
Other transport equipment	0.01	0.08	-	0.0	-	0.49	0.56	0.48	1.27	1.27

Source: Computed on the basis of data collected from Government of India, Economic Survey (various issues)

GLOBAL SCENARIO OF INDIAN ENGINEERING EXPORTS IN POST-WTO

The world export of engineering goods has increased significantly in the post-WTO period owing to greater developments in the manufactured sector of many Asian developing countries. Though the Developed countries are the major players in the export of engineering goods and the share of EU is highest among which Germany is still the top engineering exporter with a share of 15% and is faced with strong competition from China, which has become the second largest exporter in the world. India being the low-cost manufacturing hub has aided the strong growth of engineering exports from the country. From the table 6 given below, global export performance of selected Indian engineering goods in world exports in terms of share and value of exports could be analysed.

Table 6: Value and Share of Selected Indian Engineering Products in World market in Post-WTO Period

(Value in US$ Billion and share in %)

	2000	2005	2006	2007	2008	2009	2010	2011	2013
Iron & Steel									
Value	1.2	5.3	5.9	8.22	11.2	10.7	11	13	13
Share	0.9	1.7	1.6(12)	1.7(11)	1.9(11)	1.3(14)	2.5(9)	2.5(8)	2.8(8)
Office and Telecom Equipment									
Value	0.4	0.9	1.3	1.3	3.9	3.7	3.7	6.3	5.2
Share	0.04	0.07	0.09	0.09	0.2	0.2	0.2	0.4	1.7
EDP and Office Equipment									
Value	02.	0.4	0.6	0.4	0.6	0.6	0.6	0.7	0.6
Share	0.07	0.10	0.1	0.08	0.1	0.1	0.1	0.1	0.2
Telecommunications Equipment									
Value	0.1	0.3	0.5	1.3	3.9	4	2.4	5	4
Share	0.03	0.06	0.08	0.1	0.6	0.7(15)	0.4	0.8(14)	0.6(15
Integrated Circuits									
Value	0.08	0.1	0.2	0.3	0.6	0.5	0.6	0.4	0.4
Share	0.02	0.05	0.5	0.07	0.16	0.14	0.1	0.09	0.2
Automotive Products									
Value	0.6	2.7	3.2	3.5	4.9	5	8	9	11
Share	0.1	0.3	0.3	0.3	0.4	0.6(14)	0.7(12)	0.7(12)	0.8(11)

Note: Figure in Bracket shows the Rank in World Export

Source: WTO, International Trade Statistics.

In the past few years, Indian engineering export has performed better than Australia, South Africa, Ukraine and Malaysia etc. and has become top 30th largest exporter of engineering goods in the world. Among the developing countries China is the top engineering exporters and India too has the potential to be among the leading exporters of engineering goods among developing countries and among top 20 in global market. However, the share of Indian engineering exports in global market is not significant and much lower compared to developed countries.

A key determinant of every country's export performance is its export product portfolio in terms of the technology* used in its products, e.g., High Technology (HT), Medium Technology (MT), Low Technology (LT) and Resource based (RB). India is ranked below most India-like countries on the technology intensity of its engineering exports, which indicates their low level of value addition as compared to such exports from other India-like countries. However, the share of technology-intensive products1 (HT and MT) in India's engineering exports has increased from 50% in 2004 to more than 68% in 2014, indicating upward movement along the value chain.

INFERENCES FROM THE TREND

1. Engineering goods have emerged as the most important export item among the other manufactured goods in the past decade.

2. Transport equipment, machinery & instrument, electronic goods registered highest CAGR in the post- WTO period.
3. The value of export, year of year growth rate and share in the total manufactured goods was registered highest for transport equipment, machinery & instrument and manufacture of metals.
4. Top three destinations for the export of engineering goods were U.S.A., Singapore and U.A.E. However in recent years U.S.A. has registered a declining share in India's export destination. The share of U.K., Bangladesh and Hong Kong and Malaysia has continuously declined in India's export market.
5. The share of engineering products in world export is less and does not fall among the top 15 leading exporters basically due to low export-to-GDP ratio, low engineering-to-export ratio and low technology intensity of engineering export.
6. It was only iron &steel that revealed comparative advantage throughout the post WTO period. In past decade manufacturers of metals has shown RCA and other transport equipment registered RCA in 2010.
7. In recent years India's few engineering products like iron &steel, telecommunication products and automotive products has shown better global export performance and making country to become the leading exporter of these products in world market.

Following factors have attributed to growth in engineering goods in the post-WTO period:

i) The high technological and industrial development has taken place in the country in past decade.

ii) Development of infrastructure has provided significant support to engineering sector.

iii) Most of the raw materials and other components required by engineering industry are readily available within the country that provides cost advantage and also timely and ensure supply of the products.

iv) India is being preferred by global manufacturing companies as an outsourcing destination due to its lower labour cost and better designing capabilities.

v) The government had directed around 36 per cent of the total FDI towards engineering industry through an automatic route, but subject to a limit of US$ 2 million of lump sum payments, which has further played catalyst role.

vi) The removal of tariff protection on capital goods and the reduction of custom duties on various equipment's have positively impacted the engineering sector.

vii) Beside above, various export promotion policies has also expedited the export growth of engineering goods, which are as follow:

• Providing Duty Neutralization to ensure India's exports is zero rated. Thus, schemes like the DEPB Scheme, the Drawback Scheme have helped Indian exporters to become price competitive vis-à-vis their competitors like the Chinese manufacturers;

• Incentivizing Exports volume growth through schemes like Advance Authorization, DFIA, etc.

• Promotion of technology up gradation and linking these to exports through schemes like EPCG Scheme, SHIS, etc.

• Diversifying Indian goods into hitherto low or untapped foreign markets or products through schemes like FMS, FPS and MLFPS.

• Lowering Cost of Credit through the system of both general and special interest subvention.

• Promotion of exports through SEZs: the Special Economic Zones has contributed immensely in giving a considerable push to not only engineering exports but of Indian exports in general.

• Promotion of Indian Goods abroad through specific export promotion schemes like MDA and the MAI Schemes.

Though, the engineering goods have shown a tremendous rise in our export and has emerged as an important item of country's export, the world market in this item is dominated by the developed countries of the world which is basically due to low industrial base in relation to advanced countries resulting into low technology intensity of engineering exports. India accounts for a mere 0.8% share of world engineering exports (in 2008) and ranks 30th below countries like China, Brazil, South Africa, Mexico, Poland, Czech Republic, Hungary, Slovakia, South Korea.

The Reason for the low comparative performance is as follow:

- Most of the Indian firms are unable to provide quality product due to technology related problems.
- Indian Engineering Exports have been facing stiff competition from other countries. China, Mexico, Hungary, Czechoslovakia, Brazil and Korea have emerged as the fastest growing Engineering export countries.
- Infrastructural bottlenecks are the major problem hindering both domestic and export production. The scarcity and quality of infrastructure (land, transport, power, ports and roads) is poor, thus affecting competitive delivery schedule and increasing operating costs. The delivery time of locally made Engineering goods in many cases is 1.5 to 2 times longer than in industrialized countries. Companies tend to lose orders on delivery schedule.
- There is lack of skilled and trained personnel.
- Due to dearth of required specialised industrial banks engineering industry face shortage of credit and available credit cost is rather high which tends to add up to the cost of the product.
- The export transaction cost for Indian Engineering goods industry are among the highest in the world. Heavy transaction costs not only increase the prices of the final export products, but also result in inordinate delay in export fulfilments, thus affecting export competitiveness. According to estimates by export promotion bodies, total cost of transaction of engineering goods in India works out to be around 10% of total export earnings.
- Most of the raw material is not of international standards which affect the quality of final products. Besides high cost of input adversely affects competitiveness of the product thereby reducing it international demand.
- A large number of trade barriers are being imposed on Indian engineering products e.g. Anti-Dumping and Anti Subsidy measures, problems with regard to technical certification in various countries, particularly, the Latin American countries, certain policies by the countries like the USA, which has withheld the extension of GSP for the current year so far and has also put sanctions on banks and financial institutions for doing trade with Iran, which is a growing market for Indian engineering goods, among others. India's competitors like China have FTAs with a number of emerging countries while India either does not have or at best has a Preferential Trading Arrangement, which is insufficient for Indian engineering goods to be competitive vis-à-vis say Chinese engineering good. Major engineering sectors such as the Auto sector has also reported the problem of Non-Tariff Barriers faced by them.
- As per the zero rated export, Indirect taxes that are imposed on exports are generally

refunded back to exporters. The refund system very often does not refund the full element of the taxation on the goods produced, the procedures are complicated and in certain cases like the VAT refund system, either not refunded back or are delayed to such an extent that it negates the very principle of such refunds. Thus, the cascading impact of the indirect taxation both at the State and Centre levels still continues to affect exports.

Though, it is difficult for India to compete with well-established producers in the international market but with better marketing strategy and better policy initiative by the government of India it can raise its share in world export of engineering goods.

STRATEGY FOR ACCELERATING EXPORT OF ENGINEERING GOODS.

- Need to concentrate on developing products with greater export potential.
- All the infrastructure bottlenecks in the way of engineering sector should be removed speedily so as to ensure timely production and supply of product. For this huge investment required and greater public-private partnership in future and existing projects.
- Basic metals, machinery and equipment are the important item of export for India so need to strengthen this base of general engineering segment of Indian engineering industry.
- Focus on research and development activities is imperative for engineering sector; it has been undertaken to but still is inadequate due to lack of huge funds required for the purpose. In order to meet the international standards in product characteristic R & D activity needs government initiative and role of private producers to channelize fund which can initiate the 'discovery' process to encourage and facilitate effective creation, development and marketing of intellectual property/innovative technology in the engineering sector.
- Increased flow of FDI in high potential sector will promote the export growth through greater managerial and technological support.
- The engineering industry should try to acquire domain knowledge and also try to move in vertical segments to take advantage of the expertise they have already acquired.
- To ensure readily and low cost availability of credit to the engineering sector especially in MSME sector. Need to reduce the rate of interest on term loans and also increase the repayment period to 12 or 14 years.
- Government support through formation of suitable policies is also needed to provide engineering raw materials like steel, pig iron and other non-ferrous metals at international prices, so as to increase competitiveness of Indian engineering goods.
- Revision in existing quality policy from time to time is essential to fulfil international market commitments.
- With frequent modification in technology as per the needs of international market, it becomes imperative to have skill up gradation. This requires increased role of existing institutions to provide proper training to those engaged in engineering industry. If required help of the expert from advanced countries should be taken.
- To create permanent demand in international market, there is need to promote and strengthen brand image of Indian Engineering Goods.
- To identify the trust product and trust market and the schemes like Focus Market Scheme (FMS), Focus Product Scheme (FPS) and the Market Linked Focus Product Scheme (MLFPS) will play important role in promoting engineering exports from the country.

- Tariff and non-tariff barriers faced by Indian engineering export can better be handled by having a healthier negotiating with trading partners in WTO forum or through other regional trade arrangements.
- Further India's foreign trade policies

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THE CONCEPT OF ACCESS TO HEALTH: A DEFINITIONAL DEBATE

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ABSTRACT

Access to health is a major issue for the researcher in the world. But those who work on the health issue they always face the problem of definition of access to health. The definition of access is in used by different researcher in earlier as use of health services.This definition has changed over the year and by the time researchers included concept like availability, affordability, acceptability, Accommodation and accessibility but sometimes it is hard to separate them. Some time different researcher define the same term differently which create confusion in the mind of reader. This paper tries to highlight the conceptual difficulty of defining access.

Keywords: *Health, Equitable Guess, affordability.*

INTRODUCTION

The concept and definition of "access" is major concern for the researcher of different areas. Sometime researcher is using this term without knowing the exact definition. There is wide variation between the scholars of different area on the definition of access. While "access" is a major concern in the Agriculture credit policy, health care policy, Education policy and is one of the most frequently used words in discussions of the health care system, most authorities agree that it is not a well-defined term. The purpose of the paper is to focus on the debate on the concept of access on health sector. This is the revisit of the concept and definition of access taken by different literature. It also highlights the weakness of earlier definition and development of the concept and definition of access to health after 1960s. It is mainly based on the literature available on access to health and access to other sector.

There are certain common elements which are always there in the definition of researchers. Some scholars believe the access to health means the use of health services. Some other writers focused on the availability and affordability aspects of access. Later on researchers incorporated acceptability and accessibility of the services. But still there is no consensus on the definitions of access to health and researcher take such definition.

OBJECTIVE: TO HIGHLIGHT THE DEFINITIONAL DEBATE ON THE "ACCESS TO HEALTH"

The initial behavioural model suggests that people's use of health services is a function of their predisposition to use services, factors which enable or impede use and their need for care (Andersen 1995). A major goal of the behavioural model was to provide measures of access to medical care. A danger in attempting a comprehensive access measure is that it might be too broad and nonspecific. Potential access is simply defined as the presence of enabling resources. More enabling resources provide the means for use and increase the likelihood that use will take place. Realized access is the actual use of services. Equitable and inequitable access is defined according to which predictors of realized access are dominant. Inequitable access occurs when social structure (e.g ethnicity), health

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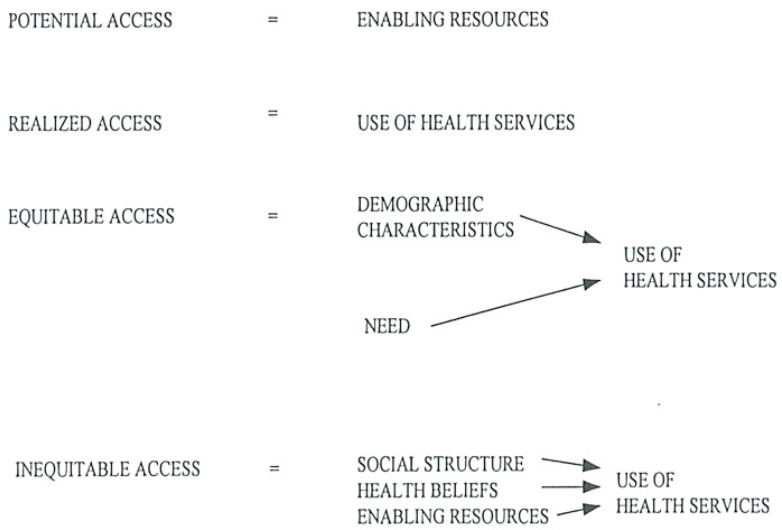
beliefs, and enabling Source (e.g income) determine who gets medical care.(Andersen. 1995).

FIGURE: 1 Initial Measures of Access



SOURCE: .(Andersen. 1995).

The issue is not limited to the lack of a precise definition for access, or the multiple meanings given to the term; access also is used synonymously with such terms as accessible and available, which are themselves ill-defined (PENCHANSKYD 1981). The oxford advance Learner's Dictionary of Current English seventh edition defines Access to something as the opportunity or right to use something. The Discursive Dictionary of Health Care, published by the U.S. House of Representatives, should be a source of precise definitions for terms employed in federal health care legislation. However, the definition for access states that the term " ..is thus very difficult to define and measure operationally . . ." and that "... access, availability and acceptability... are hard to differentiate (PENCHANSK 1981). "Access" is defined here as a concept representing the degree of "fit" between the clients and the system. Access is viewed as the general concept which summarizes a set of more specific areas of fit between the patient and the health care system. The specific areas, the dimensions of access, are as follows: Availability, Accessibility, Accommodation, Affordability, Acceptability (PENCHANSK 1981).

Tripathi(2014) has taken access as the area which cover only three dimension Availability, Affordability, Acceptability.

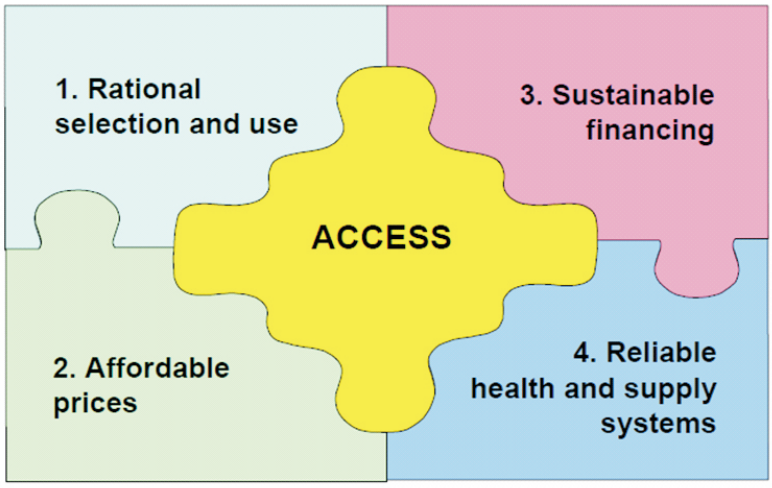
Access to healthcare is defined as the opportunity or freedom to use a health service, accompanied by timely utilisation. When an individual makes and explicit and informed decision to exercise his/her freedom to use healthcare, it is regarded as 'healthcare accessibility (L Gilson 2007). Access to healthcare is reduced to very narrow conceptions like the timely utilisation of health service or the availability of health facilities, which indicate only the existence of physical infrastructure, which is a necessary but not sufficient condition for ensuring access. Apart from physical infrastructure, several other factor are effective determinants of better access to health care and consequently better helath outcomes for the masses. These include the peoples's ability to use these services, the quality of

services being procided, the attitude of people towards receiving medical services and their awareness about diseases and knowledge about available health facilities (Tripathi 2014). Further locational access, economic access and social access are broadly taken as the major components of access to health care (Krishnan 1999).

Gulliford et al (2002) proposed components of access: *Health service availability which refers to the supply of health services. Utilization of health services which includes overcoming financial, personal and organisational barriers. Health service outcomes refers to the relevance and effectiveness of services and their quality. Equity of access which refers to whether people get access in proportion to their need.* Similarly, Thiede et al. (2007) take a broader approach to define access as the freedom to use health services (Thiede et al., 2007, p. 105). These authors define access with respect to three dimensions: availability; affordability, acceptability. Availability refers to whether appropriate health services are available when they are needed. For example, this refers to geographic availability and also whether services are available equally to different groups of the population. Affordability refers to the financial access in the broadest sense (e.g. direct costs, indirect costs, household financial wealth). Acceptability refers to the perception of health services among patients including attitude of health workers to patients, patients 'cultural attitudes to health care services' condition of premises, waiting times, duration of consultations, and quality of care in public versus private facilities.

This discussion has highlighted that even though there is no common consensus upon definition of access in the literature, there is an acceptance that access encompasses many aspects. For the purposes of this thesis, the definition according to Thiede et al. (2007) is conceptually preferred because of its broad approach. Equally important, this definition explicitly considers acceptability of health services which in low and middle-income settings is appropriate due to the wide array of cultural and contextual factors. The broad definition provides greater scope for analysis of access and is used as a basis to inform the empirical approach taken in this thesis.

Fig: WHO Framework of access to medicines



Source: Divya Srivastava 2011

While these four aspects play an important role in understanding access to medicines, In developing country settings, a key issue is that a large part of health care costs are not subsidised and so patients

must incur these out-of-pocket (OOP) costs. The demand for health care is more a function of a patient's ability to pay for these costs or to forego care (Divya Srivastava 2011).

CONCLUSION

Health is a fundamental prerequisite to realizing individual potential and equal opportunity for all. Thus, access to health care is desirable. Access is a complex and dynamic concept that defies simple definition and explanation (MacKinney et al., 2014). From the above discussion there are certain common things emerged. First thing is there is still no consensus among the researcher about the definition of access to health. Over the time number of author tries to define the access to health but there is debate on certain issue. First issue is overlapping or interrelation of the indicator of health access. For example if we take accessibility and availability element Tripathi in her definition of access only consider availability as indicator might be assuming accessibility element in it. The WHO framework focuses on the use of health services as an indicator.

Access measures describe access indirectly. Measures do not define access, but rather evaluate access performance. Yet despite indirect description, access measures have important uses. Measures can benchmark success trends within policy-relevant groups, assess performance of accountable entities (e.g., insurers and providers), and provide consumer information (Gold 1998). Access can be measured with either process measures or outcome measures. Process measures quantify how the system works, while outcome measures quantify results or final products.

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SEARCHING THE LEGACY OF TRADITIONAL CULTIVATION OF MEDICINAL PLANTS IN SOUTH ASIA

Parijat Saurabh*

ABSTRACT

As compared to other economic crops, medicinal plants have received much less attention in genetic and cultural improvements in the context of legacy in South Asian countries. Only a few countries in the Region are now cultivating improved cultivars, while the rest still depend on wild material collected for cultivation. Their cultivation techniques are quite primitive, resulting in poor yield and quality of the materials. Several constraints are envisaged, e.g. biotic (unimproved cultivars, long life cycle, susceptibility to pests and diseases), abiotic (low soil fertility, flood and drought, improper light intensity and duration, extremes of temperatures, and physical injuries or damage), technological (lack of good agronomic practices, lack of technology and technology transfer, and lack of facilities) and socio-economic (competition with other economic crops and modern drugs; lack of market channels, a domestic pharmaceutical industry, and organized cultivation; and no price support/incentive provided).

But medicinal plants continue to play a significant role in the welfare of people in Asia. Due to higher demand of raw material for industrial processing, coupled with the loss of natural habitats of most medicinal plants, large-scale cultivation of promising species has recently been attempted in several countries.

Keywords : *Medicinal Plants, South Asia, Cultural Improvement, Socio - Economic*

INTRODUCTION

All countries in the South Asia Region of the World Health Organization (WHO)have a heritage of traditional systems of medicine Plants cultivation. There are large numbers oftraditional medicine practitioners who provide help and service to the ill and theneedy. Some of these practitioners are qualified doctors who have taken a five-yearcourse in the system of medicine they practice; there are others, who have learnttheir system of medicine and the use of the different plants from their forbears,while there are still others who offer their services after working with practitionersand learning from them.

The term of medicinal plants include a various types of plants used in herbalism and some of these plants have a medicinal activities in south Asian counties. These medicinal plants consider as a rich resources of ingredients which can be used in drug development and synthesis. Besides that these plants play a critical role in the development of human cultures around the whole world.

Medicinal plants are those that possess certain chemicals that are active in treating and preventing specific ailments and diseases. Such chemicals can be extracted for the manufacture of pharmaceutical products. Medicinal plants have played a significant role in various ancient traditional systems of medication such as the Ayurvedic and Unanic systems of India, the Chinese traditional

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medicine, and their derivatives in many Asian countries. At present, medicinal plants still play an important role in developing countries in Asia, both in preventive and curative treatments, despite advances in modern western medicine. They also generate income to the people of many Asian countries who earn a living from selling collected materials from the forest, or who cultivate them on their lands.

The development of modern medicine since the turn of the century, supplemented with the introduction of modern drugs produced by pharmaceutical companies, have dealt a strong blow to traditional medicine which was accused as being inefficient, laborious in preparation and, most important of all, unavailable due to scarcity of raw material. This is exacerbated by the lack of traditional doctors who cannot earn a living without basic materials (i.e. medicinal plants) and demand (i.e. customers). There are other plants products have been used as a traditional medicine. Grape extracts have been used for human health over 2000 years ago in 'Darakchasava,' a well-known Indian herbal preparation whose main ingredient is VitisviniferaL. This 'Ayurvedic' medicine is prescribed as a cardio tonic and also is given for other disorders. Latter chemical analysis showed that it has an active component resveratrol, which has numerous activities against several diseases. It exhibits antioxidant, anti-inflammatory, antimicrobial, and anticancer properties.

The high cost of modern drugs (most ofwhich have to be imported from the West), their unavailability in remote areas, and, most important of all, the serious side effects of certain drugs, have all made the pendulum of medical treatment swing back to the side of traditional medicine in recent years. The importance and value of traditional and indigenous herbal medicine were the subject of WHO's campaign during the 70's which led to an appeal to all member countries to do their utmost to preserve their national heritage in the form of ethno-medicine and ethno-pharmacology and to re-include the use of known and tested medicinal

Plants and derivatives into their primary health care in rural areas, as well as an alternative when modern medicine was not available. Moreover, since a large portion of drugs produced by pharmaceutical industry are derived from medicinal plants, the demand for these raw materials is steadily rising. Such demand is met by obtaining naturally-occurring plants through indiscriminate collecting, or by cultivating them.

CHARACTERISTICS OF MEDICINAL PLANTS

Medicinal plants have many characteristics when used as a treatment, as follow:

Synergic medicine- The ingredients of plants all interact simultaneously, so their uses can complement or damage others or neutralize their possible negative effects.

Support of official medicine- In the treatment of complex cases like cancer diseases the components of the plants proved to be very effective.

Preventive medicine- It has been proven that the component of the plants also characterize by their ability to prevent the appearance of some diseases. This will help to reduce the use of the chemical remedies which will be used when the disease is already present i.e., reduce the side effect of synthetic treatment.

ASIA: THE LAND OF MEDICINAL PLANTS

Asia is unique among geographical regionsof the world since it possesses the following tropical ranging from tundra to deserts and rainforests characters: High Biological Diversity Due to its widely diversified ecological conditions, particularly in the tropical rain forests, it has a biological diversity that is the greatest of all regions of the world. This high diversity of the Region is reflected by the number of species of plants and animals, including medicinal plants.

High Cultural Diversity Not only is Asia rich in biological diversity; it is also quite rich in cultural diversity. Since the dawn of human history, biodiversity and humanity have become inextricably linked. Areas of high biologicaldiversity are among the most culturally disparate, with large numbers of distinct communities inhabiting adjacent areas, each with their own language, culture, and system oftraditional medicine. The last category depends on the availability of medicinal plants easily found within the community. A wealth of traditional knowledge about medicinal plants to cure illness has been accumulated over a long period and has been handed down from generation to generation until the present time.Medicinal plants can provide a significant source of income for rural people in developing countries, especially through the sale of wild-harvested material. The collectors are often herders, shepherds or other economically marginalized sections of the population, such as landless people and women. Between 50–100% ofhouseholds in the northern part of central Nepal and about 25–50% in the middlepart of the same region are involved in collecting medicinal plants for sale, thematerials being traded to wholesale markets in Delhi (Olsen 1997). The moneyreceived represents 15–30% of the total income of poorer households.

Ancient Civilizations Parallel with cultural diversity that took place in isolated areas in the jungles of tropical Asia was the existence of ancient civilizations in East and South Asia. Unlike the ruins of many empires of other regions, the Chinese and the Indian were quite successful, prosperous, and, above all, healthy. A simpleargument for their being healthy is the number of people presently living in the two most populous countries of the world.

Indonesia, which is the fourth most populous country, can also claim to have "healthy" people as well as ancient civilization. All these ancient peoples had made extensive use of medicinal plants to cure their ailments based on the systems of traditional medicine. From China and India, systems of traditional medicinespread to all other Asian countries. They were later modified to become systems of their own in most Asian countries. Abundant Raw Materials for Modern Drugs Asia has been well known in the modern world as the storehouse of raw materials for western pharmaceutical manufacturers. Up tothe recent past, the majority of these raw materials were easily obtainable from collecting naturally occurring plants. Along with cheap raw materials, accumulated traditional knowledge of native peoples of the use of medicinal plants was also "exported" freely for further development and exploitation by western pharmaceutical companies. Asia has seen the most progress inincorporating its traditional health systemsinto national health policy. Most of thisdevelopment began 30–40 years ago andhas accelerated in the past 15 or moreyears. In some Asian countries, thedevelopment has been a matter of officialpolicy, e.g., China, while, in others, changehas come about as a result of a process of politicization of the TRM agenda, e.g., India and South Asia.

In China, the process of integratingtraditional Chinese medicine (TCM) into thenational health care system began in thelate 1950s and was, in significant part, inresponse to national planning requirementsto provide comprehensive health careservices. Prior to this, TCM had been viewedas part of an imperial legacy to be replacedby a secular health care system.

MEDICINAL PLANTS PRODUCED IN ASIA

Having a long history of being utilized by Asian people, the number of species of medicinal plants known to the people of Asiais enormous. This makes listing of all medicinal plants found in Asia difficult and impracticable. Thus, in order to provide a meaningful list of medicinal plants in Asia, it is best to provide the list of promising species and group them into two categories, namely those which are collected from the wild and those which are cultivated.

Medicinal Plants that are collected from the Wild It has been estimated that four out of five medicinal

plants utilized by man are collected from the wild (Srivastana et al., 1995). Medicinal Plants that are Cultivated Due to higher demand of raw materials for the manufacture of drugs as well as to meet other requirements such as standard quality, reliable supply, reasonable price, etc., many medicinal plants are now being cultivated. Countries of Production of Major Medicinal Plants in Asia although most countries in Asia are capable of acquiring medicinal plants for their traditional uses, very few are capable of producing them in commercial quantity. These are China, India, Indonesia, and Nepal. There are also a few countries that are able to produce medicinal plants on a commercial scale, but the quantity produced is still quite low and mainly utilized domestically.

Characteristics of Medicinal Plant Cultivation As medicinal plants are relatively new crops for cultivation, very few farmers in the Region are presently engaged in their cultivation. However, it may be that such cultivation will receive greater attention from farmers in the near future. At present, cultivation of medicinal plants is characterized by the following traits:

1. Subsistence Cropping Systems

Medicinal plants are presently grown by small-holders in subsistence cropping systems. This includes the use of primitive cultivars grown in mixed cropping, i.e. together with other economic crops. The yield as well as the quantity is quite low.

2. Scattered Farming Areas

With few exceptions, most areas growing to medicinal plants are widely scattered in producing countries. This results in difficulty in collecting harvested raw materials by the middlemen.

3. Poor Quality

This is due to various factors including the use of unimproved varieties, poor cultural techniques, and poor post-harvest handling.

4. Lack of Integration

In certain areas, medicinal plants are grown as commercial crops. Yet in such cases, they are normally grown as intercrops, especially among food crops that are considered primary crops as they bring income and basic foods to the farmers. There is no systematic integration between primary crops and medicinal plants, except for China. Even in China, where total production of medicinal plants is quite high the proportion (mostly operated by industrial enterprises) in which medicinal plants are grown monoculturally is very small. This contrasts with many other economic crops that are mostly grown as monocrops.

ADVANTAGES OF COMMERCIAL CULTIVATION OF MEDICINAL PLANTS

As the supply of medicinal plants collected from the wild is decreasing due to prevailing forest destruction and their demand is raising due to global population increases, commercial cultivation of medicinal plants may become increasingly popular among farmers of developing countries in Asia. The advantages of such cultivation are as follows:

Produce uniform material:

Commercialcultivation of selected clones or improved varietiesresults in the production of uniform material. Suchmaterial yields consistent standard products of highquality, a prerequisite for successful flavor andfragrance industries.

- **Provide good income to the farmers**

Medicinal plants cropping arehigh-valued crops; thus they bring higher income tothe growers, particularly if high-yielding clones orvarieties are used.Provide opportunity for value-additionthrough processing:

- **Technology for processing**

Medicinal plants cropping is quite simple and available in most developingcountries in Asia. Commercial cultivation wouldprovide raw material for further processing, manysteps of which can be done in the locality wherecultivation takes place, while another benefit isvalue-addition through industrial processing.

- **Create better environment in utilizing the waste and unproductive lands:**

As Medicinal plants cropping yieldhigh income to the growers, costly inputs can beprovided for their cultivation. This enables theutilization of the waste and unproductive landswhich would otherwise remain idle.

CULTURAL IMPROVEMENT

Next to genetic improvement, cultural improvement contributes significantly to the success of commercial cultivation of any economic crops including medicinal plants. Several methods have been made to improve the cultivation of medicinal plants. These are:

1. **Good Agro-technological Practices (GAP)**

It has been demonstrated in a number of species of medicinal plants that improved cultivars alone cannot produce high yield and desirable quality of the products. It has tobe accompanied by GAP such as proper soil preparation and fertilizer application, the use of good planting material, plant spacing, control of weeds, insects and diseases, proper time and technique of harvesting all the way to proper post-harvest treatment. In addition, knowledge of biosynthetic pathways that lead to the production of physiologicallyimportant constituents which make these crops economically valuable is of great importance. Likewise, knowledge of physiological response of genotype to the environment will help in the understanding of the crop's behavior, especially with respect to enhanced fertilizer responsiveness, water and light requirement, etc. These will also help in the reduction of crop duration in the field; increase the amount of desirable secondary metabolite, and even reduction of any undesirable constituents (Franz, 1993).

2. Cropping Systems

In order to obtain maximum benefits of existing space, season, soil moisture and nutrients, several cropping systems involving medicinal plants have been employed. These include:Intercropping.Several cash crops, e.g. vegetable, legumes, cereals, root crops, etc. can be grown together with medicinal plants, withseveral advantages, e.g. reduction of weed, extra income, from the same area. This practice is particularly recommended for medicinal plants with lengthy periods of growth, e.g. rauwolfia, periwinkle, dioscorea, turmeric, ginger, etc.

3. Crop Rotation

This practice not only reduces incidence of weed growth but also of seed-born diseases. Normally, leguminous crops which provide nitrogen through their ability to fix atmospheric nitrogen are often used in crop rotation programs with medicinal crops. Indian farmers who grow psyllium, opium poppy and other medicinal crops are using cluster beans or cowpea as a rotation crop.

4. Selection of Suitable Sites

The ideal sites for cultivating medicinal plants are those with suitable soil and climatic conditions, which vary from crop to crop. As a "rule of thumb", fertile soil with high organic matter is preferable.

CONSTRAINTS IN PRODUCTION OF MEDICINAL PLANTS

In large-scale cultivation of medicinal plants, the following constraints are normally encountered.

BIOTIC CONSTRAINTS

These are constraints associated with living things, particularly medicinal plants themselves and their pests or other living things closely associated with medicinal plants.

1. Genetic Makeup

Most commercially cultivated medicinal plants are either primitive cultivars or those taken from the wild for cultivation. Thus, the yield and quality are often quite low. The lack of breeding institute, coupling with genetic erosion and genetic wipeout of germplasm, makes the task of plant breeders very difficult if not impossible. There is also the lack of exploration of medicinal plant germplasm, which results in very small germplasm collections in the (seed) genebanks or field genebanks. Although numerous medicinal-plant gardens have beenestablished, for example, in Thailand (Swangpol, 1995), they are mainly for exhibition purposes, and not for the specific purpose of germplasm enhancement, since, in most cases, there is no genetic diversity in the collection.

2. Long Life Cycle

Many of our medicinal plants possess a long life cycle which often makes commercial cultivation costly and impractical. This is particularly true in the case of plants whose useful parts are underground organs like roots, tubers and rhizomes such as rauwolfia, ginseng, periwinkle, dioscorea, etc. Dioscorea which is grown for its tubers rich in diosgenin, a steroid used as contraceptive drug, will attain a maximum content of diosgenin only after 5 to 6 years of growth. Certain medicinal plants are trees witha very long life cycle, e.g. Cinchona. Others possess active compounds in the bark or stem which need to be stripped off, or cutting down the trees, resulting in the loss of plants, or taking a long time for the next harvest time to arrive.

3. Susceptibility to Pests and Diseases

When grown commercially as a monocrop or estate crop, many species of medicinal plants are quite susceptible to pests and diseases, particularly those plants having a narrow genetic base as the result of vegetative propagation through rapid multiplication by way of in vitro culture.

SOCIO-ECONOMIC CONSTRAINTS

1. **Competition with Other Economic Crops.**

   Many farmers would consider medicinal plants as secondary crops. Unless they compete with other economic crops in terms of income to the farmers, they will not even consider growing them, since most species of medicinal plants give low yield, are more laborious in various steps of cultivation and harvesting, and produce low income. Moreover,as the farmers do not have previous experience in growing medicinal plants, they prefer growing other traditional crops.

2. **Lack of Marketing Channels**

   Unlike other economic crops, there is often a lack of marketing channels for medicinal plants in most countries. Also, there is no guarantee of a market demand for greater supply.

3. **Competition with Modern (Allopathic) Drugs**

   Most people still depend on modern drugs since they are efficient, selective in action (despite side effects), accessible almost everywhere, convenient in taking. All these lower the priority for medicinal plant utilization.

4. **Lack of Domestic Pharmaceutical Industry**

   With few exceptions, most developing countries in Asia do not have access to a pharmaceutical industry. Thus, there is no guarantee of sustained demand for medicinal plants.

5. **Lack of Organized Cultivation**

   To be successful, medicinal plant cultivation requires well organized contractual systems of production similar to those practiced in Europe.

6. **No Price Support/Incentive Provided**

   Unlike a few other economic crops, in most countries medicinal plants do not benefit from support/incentive from the government or the private sector.

CONCLUSIONS

The introduction of wild fruit and medicinal plant cultivation is best effected throughagroforestry schemes. As success is profit driven, it is necessary to select for cultivation, species to which monetary value can be attached. The selection of medicinal plant species forcultivation is unlikely to present a major problem, as there is a long list to drawfrom. However, wild fruits may be more problematical because their flowering and fruiting can be seasonal even in the tropics.Medicinal plants are man's best friend in time of need. Man has made use of them from time immemorial. As technology and development become more advanced, the need for them is much greater and the chance to collect them from the forest is receding. Rural property and constant demand for cultivated land are threatening the forests which are the homes of incalculable numbers of species of invaluable medicinal plants. The only possible solution to save this precious inheritance of mankind is to cultivate them systematically. This approach will also provide socio-economic benefits to the rural people as well as satisfy the need of urban people who want to go "back-to-nature" and use medicinal plants.

Medicinal plants continue to play a significant role in the welfare of people in Asia as they have for the past several millennia. Due to higher demand of raw material for industrial processing, coupled with the loss of natural habitats of most medicinal plants which were once naturally occurring plentifully in the wild, large-scale cultivation of promising species has been attempted in several countries while collecting for industrial processing still continues in certain countries. The latter approach is likely to come to an end sooner or later due to over-exploitation, unless the campaign to conserve biodiversity puts a stop to it.

Medicinal plants have been mostly brought into cultivation only recently. They have not been subjected to intensive breeding programs. Thus, the yield and quality are quite low. In order to start any breeding program, germplasma collection and conservation are most essential. As most natural habitats of medicinal plants are on the verge of being destroyed, there is an urgent need to collect and conserve valuable germplasma of medicinal plants before they are extinct.

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EMPOWERING MASS MEDIA FOR INVIGORATING THE MIND-SET OF THE SOUTH ASIAN PEOPLE TOWARDS POVERTY ERADICATION

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ABSTRACT

The most subtle instrument of poverty eradication of any people in the world is the mass media. The powerfulness of the mass media of a people determines their mind set to perceive, conceive and confront their issues, challenges and prospects. Unfortunately, the colonial mind set developed a habit of submission to the perception, conception, and construction of colonizers. The people of South Asia were victim of colonization and could not revisit their own past glories of richness and wellbeing.

They accepted that they were not civilized, not noble, uneducated, inhuman etc. as labeled by the colonial rulers and thus they became people of weak mind set and poor by morale. This state of poverty of mindset facilitated the exploitative rulers to deprive these people of their human rights, political autonomy, and self-dependence. The finer analyses lead to conclude that these people may be freed from the sense of poverty and deprivation by empowering their mass- media. Autonomous mass-media founded on the theory of identity formation of nationalist people along their own socio-political and economic-cultural heritage may be designed and empowered for this venture. The empowerment of mass media in this region may eradicate the persisting and perpetuating phenomena of deprivation and poverty, and the people of South Asia may enjoy the concept of Gross National Happiness in accordance with their richest philosophical heritage.

Keywords : *Empowering, Invigorating, Mind-set, South Asia, Heritage*

1. INTRODUCTION

The major premise behind writing this research paper emerged with the hypothesis whether there is any close nexus between mindset and role of mass-media in the formation of the mindset in any society or people. While pondering over this issue in preference to the poverty and deprivation in the South Asia, the author preferred to look into the intrinsic power and role of mass media in invigorating the mindset of the people in the South Asia. The data in this study are the theoretical narrations of the authorities in the disciplines of economics, political science, mass-media etc. The major thrust in the development of this paper is to present the role efficacy of mass media in regenerating an optimistic mindset to review the past, understand the present, and march ahead among the people of South Asia.

The issue of poverty, in the last two decades, hasemerged as a major problemamong the governments of developing nations of South Asia thatconstitute about two third of world population (World Bank,2006). The mass media, bothlocal and international attempts tosensitize the international community about this plight. It is againstthis backdrop that the United Nations in September 2000 constituted a global compact groupto address the issue of poverty ravaging the world. The outcome of the committee'sefforts is the emergence of 15 years millennium development goals which is bindingto

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all the governments of developing nations. Although it appears the whole continent ofSouth Asia is vulnerable. The popular quote of AmartyaSen as given below corroborates the findings of the committee of the United Nations.

"...in the terrible history
of famines in the world, no
substantial famine has ever
occurred in any independent
and democratic country with a
relatively free press"

AmartyaSen
in'Democracy as a Universal Value', *Journal of Democracy*, 10.3 (1999)

2. DEFINITIONAL CLARIFICATIONS

It seems quite pertinent to define each and every term which has come in the title of this paper.

Poverty: Poverty, like an elephant, is more easily recognized than defined (Aboyade, 1975). Notwithstanding its multidimensional nature that lent it to various controversialdefinitions, poverty has been defined by the World Bank, (2004) as that level of incomebelow which a certain percentage of the population is to live. The UNDP (2009) provided anall-embracing definition of poverty as "denial of choices and opportunity, a violation ofhuman dignity, lack of basic capacity to participate effectively in the society, not havingenough to feed, to clothe a family, limited or no access to school and health facilities, lack ofland to farm or employment to earn a livelihood, not having access to institutional credit facility, insecurity,discrimination and exclusion of individuals, households and communities; susceptibility toviolence, living on marginal or fragile environments without access to clean water or goodsanitation".Still it is very difficult to demarcate between poverty of psyche or poverty of physical possession. The basis of this paper is related more to psyche i.e. mindset.

Mass Media: Mass media have come to occupy the position of eminence in the worldtoday as it constitutes the nexus that controls the over-all socio-economic and politicaldevelopment of every society. Without the media which, according to Okunna (2000, p.32),maintain constant flow of vital information for economic growth, national development isbound to be stagnated or at best be retarded. Owolabi (2008, p.287) also corroborated thisposition, adding that progressive policies and decisions are made on the basis of the quality ofavailable information at one's disposal. To policy makers, information and knowledge aboutthe desires of the people are the basic ingredient they need to respond to the opportunities andchallenges in their economic and political domain. For example, the mass media, particularlyradio can be used to propagate government programs on poverty alleviation at the grassrootslevel (recent example of use of *Man Ki Baat* campaign by Government of India). It can also be used to educate the people on their civic responsibilities to the state; thatwhile the government makes effort to develop the rural communities, the people also have thecompelling obligation of paying taxes and any other levies and participate actively in the political process. The press, through comprehensive and continuous report sensitizes thepublic to the misconduct of their leaders as well as stimulates agitation for reforms that willcreate positive attitude change on the part of public officers.

It follows from the above that there is a Trinitarian relationships between the media,governance and poverty reduction. If the mass media is free as a part of the trinity andperform its expected roles, it is only normal that the level of poverty will reduce and thosefactors breeding poverty and slowing down

South Asia march towards sustainable developmentwill be tamed. Against this backdrop, this paper aims to investigate to what extent the mediareports on poverty issues demonstrate the social responsibility of the press within the contextof liberal democracy.

Empowering: Empowerment is always taken in terms of internal capacity of anything or system. Empowering the mass - media has been taken here in this paper in reference to intrinsic potential of mass media to create desired outcomes of development. Empowerment clearly denotes enrichment of positive characteristics of the mass-media for casting significant impact.

Mass - Media: Mass-media have varied and vivid structures and modes. Here is this paper, mass-media include broadcast, telecast and print matters and material like newspapers pamphlets, handbills etc.

Invigorating: The term invigorating has been used here to make the mindset of the people stronger and stronger than earlier for the required goals.

Mindset: Mindset is a psychological context which includes all the positive mental activities like attitude, aptitude, motivation, aspiration, perception, belief etc.

People: People mean the general population living in the region of South Asia with common purposes of life.

Eradication: Eradication means removal or reduction of the poverty here in this text.

South Asia: As usual politico-geographical locale consisting of India, Pakistan, Afghanistan, Bangladesh, Nepal, Bhutan, Myanmar, Sri Lanka, (All the countries of the SAARC).

3.0 Prime Question Related to the Issue:

The author of this paper has identified the following prime questions related to this issue, and analysed the available narrations of the social scientists and of the premier national and intentional authorities and organizations.

3.1 Whether the people in the South Asia have any common mindset along their heritage with special reference to orientalism?

3.2 Whether colonial rule over this region weakened the psyche (mind-set) of the people and made them believe that they are poor?

3.3 Whether mass-media may invigorate the mindset of the people of the South Asia to regain confidence in their glorious past?

3.4 Whether positive mindset created and educated by mass media may elevate the quality of the life of the people of the South Asia?

3.5 Whether new mindset based autonomous and independent survival may be exemplary case of universal development model?

These questions have been looked into the ground realities of this reason and an effort has been made to clarify the issue with conclusive recommendations.

4. THE BASIC ASSUMPTIONS

The people of the South Asia are still in the mental state of hangover of colonial lifestyle. They need to be freed psychologically from the colonial hangover and educated for their own ground realities. For this, it is basically assumed that,

1- The mass-media in this region (South Asia) should design its own educative role afresh.
2- The paradigm shift in the mass-media must be ensured from demassification to massification.
3- The heritage and inheritance of commonality of the people of South Asia must be cared.

4- The well-being of the people of this region should be redefined along the concept of National Gross Happiness.

5- The Synthetic model of development i.e. economic development and psychological development must be evolved, devised and designed for an autonomous survival model.

The intellectual construct that gives credibility to this study is the normative presstheories of communication as enunciated by Sierbert, et al (1963) and McQuail (1987).However, since the main objectives of this study is to encourage social responsibility amongthe media organisations and promote development issues through developmentcommunication, emphasis will be on social responsibility and development media theories.

The principle of social responsibility stipulates that mass media should accept andfulfill certain obligations to the society and these must be discharged on the basis of truth,accuracy, objectivity and fairness. Besides, the media are expected to be pluralistic and reflectthe diversity of their society, giving access to various points of view and to rights of reply(McQuail (2000p.15). Going by the above stated principles, the media, both publicly andprivately owned are expected to serve the interest of the public by contributing to its sociopolitical and economic needs. This is also the basis of Folarin (2002) assertion that massmedia are major participants in the development process and it is also tallies with theassumptions of development media theory that states among others that: “media must carryout positive development tasks according to nationally established policy, media should givepriority attention to economic issues in every part of the nation without discrimination”(McQuail, 1987). The above presupposes that the media as agent of change must facilitatesocio-economic development of the nation as well as bridge the information gap between thegovernment and the citizenries. It is therefore reasonable to mention that the essence of development media theory is to encourage journalists in the developing nations to embark onsustained advocacy against poverty and other factors responsible for economic backwardnessand enslavement. To do this, the media must be able to engage the government constructivelyby criticizing every bad policy and program that are contrary to development.

The fundamentals of both theories vis-à-vis this study is that the freedom of the presspreached and highly cherished in social responsibility theory carries with it a greatresponsibility of accepting and carrying out positive development tasks in line with nationallyestablished policy**.**

5. ERADICATING POVERTY IN SOUTH ASIA

Various measures of Poverty Alleviation have been suggested by various organizations such as Asian Development Bank (ADB), SAARC and UNESCO.

ADB focused on his working paper 'PovertyReductionand the Role of Institutions in Developing Asia' stated that the extent and seriousness of poverty vary markedly across Asian developing countries(ADCs). For example, using national definitions, poverty incidence ranges from a low of 6 percentin the People's Republic of China (PRC) to a high of 53 percent in Bangladesh; or usingthe international definition of a dollar a day, poverty varies from less than 2 percent in Thailandand Kazakhstan to as high as 50.3 percent in Nepal (David et al. 1999). Likewise, the extent towhich poverty has fallen over time also varies substantially across Asia. In South Asia, for instance,poverty incidence barely changed between 1987 and 1996, falling from 44.9 to 42.3 percent.In contrast, the incidence of poverty in East Asia fell from 26.6 percent in 1987 to 14.9 percent in1996 (World Bank 2000a).

In addition, there are large inter-country differences in the extent to which social services,especially health and education, reach the poor. For example, some countries, such as Sri Lanka,have been much

more successful than other countries, such as Pakistan, in targeting social services and subsidies to the poor (Streeten 1995).

There is no single explanation for these disparities. Some speculate that the diversity ofexperience stems from cross-country variations in geographical characteristics, natural resourceendowments, demographic trends, and urbanization rates (UN-ESCAP 1998, ADB 1999b, WorldBank 1997). However, these demonstrate that poverty is the outcome not only of economic processesbut also of social and political phenomena and how these interact with each other. Mediatingthese interactions is a variety of institutions that are important to understanding poverty andto devising needed policies. Thus, while economic growth is widely recognized to be the principalengine that promotes poverty reduction and improvements in people's living standards, it alonecannot fully explain the intercountry differences in achievements made in poverty reduction. Inaddition, of course, the adoption of policies that promote rapid economic growth is itself influenced by social, political, and institutional processes.

Accelerating the progress in poverty reduction requires a strategy that, in addition to promotingrapid economic growth, will address the other determinants as well, including institutionsand other factors. For instance, removing institutional and policy constraints can make economicgrowth pro-poor. The new poverty reduction strategy of the Asian Development Bank (ADB) adopts a comprehensive approach and recognizes this concern: “Since poverty causes and characteristics differ from country to country, the starting point must be a comprehensive examination of theconstraints and opportunities for poverty reduction in each country. This will require understanding the nature, intensity, and spread of poverty; the distributional effects of macroeconomic policies; the focus and efficiency of public expenditures; and the effectiveness of government programs and institutions” (ADB 1999a, 15).

'Best Practices in Poverty Alleviation and SDG's in South Asia' published by SAARC stated about the total scenario of poverty, its dimensions and poverty alleviation programmes nation by nation.

The first Summit Declaration of the SAARC Heads of State or Government (Dhaka,1985) stated as follows:

The Heads of State or Government reaffirmed that their fundamental goal was to accelerate the process of economic and social development in their respective countries through the optimum utilization of their human and material resources, so as to promote the welfare and prosperity of their peoples and to improve their quality of life. They were conscious that peace and security was an essential prerequisite for the realization of this objective.

The Heads of State or Government acknowledged that the countries of South Asia, who constitute one fifth of humanity, were faced with the formidable challenges posed by poverty, underdevelopment, low levels of production, unemployment and pressure of population compounded by exploitation of the past and other adverse legacies. They felt that, bound as their countries were by many common values rooted in their social, ethnic, cultural and historical traditions, regional cooperation provided a logical response to these problems. They were conscious of their individual and regional strengths, their potential as a huge market, their substantial human and natural resources and the complementarities of their economies. They were confident that with effective regional cooperation, they could make optimum use of these capacities for the benefit of their peoples, accelerate the pace of their economic development and enhance their national and collective self-reliance. They were convinced that theircountries, which had made important contributions to the enrichment of human civilization, could together play their due role in international relations and influence decisions which affected them.

The Heads of State or Government emphasized that strengthening of regional cooperation in South Asiarequired greater involvement of their peoples. They agreed to increase interaction and further promotepeople-to-people contacts at various levels among their countries. To this end, they decided to take steps to create awareness and public opinion in the region.

As is evident from the pronouncements made by the South Asian Heads of State or Governmentat the First SAARC Summit (Dhaka, December 1985), SAARC was founded primarily to makeoptimal utilization of human and material resources to overcome the challenges posed by poverty,underemployment, low level of production, unemployment and pressure of population growth.

During their Twelfth Summit, the South Asian Heads of State or Government declared poverty alleviation as the "over-arching goal" of SAARC. In order to reinvigorate efforts of Member States aimed at poverty alleviation, SAARC not only launched the Plan of Action on Poverty Alleviation, in 2004, but also declared 2006-2015 as the SAARC Decade for Poverty Alleviation. In 2007, SAARC unveiled a publication, Taking Forward SDGs, with specific targets to be achieved in twenty-two areas by the year 2012, which was laterextended to 2015 to coincide with the periodicity of the Millennium Development Goals (MDGs).

In 2011, the Addu Declaration decided to form the Inter-Governmental Working Group to expedite poverty alleviation and fulfillment of SDGs. Here listed comments of some excerpts from the Addu Declaration on poverty alleviation, SDGs, and social services. These directives suggest that the progress in poverty alleviation needs to be monitored covering specific works at the community level, and this progressneeds to be linked with development policy and institutional capacity in alleviating povertyand attaining SDGs.

Excerpts from the Declaration of the 17th SAARC Summit, Addu, November 2011

- ✓ To direct the convening of an Inter-governmental Expert Group Meeting to discuss the establishment of a regional mechanism to ensure empowerment of women and genderequality in the region, with focus on national legislations, including timely realization of the MDGs and SDGs.
- ✓ To direct the finalization of the work on the elaboration of the SAARC Regional Convention on Preventing and Combating Trafficking in Women and Children for Prostitution with a view to its adoption by the next Summit.
- ✓ To formulate an actionable framework to address the common challenge of sanitation and access to safe drinking water in the region.

The publication, Compendium on Best Practices in Poverty Alleviation/SDGs in South Asia, is intended to facilitate the post-PAPA (2006-15) and post-SDGs (2007-15) discourse and implementation of regional poverty alleviation investment projects in line with the Poverty Reduction Strategy Paper (PRSP) in the Member States.In preparation of this Compendium, the SAARC Secretariat circulated to Member States a memoon the outline of papers on Best Practices for Poverty Alleviation and SDGs Progress including the subjects to be covered, structure of individual report, and a timeline.

The Secretariat also organized a Symposium in Kathmandu in October 2013 to facilitate exchange of views on the best practices with the following objectives:

1. A Compendium of Best Practices is to be published in an appropriate form, such as a printed book or an online PDF document, to be made widely available;

2. Recommendations of the Symposium can help in designing regional/sub-regional investment projects for poverty alleviation at the regional and country levels;

3. Since SAARC Secretariat Member States may carry out evaluation of the Poverty Alleviation

Plan of Actions and the SDGs, the Symposium on Best Practices may cast some light from the point of view of monitoring and evaluation (M&E); and

4. The foregoing may be used to update the existing (i) "SAARC Plan of Action on Poverty Alleviation" approved by the 12th SAARC Summit, Islamabad (January 2004), and (ii) the SDGs (2007-15).

6. SUMMARY AND CONCLUSION

The two conclusions the first is that the newspapers fell below expectation when their reports on poverty are weighed on the scale of development, and the second point is that there is lopsidedness in the news reporting pattern in favour of the urban centre. It is true that the rural people in South Asia have been neglected for so long by each succeeding governments. The first and the foremost importance is to be given to enrichment of mass-media by adding constructive input. The development al issues and perspectives must be local and innovative. The imitative habit of mass-media must be checked and controlled. The regional people's needs and meeting of these needs by relevant knowledge should be the priority of the contents of mass-media.

The conclusion is in tune with the conclusive observations of some authority in this field. It has been stated that as we consider a new world order and the possibility of sustaining poverty reduction program among developing nations, we need to put in perspective the rural-urban information imbalance. If the developing nations are quick to dismiss the present world information flowas imbalance and totally unacceptable, there is a greater need for as much agitation tomaintain balance at the national level. There is urgent need for true community media inSouth Asian countries. National or regional media have been found to be unable to cater for thedevelopment needs of South Asia's sharply divergent urban-rural populace. A community media should be sited in, owned and managed by the community. Although there is a reasonablelevel of improvement in community broadcast but there is still much to be done in print mediaby dedicating a sizeable number of pages to development news about the rural communities.

In a recommendatory tone it may be proposed that the mass-media in South Asia should accept the challenge of educating the masses, and highlight the crises and their solutions, based on the commonality of geopolitical and socio-cultural commonalities, and thus, mass-media must be devised and designed afresh to inculcate the psyche of self-pride, self-dependence, self-confidence, self-sufficiency etc. among the people of the South Asia. The people of this reason may be educated through empowered mass-media to relook into their glorious part and socio-cultural as well as philosophical heritage to consolidate their vigor to eradicate poverty and deprivation.

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INDUSTRIAL AND ECONOMIC DEVELOPMENT IN INDIA FOR THE LAST THIRTY YEARS

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ABSTRACT

The objective of this paper is only to highlight the growth and development that the nation witnessed, the flip side of the reforms does not require a discussion. Here, it would suffice to point out that the post-1991 era saw the sudden lifting of various controls. This resulted in a slew of investments flowing into the country. This march went ahead unbridled, and there was absolute freedom to' the private sector. Mare particularly, corporations and the government exercised only minimal control. In my view, this unfettered freedom has made it more difficult in implementing the principles of social responsibility.

Keywords : *PSUs, Private Sector, FDI*

Indubitably, the post-1991 regime set the ground for a wholly new perspective, and a set of restructuring to follow. More popularly described as the neo-liberalization period, this very scenario in India underwent a change after this period. A new government had taken guard at the center. The economic policies of the new regime were oriented towards a totally different direction, which represented one of minimal interference and controls.

This was at stark variance from the earlier rigorous control that was being exercised by the previous governments. These reforms rather set the stage for opening the gates for attracting foreign trade and investment. Privatization was encouraged. Rigors were lifted substantially to infuse more growth and advancement in almost all sectors. The government opened up many more areas, which were hitherto under government control, to private players.

For example, some of the key sectors that were thrown open to the private sector include banking, telecom, heavy industries, etc. The license raj (bureaucratic red tape) that existed hitherto was in a sense totally dismantled.

Since the objective of this paper is only to highlight the growth and development that the nation witnessed, the flip side of the reforms does not require a discussion. Here, it would suffice to point out that the post-1991 era saw the sudden lifting of various controls. This resulted in a slew of investments flowing into the country. This march went ahead unbridled, and there was absolute freedom to' the private sector. Mare particularly, corporations and the government exercised only minimal control. In my view, this unfettered freedom has made it more difficult in implementing the principles of social responsibility.

One of the outstanding feature of India's economy is the growth of the public sector. Indian Railways, despite its shortcomings, is managed successfully by the Indian Government. The post and telegraph department has also registered substantial advancements and progress. Also worth mentioning are the various Public Sector Units (PSUs) like Indian Oil Corporation (IOC), Oil and natural Gas

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Corporation Limited (ONGC), Petronet LNG Limited, etc. who have marked their presence international . India's space research organizations, namely Indian Space Research Organization (ISRO), Liquid Propulsions Systems Centre (LPSC),etc. are a ource of dreams come true for the poorer economies to' foray into space research. India's flagship defense organizations, namely the Defence Research & Development Organisation DRDO and Brahmos Aerospace have shown their capability by developing very sophisticated missile systems. The public sector now offers more than a fifth of the employment generated in the industrial sector. Bharat Heavy Electrical Limited (BHEL), and Hindustan Aeronautics Limited (HAL) are two of the industrial concerns respected worldwide for the proficiency and quality. BHEL in fact has won the India Pride Award 2013 for Excellency in Heavy Industries. BHEL in fact has won the India Pride Award 2013 for Excellence in Heavy Industries.

To dwell succinctly on the positive aspects, it is these set of reforms that brought about a competitive economy. Earlier, various key area such as banking, telecom, power, irrigation, communication, gas and petroleum were placed in the hands of the government, or the various public sector undertakings over which the government exercised substantial control. Let us have a glance into the various changes that took place in the key fields.

The advancements in the utility services themselves is a benchmark of the phenomenal progress that we have registered. From two or three automobile manufacturers in the 1990s, we have more than twenty leading automobile manufacturers in India, which have fully established manufacturing plants. Several private players now cater to defense requirements. The IT sector has boomed in India more than any There else. Infrastructure projects have grown by leaps and bounds with private participation. The simple illustration that immediately comes to one's mind in the phenomenal increase in BOT projects. Moving away from the traditional system of expending Government money, we have now come to devise an efficient method of securing the growth of infrastructure by involving the private players. For this purpose, we are increasing switching over to BOT projects (Build, Operate and Transfer) projects. This has in fact encouraged several private players to open up their investment plans. For example, GMR infrastructure has involved himself in the construction/modernization of the International Airport in Mumbai (kindly verify) several roads and bridges are now constructed by private infrastructure concerns. To ensure that the BOT system does not end up in the private companies taking undue advantage of the opportunities, almost all Governments as also the Central Government have formed their expert BOT cell, which lays down clear norms and they handle the situation on a case to case basis.

Communication systems, including Internet and mobiles, have registered a remarkable growth. The interesting aspect is that the encouragement of private players has caused the PSUs to revisit their strategies and come on a par with the private players. We haven't even yet discussed the banking sector, where we are all aware of the dominance and key roles played by the private banks and financial institutions. The contribution of the banking sector is also commendable. Content with the policy to encourage private participate, banks have also come forward to finance and support such projects. They are a part of nodal agencies involved in such contracts. Industrial Development Bank of India (IDBI) over which the Government exercises interest has funded several projects. After the enactment of the Securitization Law, banks also help in asset reconstruction. In the case of sick industries also, the financial institutions more popularly known as the operating agencies do their maximum to revive such sick industries

This has also resulted in huge employment generation, besides expanding India's forex reserves. The Times of India recently announced that India's forex (foreign exchange) reserves have just increased

$5.03 billion to $293 billion USD. It's easy to see that the reforms have made the country more affluent. Despite the opposition and criticism to these reforms, one needs to acknowledge that it was this change in focus that has really opened India up to the entire world.

India became an instant click with the foreign investors. There was a huge surge in investments. Foreign Direct Investment, more popularly referred to as the FDI, flowed profusely into the nation. The stock market woke up, and the Indian market is one of the most sought after for the foreign investors. Statistics show that the FDI in India has increased by 34.7%, at USD $13.6 billion during the first half of the current year, whereas in the corresponding period for the previous year it was USD $10.1 billion.

The successive governments since 1991 have attempted to attract more and more foreign investment. Now the retail sector is also to be thrown open to foreign investors. The government has also of late increased the foreign holdings in the banking and insurance sectors, making these areas fiercely competitive, and according the people plenty of options to choose from. India, no doubt, is one of the most emerging and influential economies. Various studies also show that the impact of recession in India was really much lower than expected in the worldwide economic recession of the past five years. In the field of space and defense also, India is emerging as a global player. Not to speak of the IT sector, where India is the most favored destination for outsourcing from all parts of the world.

India's competency and ability in trading is not new. It dates back centuries. As history reveals, India has remained one of the most enviable trading nations. The trading culture in India now has assumed a new image, with more and more Indian companies forming joint ventures and working arrangements with foreign companies. Indian companies, which include the PSUs, have even teamed up with companies abroad, and have successfully bid and undertaken projects around the globe. The projects undertaken by the ONGC in Brazil and other parts of the world are only the tip of the iceberg. Private players like Reliance and Tata have projects throughout the world.

The phenomenal growth of India's economy is clearly reflected in the growth of India's national income, also. The GNP per capita in India was approximately 1.4% during 1960, and hovered in that level for around twenty years. However, post 1990, the GNP has registered a prolific increase.

The electricity sector, or the power sector, has undergone a complete transformation. From what remained as a monopoly of the State Transmission Utilities, the present situation represents a totally different fabric. Private players have entered the field in abundance. The emergence is now mostly confined to the generation aspect, since obviously distribution and transmission requires the building up of a much more extensive network. Earlier, the whole process of generation, transmission and distribution of electricity was done by the respective Boards/Corporations established by the Government. The Electricity Supply Act, 1910 provided for establishment of State utilities. The situation was therefore one where it was the Government that was invariably involved in the affairs of the electricity boards. Private participation was not contemplated much less encouraged. Over the years, however, there has been a change. Many private companies have come up with power projects. In Mumbai, earlier itself, the entire distribution network is done by BSES.

The sweeping changes that have been introduced by the new electricity law replacing the old law is a clear indication of the recognition of the role of private players. Now, with the new law in place, it firstly delinks the three major components i.e. generation, distribution and transmission. As a consequence, even private persons can set up their own generation units. This has become an instant hit since small time hydro electric generation has been on the rise. Alternatively, investments in wind mills have gone up. The new law has also helped in the sense it has simplified the process of

transmission. A salient feature of the new Act is the concept of "open access", where one can, subject to compliance with the procedure, access electricity by purchasing it from any generator. The long drawn consequence is that the entire process will become competitive and fiercely competitive that it benefits the consumers. The new Act now recognizes private participation just like the Government utilities in all the three segments by equating all those involved as "licensees". In order to ensure that there is transparency and fairness, Commissions called Regulatory Commissions have been set up for each State so that no entity gets an undue advantage.

This highlights the growth that we have registered in this field over the years. Industrial production has also been gaining momentum. It has not registered negative growth for the past so many years. Since the mid-1980s, India has slowly opened up its markets through economic liberalization. After more fundamental reforms since 1991 and their renewal in the 2000s, India has progressed towards a free market economy. In the late 2000s, India's growth reached 7.5%. (WIKIPEDIA). The sectors, such as production, manufacturing, mining and even the traditional industries, have registered substantial growth. The economy will grow 4.9% year on-year in 2013-14, similar to the 5% growth recorded in 2012-13. (India Ratings & Research- indiaratings.co.in).

In terms of size, India is considered to be the tenth largest economy in the world by nominal GDP and the third-largest by purchasing power parity (PPP). The country is one of the G-20 major economies and a member of BRICS. On a per-capita-income basis, India ranked 141st by nominal GDP and 130th by GDP (PPP) in 2012, according to the IMF. India is the 19th largest exporter and the 10th largest importer in the world. While the economy grew at a rate of 5.5 percent during the 1980s, we have witnessed further growth in the 1990s and thereafter. Given the fact that India was a developing country at that time, and not perceived by many to be a potential player, the growth during the past three decades have proved all such assumptions wrong. India today is one of the hottest destinations, be it in any field ranging from industry to IT to tourism. There is no area where Indian presence is not felt.

It is due to the flexibility and the stimulus in the economy that was introduced since the 1990s that we have been able to register such a remarkable growth in all sectors. One highlight of Indian economy is that it has not just opened the doors to foreign players Consistent with and not remaining complacent by opening the doors to foreign companies alone, our economy has given a major fillip to encourage Indian companies to invest, contribute and compete with the foreign players. It may be true that it is the foreign inflows that took India's entrepreneurs to new horizons, but we must pay full credit to India's own industries and establishments. They have been able to demonstrate that India is a power to reckon with. The fact that some of the Indian companies and the industrialists are respected and reckoned worldwide as key figures bears testimony to India's endeavors.

One more remarkable feature of India's robust economy is that it has been able to withstand the onslaught of the recession that has visibly shaken the world economy. No country is spared by this syndrome. It has affected all countries, including the US and the European Union, with full force. While the hurricane has not yet died down, and still the major countries are finding it difficult to grapple with the tumultuous economic scenario, India showed the way by registering positive growth. While the growth may not be as great as expected, the fact that India has not been so badly hit by the recession and the fact that India has been able to register positive growth is a clear sign of her ability to swim against the tide. It is such a feat that emboldens me to assert that India is a power to be reckoned with.

India's external relations have also improved by leaps and bounds. She is now a more reticent

government. Thanks to the incessant work done by the external affairs ministry for the past several years, India has been able to forge strong and stable ties with several countries. For a long time, India's association was mostly confined to the USSR and its partners. But India has shed those inhibitions, and now shares excellent relations with several countries across the world. Interestingly, countries who traditionally oppose each other have established strong ties with India. We have excellent relations with both the US and Russia. India's presence in Latin America is getting more and more profound as well. India's ties with China, which is perceived to be India's archrival, are improving. India and China have long been involved in a tug of war on the border issue. Now, both the Governments have formed special teams to address the issues. News reports suggest that it is progressing. Trade initiatives are also being undertaken at several levels between the two countries. Despite the instances of border incursions which we have been seeing, bi-lateral ties have improved. I believe that even relations with Pakistan have improved. This has been possible mainly because of India's ability to trade, develop and do business in all areas. Over the years, India has also become sufficiently self-reliant. This shows that India is not a country that can be taken for granted.

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REDUCING GENDER INEQUALITY IN THE RURAL LABOUR MARKET THROUGH PUBLIC WORKS: AN ANALYSIS

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ABSTRACT

The state intervention in the rural labour market through Employment Guarantee Act, 2005 has been a landmark in the India's development policy. It guarantees atleast 100 days of work for the rural household whose adult member is willing to do unskilled manual work. Furthermore, it ensures social justice by mandating minimum women participation of 33 percent and prohibits wage discrimination. MNREGS has been successful in self targeting of the relatively poor and vulnerable households and individuals across socio-economic groups. However, simultaneously the program has also been criticized for creating labour shortage in the rural area particularly in manual agricultural activities where share of women is relatively higher. In this sense, the study has shown by using secondary data from NSS and IHDS that the PWP has actually a tool in addressing gender inequality in the labour force participation. As argued in the literature, one of the reasons for low female participation is the lack of socially acceptable employment oppurtunities in the rural area. In a sense the program has been a successful in providing dignified alternative employment oppurtunity. Second given its gender friendly design, the wage gap in the casual public work employment has reduced significantly with the implementation of the program. The impact is also clearly visible in non-public casual work. However, there has been significant inter-state variation where the success has been limited to remove social and cultural constraints faced by the women.

Key Words : *MNREGS, NSS, Rural Labour, Public works.*

1. BACKGROUND

One of the features of the labour market in the developing countries is the low participation of female in the labour force particularly in the non-agricultural sector. Female are mostly disadvantaged with low earning and are mostly employed in the casual workforce (Fields, 2011). In India female labour force participation has been less than 50 percent of the male participation which further declines in the period between 2004-05 and 2011-12. The factors argued for this ranges from increased educational enrollment, improvement in the standard of living, lack of socially acceptable work in the non-agricultural sector to the social and cultural barriers (Das and Desai, 2003; Rangarajan et. al 2014; Sorsa P et. al. 2015). Gender wage discrimination has also been strong factor that discourages women from participating in the labour market unless the distressed economic condition compels.

Theoretically as argued, in the traditional agricultural labour market women has been considered as a subsidiary to the male worker and are mainly employed in less paid manual agricultural works (Khera and Nayak, 2009). So, women remained out of labour force as the employment oppurtunity available

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in rural area are neither remunerative nor socially dignified which deprives women from monetary earning. Even in the non-agriculture employment women are being paid less than the male workers despite the same feature(s) of the work. In India with the declining share of agriculture in the economy, women cannot find the alternative work oppurtunity in the non-farm sector and cannot migrate to the urban area as the male workers (Desai, 2013).As pointed out in Khera and Nayak (2009),

> "Employment oppurtunities for women in the private labour market are limited, irregular, poorly paid and can be hazardous. It often involves migration which raises a whole range of issues of its own. In addition to the invisible social barriers, working conditions in the private labour market are often very demanding and exploitative."

Recent experience of the public work program provides some insights in addressing these challenges. Historically, public works program has been successful and appreciated for relatively higher participation of women (Dreze and Sen, 1989). Similarly, the national employment guarantee (NREG) program implemented in 2006 has relatively higher female participation in total. The official data of MoRD shows the consistently higher representation of the women in the program over the period since its implementation. Recently, in 2014-15, the participation of women has been the highest and was more than 50 percent.

The employment guarantee act, 2005 has mandated gender friendly policies that have shown the positive effect in attracting women from the household activities to the labour market. EGS in its design mandates atleast one-third participation of female (schedule II (6)) in the public work as well as guarantees equal remuneration to both male and female (schedule II (34)). As pointed out in Khera and Nayak (2009), the attractive features of NREGA for women include: availability of work in the radius of five kilometer around the village, being government work public employment has regularity and predictability of working hours, less chance of work being exploitative as in private labour market, NREGA work is also considered socially acceptable and dignified, better paid (there is no discrimination on the basis of gender) and also provision of crèche for the care of child which she can carry to the worksite. The participation in the program has the empowerment effect for the women in the rural area given the assured income with safe and socially accepted working conditions.

The paper has been designed in the following fashion. Section 2 analyses the trend in the female labour force participation in the labour market in the reform period. The successive section 3 analyses the relative participation of the female in the MNREGA as compared to the rural labor market. Section 4 discusses the trends in the gender disparity in the wage rate both in public work and non-public work. The role of public work wages particularly for female in determining non-public work wages has also been part of the section 4. The last section concludes with policy observations.

2. FEMALE PARTICIPATION IN THE LABOUR MARKET

The FLPR has been lower than the male counterpart in the rural area as reported in the table 1 below. As per all the estimate of measurement, the FLPR has been less than half of the male LFPR in all the period of analysis. In the reform period between 1993-94 and 2004-05, the female participation in the labour force has increased by around three percent, the highest being in the principal status. However, in the period between 2004-05 and 2011-12, the FLPR has decline significantly. The average decline in the FLPR in the rural area has been by around 25 percent.

In the period between 1993-94 and 2004-05, most of the employment has been in the self-employment category. Female share in self-employment has increased by around 15 percent against just 1.4 percent increase for male workers. Whereas in the self-employment representation of female has been

much higher than the male, in the regular employment the female share has been much lower than the male. Thus on the one hand female has declining share in the labour market at the same time the quality of employment female are getting are more vulnerable than the male workers (table 2). The share of female has been higher than the male in the self-employed of which mostly are unpaid. In the period between 2004-05 and 2011-12, with the improvement in the standard of living women has exited from such work. Similarly female share has been much lower in the regular employment. But in the casual work, share of female has increased in the period between 2004-05 and 2011-12 and the share of female is just one percent less than male casual workers. In this period the growth in the share of female casual employment has been around 21 percent.

In the out of labour force category, domestic duties has been a major activity for female, the substantial share of that can be attributed to the unavailability of suitable work oppurtunities. According to activity status in 2011-12, around 43 percent of women were attending domestic duties. Out of this, about 16 percent of female in the rural area are doing domestic duties because of social constraints. From the total women who do not want to spend most of the time on domestic, 17 percent of female are pursuing so due to lack of work. Further, around 33 percent of women doing domestic duty are willing to work if provided to their household. In this around 73 percent want to do regular part time regular while around 20 percent want to pursue regular full time work. So in such situation NREGA can be a source of optimism for improving the share of female in the labour market.

Table 1: Gender-wise Labour Force Participation in Rural Area

Category	1993-94	2004-05	2011-12
Male			
PS	54.9	54.6	54.7
PS+SS	56.1	55.5	55.3
CWS	54.7	54.5	54.5
CDS	53.4	53.1	53.4
Female			
PS	23.7	24.9	18.1
PS+SS	33.0	33.3	25.3
CWS	27.6	28.7	21.5
CDS	23.2	23.7	18.0
Person			
PS	39.7	40.1	36.8
PS+SS	44.9	44.6	40.6
CWS	41.5	41.8	38.3
CDS	38.7	38.7	36.1

Source: Various NSSO rounds

[1] The NREG Act, 2005 makes no distinction on the basis of gender and the wage paid are equal to both male and female who works in the program. Anyone irrespective of gender who demands for employment under the program will be provided work within 15 days and in the radius of 5 Km around the village. Apart from this the working conditions has also been assured to be gender friendly which attracts women workers and participate in the program for supporting household income. This has the potential to not only economically empower women but also increase their status in the household and participation in the decision making.

Table 2: Relative Gender Gap (percent) in the Share of Different Employment Status

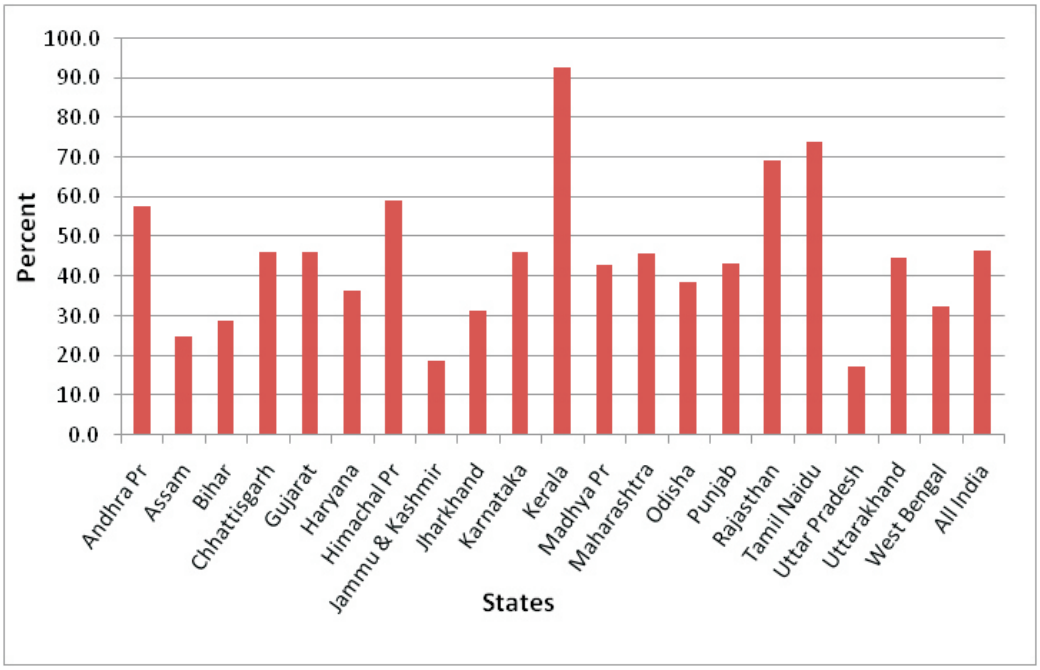
	1993-94	2004-05	2011-12
SE	1.6	15.9	9.1
REG/SAL	-68.2	-60.7	-45.5
CAS	14.5	-11.7	-1.7

Source: Author's calculation from unit record data

3. ROLE OF MNREGA IN FEMALE PARTICIPATION

The unavailability of socially acceptable work oppurtunity for female deprives them from monetary earning which negatively affects their status in household and society. In such conditions, NREGA has been an economic oppurtunity for the rural women that played a significant role in their participation in the labour market by providing better economic and social benefits. It is reflected in the increased female share in the casual employment from NSS data by around 21 percent between 2004-05 and 2011-12. Against the lower female participation in the workforce, NREGA has been an attractive avenue for income earning oppurtunities to female in the rural area. As per the official data, the share of women in total participation in the NREGA has been equal to male and has been much higher than the mandated one-third of total employment generated. At the aggregate all India level, women participation has increased regularly since the 2006-07 and in 2013-14, the share of women in total casual public employment was higher than the 50 percent. However, there has been significant level of heterogeneity at the sub-national level (figure 1) with higher participation of more than 70 percent in Tamil Naidu and Kerala while less than 20 percent in Bihar, Uttar Pradesh and West Bengal.

Figure 1: Persondays Work (Percent) by Women in NREGA, 2011-12



Source: MIS, Ministry of Rural Development

Although higher women participation in the public work has not been new, however, the participation in MNREGA has been remarkable. There has been apprehension in some quarter that the higher female participation in the public work may be due to shift from the existing occupation that may not be considered as encouraging. Nonetheless, the public work program has not only provided better employment oppurtunity but has also attracted women who have not done paid work which evident from observation from IHDS report and NSS quinnequinnal survey (table 1 & 2 and figure 2).

From the unique panel of IHDS it has been found that around 46 percent of women who worked in MNREGA in 2011-12 were either not working (25 percent) or working only for family farm or business (21 percent) in 2004-05 (table 1). So, MNREGA has been the first time earning oppurtunity for such women. Interestingly among the participating women no one has reported as not working in the year as compared to 39 percent by the non-participating women. MNREGA has helped in diversifying the earnings as around 56 percent of participating women had worked only in agriculture as farmer or labourer in 2004-05. But in 2011-12 in comparison to the 47 percent of the non-participating women who worked only in agriculture, none of the participating household has worked in only agriculture and has diversified source of earnings including non-agricultural.

Table 1: Activity Distribution (percent) of Female MNREGA participant and non-participant (age 30-59 yrs) in 2004-05 and 2011-12

Activities	Non-Participants		Participants	
	2004-05	2011-12	2004-05	2011-12
Not working	44	39	25	0
Work on own farm	39	43	41	52
Work on family business	4	5	6	4
Agricultural labour	18	17	46	48
Non agricultural labour	5	5	11	7
Work on monthly salary	3	4	5	3
Work in MGNREGA	-	-	-	100
Worked only in agriculture (farmer or labourer)	44	47	56	0
Work only for family (on farm or in business)	31	35	21	0
All work excluding MGNREGA	56	61	75	82
All work including MGNREGA	56	61	75	100

Source: IHDS (2004-05 and 2011-12)

Note: Multiple Activities may be more than 100 percent.

The persondays worked by women in MNREGA has not only been equal to men but as reported in table 2 below, the participating women have also worked higher persondays in a year than the non-participating women. In the year between 2004-05 and 2011-12 persondays worked in a year increased by around 22 days from around 116 days to 138 days respectively. In the same period persondays worked by non-participating women has increased by less than three days in a year. Furthermore, as compared to the non-participants it has been significantly higher by around 61 days in

[2] The other prominent criticisms of the MGNREGS have been a factor for increase agricultural wages by creating shortage of wage labour in the peak agricultural season. However, it has been argued as indirect effect of the program which has equally benefitted to the non-participants in the rural area. The monopsonistic character of the traditional labour market has been providing sub-optimal return to the casual wage earners. So, the program brings positive impact in the labour market through the efficiency gains (Basu et. al. 2009).

[3] Khera and Nayak (2009) has found in their study of six states (Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan and Uttar Pradesh) conducted in May-June, 2008 that around 70 percent of women who worked in the MGNREGA were not earned any cash income from any source in three months preceding the survey.

year. The persondays worked by participating women was around 138 days against 77 days for non-participating in the year 2011-12.

Table 2: Persondays worked by female MNREGA participants and non-participants (aged 30-59 yrs) in 2004-05 and 2011-12

Activities	Non-Participants		Participants	
	2004-05	2011-12	2004-05	2011-12
Not working				
Work on own farm	31.9	28.8	31.2	34
Work on family business	7.1	11.2	8.2	7.0
Agricultural labour	23.1	20.3	58.8	48.0
Non agricultural labour	7.2	7.3	12.0	19.2
Work on monthly salary	6.0	10.3	6.3	6.2
Work in MGNREGA	-	-	-	34.8
Worked only in agriculture (farmer or labourer)	54.9	49.1	89.9	81.9
Work only for family (on farm or in business)	38.8	39.8	39.2	40.7
All work excluding MGNREGA	74.7	77.3	115.8	103.8
All work including MGNREGA	74.7	77.3	115.8	137.8

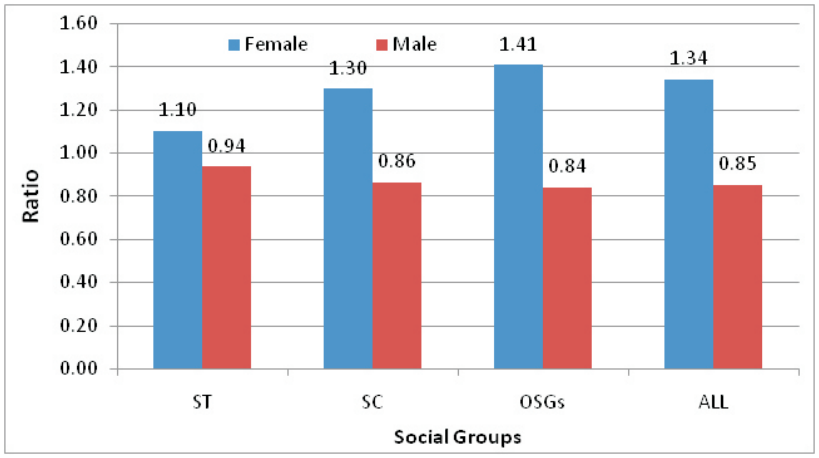
Source: Same as above

Increased female participation in the public work program with significant new entrants in the labour market has been supported from the NSS observations as well which is shown in the figure 2 below. It shows the ratio of participation in the MNREGA to the private labour market for both male and female. As compared to the male counterpart, the ratio has been greater than one for female at the aggregate level which shows relatively higher preference for casual public employment among the female. In 2011-12, the ratio was 1.34 for female against 0.85 for male counterpart. It implies that whereas the participation of female in the public work program has been higher by around 34 percent, the male participation has been lower by around 15 percent as compared to their representation in the private labour market. The pattern has been true across the social groups.

As it is evident from the figure below, among the various social groups, the ratio for female has been the highest for OSGs and the lowest for STs, however, it is greater than one for all the groups. The reason for higher participation ratio for OSGs is the relatively lower female participation in the private labour market for OSGs as compared to other groups. Similarly for STs, the female participation in the MNREGA has been the highest of all the groups followed by SCs, however, the female participation of STs has also been the highest in the private labour market. Higher female participation in MNREGS across all the social groups shows the positive contribution of the scheme in providing socially acceptable and dignified employment oppurtunities.

[4] Female participation in the labour has been inversely related with the standard of living (Abraham, 2013). As STs and SCs are having relatively lower standard of living so their participation in the labour force has also been relatively higher.

Figure 2: Ratio of Participation in MGNREGA to Rural Labour Market, 2011-12



Source: Author's Calculation from NSSO Data

Thus, even though as discussed earlier female participation in public work has always higher, but in MNREGS female participation has been remarkable. It has been remarkable in the sense that for a large section of female it has been the first time income earning oppurtunity outside household work. Even in terms of persondays worked the female who participated in the MNREGA has worked for relatively higher number of days than the non-participants. Higher level of participation in work and increase number of days worked has been a crucial factor of women economic empowerment.

Further, not only at the aggregate level but also at the sub-national level in almost all the states with exception of only few, women participation in the scheme has been higher than the 33 percent target mandated in the Act. Infact in around six states it has been higher than the 50 percent of total participation in the scheme. It includes Andhra Pradesh (54 percent), Himachal Pradesh (54 percent), Kerala (86 percent), Manipur (71 percent), Rajasthan (58 percent) and Tamil Naidu (74 percent).

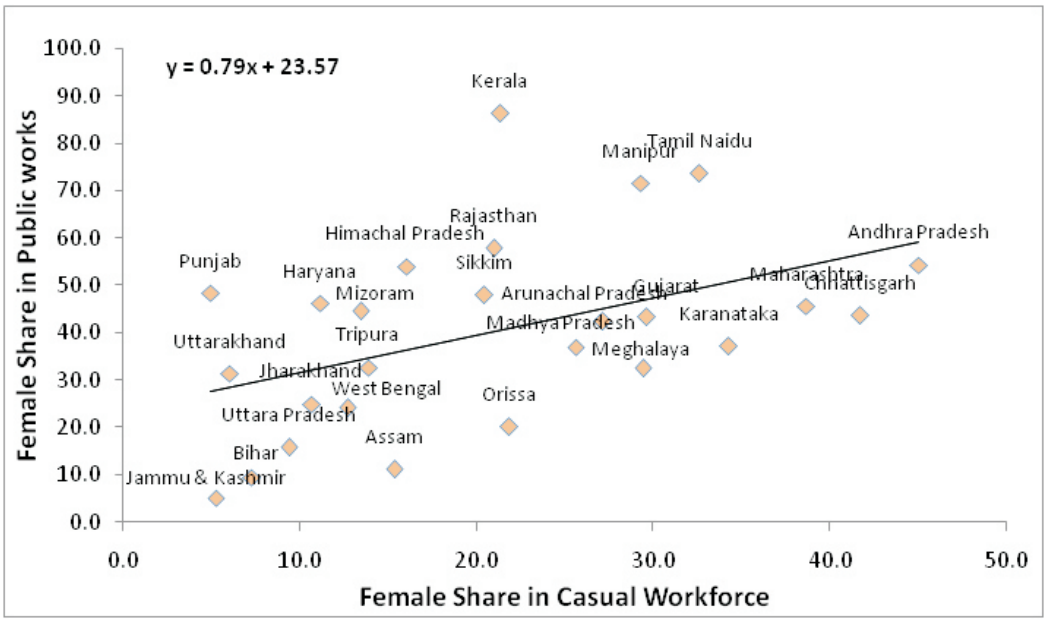
However, against the aggregate all India female participation shares of around 41 percent there were around eight states which could not even reach the target of 33 percent. The state which fails to achieve the target includes Assam, Bihar, Jammu and Kashmir, Jharkhand, Orissa, Uttar Pradesh, Uttarakhand and West Bengal. If Jammu and Kashmir being considered exception, the lowest participation has been recorded in Bihar (9 percent) and Uttar Pradesh (16 percent) which is much below the mandate participation rate (33 percent) of women in the program. One of the reasons could be the institutional constraints faced by women in relatively less developed states.

The effect of social constraints on the female participation in the public work has been visible in the inter-state variation. The states with lower female MNREGA participation have also lesser participation in the non-public work casual wage employment. It includes states like Assam, Bihar, Jharkhand, Uttar Pradesh and West Bengal which along with low female share in the MNREGA has also lower participation in the private labour market. On the contrary in the states like Andhra Pradesh, Chhattisgarh, Himachal Pradesh, Rajasthan, Tamil Naidu and Uttarakhand women participation has also been relatively higher in the private labour market. Andhra Pradesh, Gujarat, Kerala and Tamil

[5] Earning from the program has increased the role of female in the household decision making. Also the female has independence to spend the income according to their choice (IHDS, 2015). Thus the scheme through employment generation has empowerment effect on women.

Naidu are the states where the women participation in the public work has been significantly higher than their participation in the private labour market, however in Orissa and Uttar Pradesh the female participation in public work has been significantly lower than the private labour market. The correlation between the female participation as casual wage labourer in the non-public work and in the public-work has been positive (0.46). The positive correlation between the two has been reflected in figure 7.2 below.

Figure 3: Relationship between Female Participation in MGNREGA and Private Labour Market in Rural Area, 2011-12



Source: Estimated from NSSO 68th round unit record data.

Other arguments discussed in the Dutt et. al. (2012) for this inter-state variation in the women participation in the NREGA includes poverty and substitution effect. They found that women are less likely to participate than men in the relatively poorer states. They have also found for female participation in the scheme is negatively correlated with the wage rate in the private casual labour market and positively correlated with the male wage rate in the private labour market.

This has been described by them as the substitution effect in the household. If the prospect in the private labour market is better for men and bad for women, the probability of women getting limited job in public scheme increases. Although Dutt et. al. (2012) have speculated discrimination against the women also as one cause but Narayanan and Das (2014) have found relatively less administrative discrimination for women as compared to the male workers who seek work in the program. However, they have found that as compared to men women seek less work which requires further validation.

Thus, the effect of public-work on the inequity in the female participation arising due to limited availability of the alternate employment oppurtunities has been positive. As argued given the nature of

[6] Dutta et. al. (2012) has found for 2009-10 NSS data that gap between the female participation in the public work and non-public work casual wage has been higher in the states with low participation in the casual wage labour market.

work available in the rural labour market, female participate only when there is dire need to support the household income. So, as the household economic condition improve they would opt out from the labour market as the utility from the low earning has been far less than the disutility from the kind of exploitative and socially not much acceptable work. In this way MNREGA has been successful in bringing the women out of the household activities to participate in the public-work and thus bridge the inequity in the female participation as compared to the men.

Apart from the inequity in participation, wage discrimination faced by the female worker has been the most severe challenge. As mentioned earlier, MNREGA in its design mandates for no discrimination in wage payment on the basis of gender or caste. If so the scheme will be instrumental in bridging the unfairly higher gender wage gap that has been discouraging for female to participate in the labour market. In the following section role of public work on gender disparity has been extensive analysed.

4. PUBLIC WORK AND GENDER WAGE DISPARITY

It has been argued that with the increased competitiveness gender wage gap will be narrowed down in the post reform period (Thomas, 2012). However, historically prevailing significant level of gender wage gap still persist in the labour market and more so in the rural agricultural labour market. In the rural area, agriculture work has been the important income earning oppurtunity for female the nature of which has been seasonal in nature and are also less paid. One of the effects of it has been discouragement for women participation in the rural labour market until and unless they have low living standard. In this sense public work has been an attractive oppurtunity as it prohibits wage discrimination on the basis of gender.

Here it has been attempted to examine the trend in gender wage gap in the reform period both at the aggregate and at the sub-national level in the major states for casual worker (both public work and non-public work). Further impact of the MNREGA on the gender wage gap particularly in the agriculture wage has been analysed examined.

4.1. TRENDS IN GENDER WAGE GAP

At the aggregate all India level, relative gender wage gap (for both casual and regular/salaried) at three points of time in the reform period and for different socio-religious groups has been reported in the table 3 below. The relative gender wage gap has been measured as the percentage difference of male wage over the female wage.

At the outset the relative gender wage gap has been higher for the regular workers as compared to the casual workers over the periods. It has declined in the period between 2004-05 and 2011-12 for both casual and regular workers. Infact for regular workers it has also declined in the earlier period between 1993-94 and 2004-05 when gap in the casual work has increased by more than two percent. There has been considerable variation among the different socio-religious group in both casual and regular workers.

[7] Abraham (2013) has pointed out about the exit of female from the labour market due to the improved living standard. However, as women form relatively vulnerable groups are having higher participation in the labour market and have no alternative oppurtunities. So they exit from the exploitative work as their income improve.

Table 3: Relative Gender Wage Gap for Wage Worker in Different Socio-religious Groups in the Rural Area

Groups	Casual Worker			Regular/Salaried		
	1993-94	2004-05	2011-12	1993-94	2004-05	2011-12
Social Groups						
STs	23.6	27.0	24.1	28.5	42.1	41.1
SCs	31.4	34.3	28.9	51.8	51.6	48.2
OSGs	38.1	39.8	33.2	40.8	39.0	35.7
Religious Groups						
Hindus	32.7	35.6	30.1	45.0	44.2	40.3
Muslims	39.7	36.2	37.2	47.2	34.3	28.5
ORMs	44.2	48.0	40.5	21.5	31.0	33.1
Total	34.3	36.7	31.3	42	41.9	38.5

Source: Author's Calculation from NSS Wages of Different quinnequinnal EUS rounds (50th, 61st and 68th).

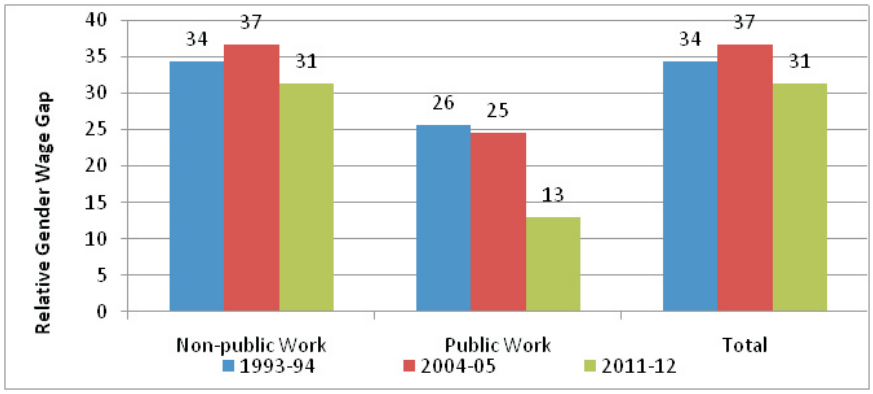
Among the social groups, for casual workers, gender wage gap has been the lowest for the STs followed by SCs and OSGs. Similar to the aggregate level, the gender wage gap in casual work has increased for all the social groups in the period between 1993-94 and 2004-05. However, since 2004-05, in all the social groups there has been decline in the relative gender wage gap. The decline has been the lowest in the STs. At the same time it should also be mentioned that the level of male wage and female wage has been the highest for the OSGs and SCs respectively and the lowest for STs.

Among the religious groups relative gender wage gap has been the lowest for the Hindus casual workers. In the period between 1993-94 and 2004-05, as similar to the aggregate level trend, relative gender wage gap has gone up for Hindus and ORMs but it has declined in Muslims. But in the period between 200405 and 2011-12 when the gap has declined for all the groups, it has increased slightly by one percentage point in the Muslims. So at the aggregate level, there has been considerable relative gender wage gap in the casual works that shows sign of decline in the period since 2004-05 across different socio-religious groups.

In casual work, the relative gender wage gap for non-public work and public work has been given in the figure 4. As discussed above the gender wage gap at the aggregate level among casual non-public works the gender wage gap has increased between 1993-94 and 2004-05 and it has declined by around six percentages points in the period between 2004-05 and 2011-12.

Interestingly, the relative gender gap in casual public work has been lower than the non-public work in all the period of analysis. It has declined slightly in the period between 1993-94 and 2004-05 when the wage gap increased in the casual non-public work. Furthermore, in the period between 2004-05 and 2011-12 the relative gender wage gap has declined in the public work by around 11 percentages points. This is the effect of NREGA as in this period with the implementation of EGS casual public employment has increased significantly. As per NSS, the ratio of casual public work to non-public work has increased from 0.5 percent in 2004-05 to around 5 percent in 2011-12. More significantly for female whose share has increased to 13.3 percent in 2011-12.

Figure 4: Trends in Relative Gender Wage Gap among Casual Workers in Rural Area.



Source: same as above

To summarise, at the aggregate level, gender wage gap in the rural area has increased before 2004-05 but has declined since then for both casual and regular workers. Broadly, at the aggregate level, this trend has been true for causal workers in different socio-religious groups. In comparison to the casual workers it appears that as compared to male workers, female workers are at more disadvantaged under regular/salaried employment across all the socio-religious groups except for ORMs. Nonetheless magnitude of gender wage gap in the regular employment has been higher than the casual workers. But as compared to 1993-94 it has been lower for all socio-religious groups in 2011-12 except for STs and ORMs for whom it has been the lowest in 1993-94. Further, in the casual labour market it has been clear that declining relative gender wage gap in the public work could be decisive force, both directly and indirectly in overall decline in the gender wage inequality in the rural area.

4.2. INTER-STATE VARIATIONS IN GENDER WAGE GAP

As the aggregate level, there is considerable difference in the relative gender wage gap in the casual work which is prevalent across socio-religious groups. Since the state has been the implementing agency for the EGS which shows variations at different level, in this section attempt has been made to look relative gender wage gap among casual workers at the disaggregated the sub-national level. Relative gender wage gap at the sub-national level in the major states has been reported in table 4 below. The analysis has been done initially for non-public works which followed by trend analysis of wage gap in the public works.

NON-PUBLIC WORKS

The relative gender wage gap among causal workers employed in non-public work has been on an average around 30 percent. Although it has declined since 2004-05 but still the gap is significant. At the sub-national level, there have been considerable variations in compared to the national average as well as inter-state. The analysis has been done among the states as compare to the national average at a point of times and then the trend in wage gap in the reform period.

In 1993-94 for non-public works casual workers relative wage gap has been higher than the national average only in Kerala, Maharashtra and Tamil Naidu which is higher than the 40 percent. At the same time in Himachal Pradesh it has been favourable with female wage has been higher than the male

[8] Since our main focus is casual employment in the rural area, so analysis has been conducted only for relative gender wage gap in the casual workers and for regular/salaried employment it has been reported in the table 3 for comparison.

workers by around three percent. Further, in 2004-05, gender wage gap has been higher than the national average in Andhra Pradesh, Jammu and Kashmir, Kerala, Maharashtra and Tamil Naidu. Gender wage gap has been the highest in Maharashtra (50 percent) and lowest in Assam (14 percent). In 2011-12, relative gender wage gap has been higher than the national average in Andhra Pradesh, Jharkhand, Karnataka, Kerala and Tamil Naidu and was more than 40 percent except in Andhra Pradesh (34 percent).

In the period between 1993-94 and 2004-05 as similar to the aggregate level, wage gap among non-public workers has increased in many states. However, it has declined in the states that include Assam, Haryana, Jharkhand, Maharashtra, Rajasthan, Uttar Pradesh and Uttarakhand. In this period irrespective of the rise in relative wage gap by around two percentage points at the aggregate level, it has increased significantly (more than 10 percent) in Andhra Pradesh, Himachal Pradesh and Jammu and Kashmir. It should be emphasised that gender wage gap was favourable for female in 1993-94 in Himachal Pradesh which has turned adverse in 2004-05 by around 28 percent.

In the period between 2004-05 and 2011-12 wage gap has declined on an average, however, it has gone up in many states that includes Assam, Bihar, Jharkhand, Karnataka, Orissa, Rajasthan, Uttar Pradesh, Uttarakhand and West Bengal. In this period, wage gap has been the highest in Kerala (around 50 percent) and the lowest in Gujarat followed by Chhattisgarh. The highest increase has been in Rajasthan, Uttar Pradesh and Uttarakhand by around 7 percent. Among the states where gap has declined, Jammu and Kashmir has experienced steepest decline. Here the gender wage gap has fallen from 48 percent in 1993-94 and became favourable to female workers by around 19 percent.

PUBLIC WORKS

Casual workers employed in public works are expected to have relatively lower gap between male and female wages as well as across socio-religious groups. In the table 4, at the aggregate level, gender wage gap under public works has exists but it has been significantly lower than the non-public casual work. Over the period, relative gender wage gap under public work has declining since 1993-94 with the steepest decline between 2004-05 and 2011-12 by around 12 percentages points from 25 percent to 13 percent respectively. Even though the gender wage gap, as compared to non-public work, has been relatively lower at the aggregate level but as similar to non-public work there has been inter-state variations at the sub-national level.

In 1993-94, out of the 13 states of the study relative gender wage gap has been higher than the national average in the eight states. Himachal Pradesh and Jammu and Kashmir has much higher wage gap which was more than 70 percent. At the same time relative gender wage gap has been favourable for female in relatively less developed states like Orissa. In 2004-05, relative gender wage gap has been higher than the national average in 4 out of the 11 states of the study and the highest being in the West Bengal (around 51 percent). The relative wage gap has been favourable to female in Chhattisgarh but has been slightly adverse in Rajasthan. In Madhya Pradesh and West Bengal the wage gap has been higher than the non-public works wage gap.

The impact of MNREGA on the relative wage gap in public work has been prominent in all the states of the study. In 2011-12, relative lower gender wage gap has been encouraging as out of the 19 states of the study it has been higher than the national average of 12 percent only in 5 states (which is not much higher) which includes Gujarat, Jammu & Kashmir, Maharashtra, Rajasthan and Uttarakhand. It has been favourable for female in 7 states which has been more than 25 percent in Haryana and Karnataka. As compared to the non-public work wage gap it has been significantly lower in all the states.

Even though, for comparison, information for every state was not available consistently for different

period, broad trend analysis at the sub-national suggest declining trend in the gender wage gap since 1993-94. Between 1993-94 and 2004-05 gender wage gap has declined in 5 states and has become favourable for female in Chhattisgarh. Subsequently in the period between 2004-05 and 2011-12 out of 11 states for which information is available for both the period, gender wage gap has declined in all the states.

Table 4: State Level Trend in Relative Gender Wage Gap for Casual Worker (Rural Area)

States	Non-public Works			Public Works*		
	1993-94	2004-05	2011-12	1993-94	2004-05	2011-12
Andhra Pradesh	28.1	38.2	33.6	n.a.	20.3	3.5
Assam	21.1	14.2	28.9	32.1	n.a.	-12.2
Bihar	11.2	15.3	30	2.3	n.a.	-11.1
Chhattisgarh	18.2	24	13.3	37.7	-40.7	-0.5
Gujarat	14.5	17.3	9.6	39	n.a.	20.2
Haryana	32.6	24.1	21	33.6	n.a.	-28.5
Himachal Pradesh	-2.8	29	29.6	72.6	14.7	7.5
Jammu & Kashmir	7.6	46.7	-7.7	76.3	43.1	27.2
Jharkhand	28.4	25.6	43	n.a.	n.a.	10.2
Karnataka	31.5	36.7	40.2	22	33.3	-60.3
Kerala	42	50.1	49.7	n.a.	n.a.	-12.1
Madhya Pradesh	18.4	20	9.8	n.a.	44.6	2.4
Maharashtra	41.2	40.1	29.7	39.7	26.9	24.1
Orissa	26.7	28.8	31	-5.1	22.5	2.4
Punjab	12.3	27.4	18.7	n.a.	n.a.	n.a.
Rajasthan	29.9	20	27.4	0	2.5	17.2
Tamil Naidu	43.9	48.4	44.7	47.4	n.a.	4.3
Uttar Pradesh	29.5	24.1	30.9	n.a.	22.6	6.7
Uttarakhand	21.2	19.3	27.1	n.a.	n.a.	26.3
West Bengal	20.3	20.5	21.1	9	50.8	-7.4
All India	34.3	36.7	31.3	25.6	24.5	13.2

Source: Same as in table 4.17.

*For 2011-12 public works has two categories—MGNREGA and Non-MGNREGA and here public works include gender wage difference in both form of casual public employment.

Thus, like aggregate trend, at the sub-national level, relative gender wage gap has declined particularly more sharply in the period between 2004-05 and 2011-12. It has been visible in both public work and non-public work casual employment. The positive impact of the gender friendly employment oppurtunity through the public work program like MGNREGA has been evident. More

[9] As discussed earlier public works are government sponsored works that cover local area development works as relief measures or outcome of wage employment schemes for poverty alleviation. Thus it is expected to be sensitive to gender and deprived sections of the society and so lower discrimination on the basis of caste, creed and gender.

[10] Relative gender wage gap at the sub-national cannot be calculated for all the major states as information of wage for male and female worker worked under public work is not available for these states in NSS EUS.

[11] Trend analysis over the period has been done by taking only those states between two point of time for which information for both male and female wage was available through NSS.

interestingly, the aggressive campaign of female friendly mandate of the EGA in some of the states like Tamil Naidu has shown potential impact on gender wage gap in the non-public work employment. The channel of the impact may be due to supply side factors as well as increase in bargaining power due to guaranteed fall back options (Khera and Nayak, 2009; Dutt et. al. 2012). The effect of public work program on the female wages has been further ascertained with the analysis of wages particularly agricultural wages vis-à-vis wages in public work in the following section here below.

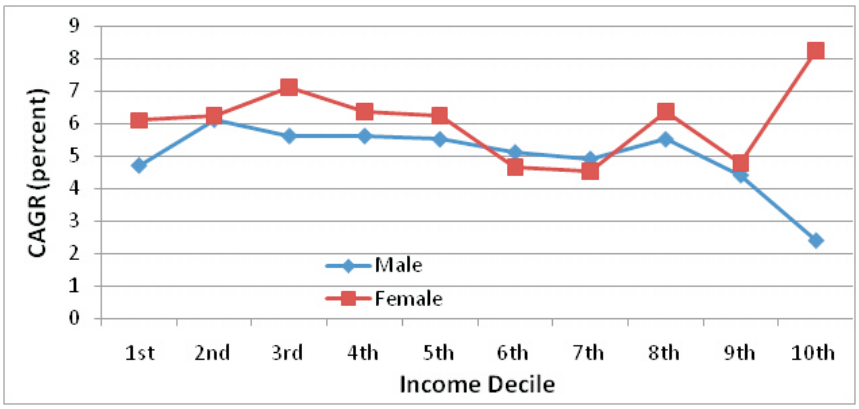
5. PUBLIC WORK IMPACT ON FEMALE WAGES AND EARNING INEQUALITY

As discussed above, in the period since 2004-05 gender wage gap has declined in the casual labour market both in public and non-public work. The impact of the MGNREGA on rural wages has been studied by scholars and considerable influence of public work program has been found on the female wages. In the rural area average impact on wages has been found by around 8 percent (Azam, 2012) by using NSS data and around 4.8 percent (Berg et. al., 2012) by using Agriculture wages of India (AWI) data.

Since in the rural area, most of the alternate employment oppurtunities for female workers has been in the manual agricultural activities, it is expected that the impact of the increase in the public employment with significant share of female may be on the agriculture wages. It may be through supply side channel as in the period between 2004-05 and 2011-12, the share of female in the rural manual agricultural activities declined by around 18 percent as percent which shows the increase in demand pressure in the traditional labour market that has influenced agricultural wages.

The CAGR of real manual agriculture wages (at 1993/94 prices) for both male and female casual workers has been given in the Figure 5 below. Overall the growth rate of female wages has been higher than the male wages. Also the growth rate of wage has been pro-poor as it has been relatively faster at the lower income deciles. It reflects the role of the scheme as it has been seen in the earlier as the participation in the MNREGA has been relatively pro-poor. Relatively higher growth in the lower deciles have also expected to contribute in the decline in the within group inequality that has been explored further.

Figure 5: Gender-wise CAGR of Manual Agricultural Wages in the Rural Area (Between 2004-05 and 2011-12)



Source: Calculated from unit record NSS data (61st and 68th rounds)

[12] In 2004-05 and 2011-12 the share of female in person-days employment generated in agriculture manual activities in was around 35 percent against the 29 percent in total person-days employment generated. In the non-manual agriculture activities and non-manual non-agriculture activities the share was 16 and 17 percent respectively in 2004-05 and 11 and 16 percent respectively in 2011-12.

Role of MNREGA wage as reservation wage is clear from the comparative analysis of public work and non-public work wages (table 6 below). In the 2004-05 when the public employment share was very less and the scheme was not in existence there was considerable gap in the public work and non-public work wages particularly agricultural wages. The gap was pronounced for both male and female workers alike. Infact, it was lesser for the female workers as the gender gap was also higher (although less than non-public work) in the public work.

In 2004-05, the percentage gap between the public work wages and non-public work wages was more than 40 percent for both male and female and was much higher vis-à-vis manual agricultural wages particularly for male workers. The wage-differential has been present across the social groups with significant variations among the different social groups. The percent difference, for male workers, between public and non-public work has been higher in OSGs. However, for female workers it has been the highest in STs followed by OBC and SC with the lowest for OSGs worker. The wage differential between public and non-public work wages declined sharply in the period between 2004-05 and 2011-12.

In the 2011-12, even though MNREGA wages has been updated yearly with price index (CPI-AL), the wages in the non-public work and manual agricultural wages has increased higher than the public work wages. It implies that growth in the casual wages has been higher than the trend growth rate. At the aggregate level, the non-public work male wages was higher than the public work wages by around 21 percent from the gap of 41 percent in 2004-05. Similarly, it has declined from around 45 percent in 2004-05 to just around one percent in 2011-12 for female workers.

Male agricultural wage for manual activities has also been higher than the public work wage by around seven percent and declined for female workers from 54 percent to around five percent. This supports the argument of the role of the public work wage as the reservation wage in the rural labour market. In order to maintain the supply of labour, the non-public work wages catches up the public work and this has been for both male and female. However there has been considerable variation across social groups.

The catching up of non-public work wages with the public work has been the highest for OBC and the lowest for STs. Regarding agricultural wages, it has been positive for STs in 2011-12. Similarly, even though at the aggregate level the difference with the public work still positive, for SCs and OBC it has turned negative. But STs and OSGs female workers has still significant gap as compared to the male workers in the rural labour market. Manual agricultural wages gap has been still positive but has come down swiftly. The pattern has been similar to the non-public work wages. Most importantly, even though, at the aggregate level, the decline in the percentage difference has been the highest for the male workers, but except OSGs in all the social groups the decline has been higher than the male workers. It has been higher for OBC followed by STs and SCs.

[13] There has been field evidence (Jakimov, 2014) which shows that workers are not ready to work at wages lower than the MGNREGA wage. So, cultivators have to pay wages higher than the MGNREGA wages to hire labour for agriculture work.

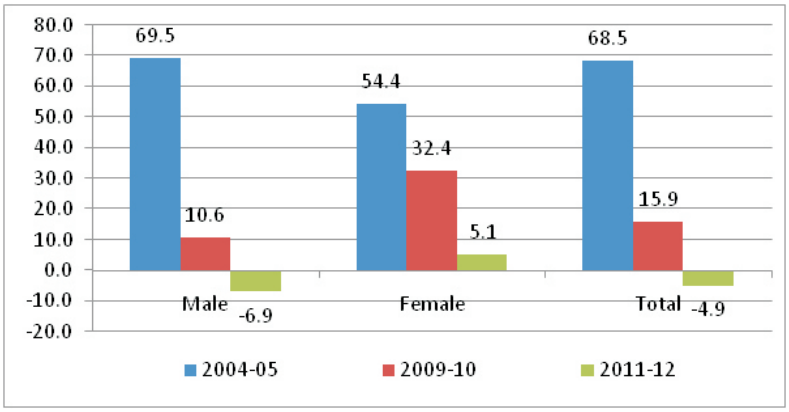
Table 6: Gap (percent) between Public Work and Non-Public Work Wages

Social Groups	Between Public Work and Non-Public Work Wages			Between Public Work and Manual Agricultural Wages		
	Male	Female	Total	Male	Female	Total
	2004-05					
STs	29.8	57.8	39.2	45.2	71.0	56.3
SCs	14.4	41.6	20.6	31.9	49.3	39.3
OBC	4.6	47.1	11.3	28.9	56.0	36.7
OSGs	33.6	30.4	34.9	66.3	41.6	68.1
ALL	41.3	45.0	40.7	69.5	54.4	68.5
	2011-12					
STs	-8.4	13.7	-3.2	7.6	20.4	12.2
SCs	-17.8	-2.4	-17.8	-8.2	1.3	-7.1
OBC	-26.4	-3.5	-25.5	-9.8	0.9	-9.1
OSGs	-17.2	19.8	-12.7	-3.0	18.8	2.2
ALL	-21.2	1.1	-19.6	-6.9	5.1	-4.9

Source: Same as Above

The effect of the reservation wage on the non-public work wages has been gradual (figure 5) as evident from the trend in public and non-public work wage trend at three points in the seven year period since 2004-05. Initially it declines in the period between 2004-05 and 2009-10 for female workers which further declined effectively in the period between 2009-10 and 2011-12. Percentage difference between public work wage and manual agriculture wage has been higher in 2004-05 (when the scheme was not implemented) which declined by around 22 percent in the period between 2004-05 and 2009-10 with further decline of 27 percent in the two year period between 2009-10 and 2011-12.

Figure 5: Trend in the Gap (percent) between Public Work and Manual Agricultural Wages.



Source: same as above

Thus, the role of public program in the overall wage growth and so of female wage can be attributed to the implementation of the public work program since 2006. The higher growth in the non-public work wages as compared to the price indexed public work wages shows the effect of public work wages as reservation wages in the rural labour market. At the same time relative decline in the female share in the agricultural and non-agricultural manual activities may have exerted supply side pressure on the wage in the rural area. However, it could not be ascertained with the limited information.

Given the significant gender wage inequality, the relatively higher growth of female wages would have also contributed in the reduction of overall wage inequality which has been analysed below through Gini index and percentile ratio.

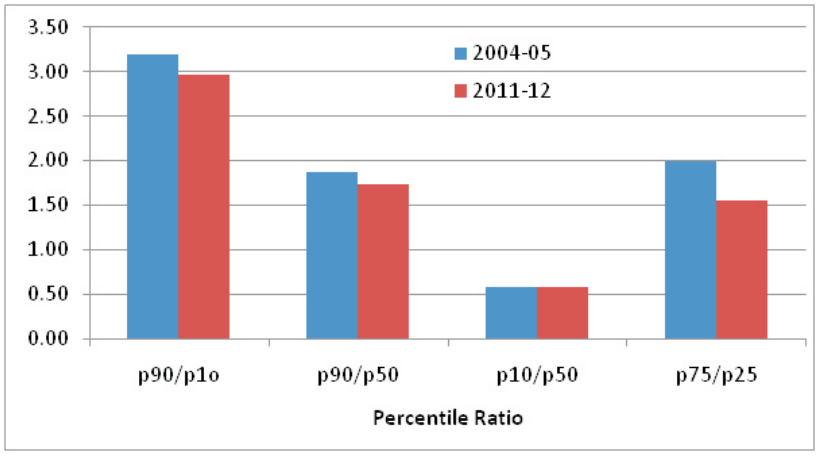
It is evident from table 7 below, which shows that overall earning inequality measured by Gini index has decline by around eight percent in the period between 2004-05 and 2011-12. The decline in the wage inequality has been at the higher rate for female casual worker (around 13 percent) as compared to the male casual worker (around 4 percent). The higher wage growth at the lower end of distribution has contributed in reducing the wage inequality particularly for female. The decline in the percentile ratio (figure 6) has been steeper in p75/p25 while the ratio has remained unchanged in the p10/p50. It implies higher wage growth in the bottom half while the upper half, particular top 25 percent, has recorded relatively lower growth in the wages. The higher decline in female wage inequality as well as higher growth in the lower percentile supports the pro-poor impact of MGNREGA.

Table 7: Change in the Wage Inequality (Gini) in the period between 2004-05 and 2011-12 among Rural Casual Workers

Social Groups	Percentage change		
	Male	Female	Total
ST	-18.4	-26.8	-28.2
SCs	-1.9	-23.1	-3.5
OBC	4.9	-14.7	-2.1
OSGs	-19.8	-32.4	-15.9
ALL	-4.1	-13.4	-8.2

Source: Calculated from NSSO data (61st and 68th round)

Figure 6: Change in the Wage Percentile Ratio of Casual Workers (2004-05 and 2011-12)



Source: same as above

Thus, wage inequality measured by Gini has declined among the rural casual workers in the period between 2004-05 and 2011-12. The decline has been faster for female workers as compared to the

[14] The female wage growth rate particularly agricultural wage that has been relatively faster since implementation of the MGNREGA has also been supported by many studies which although uses different technique of analysis but with the same (NSS) data (Azam, 2012; Zimmerman, 2014).

male workers. However, there has been variation among the different social groups in the change in the wage distribution. One of the significant observations is the decline in the gap in between top and bottom income decile and it remained almost unchanged in the bottom half decile.

5. CONCLUSION

The gender inequality in the rural labour market has been two fold includes: inequity in participation which itself to some extent supply side problem. Secondly the discrimination in the return to labour which further discourages female participation in the labor market. The state intervention in the rural labour market through universal provision of unskilled manual employment has gender friendly provision. The paper examines the impact of the public work program in addressing the gender based inequity in the rural labour market in India.

It can be concluded from the empirical analysis that public work has been successful in providing socially acceptable and accessible employment oppurtunity to female as around 46 percent of women participant in the program has been new entrant in the paid job. This has been true across social groups which also includes OSGs that are relatively economically better off. However, there has been inter-state variation which shows the effect of social constraint along with the other factors argued in literature for low female participation. Further, the declining gap between public work and manual agricultural wages shows the effect of public work as reservation wage also found in many field studies. However, regarding female wages its potential is yet to realize. Lastly even though female wage inequality has declined but given the limited information its exact role cannot be ascertained which requires intense investigation.

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HOUSEHOLD AIR POLLUTION AND HEALTH ISSUE OF RURAL WOMEN: ANALYSING THE UJJWALA SCHEME IN INDIA

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ABSTRACT

Indoor air pollution (IAP) may have potentially large impacts on the health and well-being of poor families. The literature indicates ambient IAP levels and personal exposure levels from cooking with traditional fuels are dramatically high. Household air pollution or indoor air pollution in developing nations is a significant form of indoor air pollution ***(IAP)*** *that is little known to those in the developed world. India too faces this problem .According to the 2001 Indian Census, 72.3% of households in India—and 90% of the population in poorer, rural regions—use traditional fuels. Prime Minister Narendra Modi on May 1st, 2016 launched the Pradhan Mantri Ujjwala Yojana, which aims to provide five crore LPG connections to women in Below Poverty Line (BPL) households over the next three financial years, at a cost of Rs. 8,000 crore. The present paper is an effort only to narrate the UJJWALA scheme and the issue of indoor pollution in the rural areas.*

Key words : *IAP , BPL, Ujjwala, Health , productivity*

INTRODUCTION

Household air pollution or indoor air pollution in developing nations is a significant form of indoor air pollution (**IAP**) that is little known to those in the developed world.

As per available data around 3 billion people still cook and heat their homes using solid fuels (i.e. wood, crop wastes, charcoal, coal and dung) in open fires and leaky stoves. Most are poor and live in low- and middle-income countries. Such inefficient cooking fuels and technologies produce high levels of household air pollution with a range of health-damaging pollutants, including small soot particles that penetrate deep into the lungs. In poorly ventilated dwellings, indoor smoke can be 100 times higher than acceptable levels for fine particles. Exposure is particularly high among women and young children, who spend the most time near the domestic hearth. Over 4 million people die prematurely from illness attributable to the household air pollution from cooking with solid fuels. More than 50% of premature deaths due to pneumonia among children under 5 are caused by the particulate matter (soot) inhaled from household air pollution.3.8 million premature deaths annually from noncommunicable diseases including stroke, ischaemic heart disease, chronic obstructive pulmonary disease (COPD) and lung cancer are attributed to exposure to household air pollution.

Even though the rate of dependence on biomass fuel is declining, this dwindling resource will not keep up with population growth which could ultimately put environments at even greater risk. Over the past several decades, there have been numerous studies investigating the air pollution generated by traditional household solid fuel combustion for space heating, lighting, and cooking in developing countries. It is now well established that, throughout much of the developing world, indoor burning of solid fuels (biomass, coal, etc.) by inefficient, often insufficiently vented, combustion devices results

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in elevated exposures to household air pollutants. This is due to the poor combustion efficiency of the combustion devices and the elevated nature of the emissions.

In addition, they are often released directly into living areas. Smoke from traditional household solid fuel combustion commonly contains a range of incomplete combustion products, including both fine and coarse particulate matter (e.g., $PM_{2.5}$, PM_{10}), carbon monoxide (CO),nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and a variety of organic air pollutants(e.g., formaldehyde, 1,3butadiene, benzene, acetaldehyde, acrolein, phenols, pyrene,benzopyrene, benzo(a)pyrene, dibenzopyrenes, dibenzocarbazoles, and cresols). In a typical solid fuel stove, about 6–20% of the solid fuel is converted into toxic emissions (by mass). The exact quantity and relative composition is determined by factors such as the fuel type and moisture content, stove type and operation influencing the amount.

EARLIER STUDIES

Over the past several decades, there have been numerous studies investigating the air pollution generated by traditional household solid fuel combustion for space heating, lighting, and cooking in developing countries.

Most of what we know about the relationship between air pollution and health comes from studies that look at the impacts of ambient air pollution levels in the developed world. In fact, there is a substantial literature indicating that these ambient air pollution levels substantially affect human health, especially the health of infants and young children. Dockery, *et al.* (1993) and Pope, *et al.*(1995) find a positive relationship between adjusted mortality rates and concentrations of particulate pollution. In a pair of natural experiment designs, Chay and Greenstone (2003a and 2003b) find that higher concentrations of total suspended particulates (TSPs) are strongly associated with higher rates of infant mortality; they found that a 1% increase in ambient TSPs results in a 0.35% decrease in the fraction of infants surviving to 1 year of age. However, the combination of relatively low ambient air pollution concentrations in developed countries and the possibility of a nonlinear relationship between health and pollution mean that these studies may not be informative about the impacts of IAP on health in the developing world.

In developing countries, recent natural experiments have provided opportunities to measure the health impacts of higher concentrations of ambient air pollution that appear closer to the levels of air pollutants that rise from traditional stoves. For example, the 1997 massive forest fires in Indonesia resulted in pollution levels that in some parts of Indonesia were comparable to IAP concentrations associated with wood burning stoves. A series of studies have found that the unusually high levels of pollution caused by the fires had significant negative impacts on health. Frankenberg, McKee and Thomas (2005) compare adults in high and low smoke areas, both before and after the fires, and find that pollution impacted individuals' abilities to perform strenuous activities and other health outcomes. Jayachandran (2006) found that the smoke caused by the fires led to an increase in infant mortality rates. In fact, she estimates that the pollution that was induced by the fire led to approximately 16,400 fewer surviving infants in Indonesia. Emmanuel (2000) found an increase in respiratory related hospitalizations in nearby Singapore. While the evidence from fluctuations in outdoor air pollution is *suggestive* of potentially large impacts of IAP, it is limited in its interpretation for at least two reasons. First, the most basic economic models predict that individuals could limit their exposure to temporarily high outdoor ambient pollution concentrations by changing their activities or purchasing protective devices (e.g., masks). Second, the health impacts from the relatively brief elevated concentrations may differ from daily exposure to IAP. Indeed, Jayachandran (2006) found that the effect of the fires was stronger for households that used traditional stoves,

perhaps suggesting that chronic exposure to smoke lowers resistance to further smoke exposure.

Because of this growing consensus that the impacts of indoor air quality in the developing world cannot be derived solely from studies on outdoor air pollution, there has been a rise in research specifically on IAP and health. Numerous studies have found associations between IAP and acute lower respiratory infection (Smith et al, 2000, Ezzati and Kammen, 2001a, 2001b), chronic obstructive pulmonary disease (Bruce et al, 2000; WHO, 2002) and lung cancer in the case of coal smoke (Mumford, 1987, Smith, 1993). There is emerging evidence that IAP increases the risk of other child and adult health problems, including low birth-weight, perinatal mortality, asthma, otitis media (or middle ear infection), tuberculosis, nasopharyngeal cancer, cataracts, blindness, and cardiovascular disease (WHO 2002). In fact, the World Health Organization estimates that IAP is responsible for 2.7% of the loss of disability adjusted life years (DALYs) worldwide and 3.7% in high-mortality developing countries. More recently, Zhang and Smith (2007) undertook a very through meta-analysis of 200 publications regarding IAP in China. They showed that most of the studies find a strong correlation between IAP and negative health outcomes: lung function reductions, immune system impairment, lung cancer, etc.

However, much of the evidence on the link between health and IAP is based on observational studies (Bruce *et al.*, 2000). The shortcoming of observational studies is that individuals who have taken measures to improve their indoor air quality may do so because they are wealthier, are better informed, or just have greater cause for concern about their health. In this case, a simple comparison of households that do and do not own stoves will confound the effect of the stoves with these other factors. For example, Bruce *et al* (1998) examined the association between the use of wood stoves and other housing improvements that may affect health in Guatemala. They found that 82% of open wood fire users had dirt floors, while just 18% had cement or tile floors. The statistics were nearly reversed among users of stoves with chimneys: only 16% had dirt floors, while the rest had cement or tile floors. They concluded that confounding factors are likely to lead to substantial biases in observational studies of the link between IAP and health. Thus, they argue that randomized interventions are necessary to learn whether there actually is a causal relationship between IAP and health. A second important aspect that most previous studies have failed to take into account is the optimizing behavior of the household. In Bangladesh, Pitt, Rosenzweig and Hassan (2006) find that, within the household, women who cook exhibit greater symptoms of respiratory illness, as do the young children whom they supervise. They also find that the women who cook tend to be the women with the worst health endowments. They conclude that the household "shares" the burden of disease in an optimal way. This suggests that any health gain associated with the availability of a new stove will be mediated by the household's behavioral response (for example, how and by whom they are used). It also suggests that there may be other welfare gains to the families associated with the new stoves. Collecting good measures of individual time use and individual exposure to pollution for all household members before and after the introduction of a new technology is, therefore, essential to a full understanding of its effects.

The most comprehensive study on the impact of IAP on health to date is the RESPIRE study in Guatemala that is described in Smith-Sivertsen, *et al* (2004) and Diaz, *et al* (2007). The RESPIRE study, begun in October 2002, was the first randomized experiment of the provision of improved stoves. The stoves used in the study, called *planchas*, are indigenously designed stoves constructed out of steel. They include a metal chimney that expels the smoke out of the house. The study randomly selected women who either had a child less than four months old or were pregnant at the time the study

began. Each household was followed for three years, until the infants reached 18 months of age. The original study aimed to examine at the impacts on children under age 18 months. The researchers then added on a study to examine the impacts of IAP on women's health using lung functioning tests and semi-annual health assessments. To measure exposure to smoke from the stoves, they tested individuals using CO breath analyzers and gave individuals 48-hour CO personal monitoring tubes. Follow-up health assessments were conducted every 6 months, covering respiratory symptoms, eye irritation, headaches and backaches. In addition, the survey team assessed respiratory function using spirometery tests. The study found that CO levels and the reported health symptoms were reduced among women who received *planchas*. After about 16 months, a little over half (52.3 percent) of women in the treatment group stated that their health had improved, compared with a quarter (23.5 percent) of the control group. Women in the treatment group had reductions of sore eyes, of headaches, and of sore throats as compared to the control. Children in the treatment group experienced reductions in crying and of sore eyes.

EVIDENCE ON THE RELATIONSHIP BETWEEN HEALTH AND PRODUCTIVITY

In measuring the costs of indoor air pollution, it is important to look further than just the main effects on health. Imagine that an individual is in poor health. As such, he may not be able to conduct strenuous or sustained work. This limits his labour market opportunities and provides him with lower wages (if employed). Because the household exists in poverty, he cannot afford to pay for goods that could improve his health—better fuel, more nutritious foods, doctor's visits—and would therefore improve his work ability. Thus, it becomes a vicious cycle, where because members of the household are both financially disadvantaged and in poor health, the household remains both in poverty and in poor health. In the economics literature, this is called a poverty trap (Dasgupta and Ray, 1986, 1987, 1990; Ray and Streufert, 1993; Ray, 1993). Several papers have tried to study whether air pollution contributes to the poverty trap. Smith (2000) uses morbidity/mortality relationships for the diseases attributable to indoor air pollution to estimate that, in terms of sick days, the annual health burden for India from indoor air pollution is 1.6-2.0 billion days of work lost. Likewise, Frankenberg et al (2005) estimate that haze from the fires in Indonesia caused older adults in areas covered by the haze to be more than 5% more likely to report having difficulty carrying a heavy load than older adults in non-haze areas.

However, other than these studies, there is very little evidence on the direct impact of air pollution on economic productivity. In fact, Bruce et al (2000) explicitly state that much *more* evidence is needed on this point. On the other hand, there is a large medical literature linking iron supplements, which also improve respiratory functioning, to productivity (for example, see Davies, et al, 1984, Hass and Brownlie, 2001, Zhu and Haas, 1998, Woodson, et al, 1978). Iron-deficiency anemia (IDA, which combines iron deficiency with low hemoglobin levels) affects the body through two pathways. First, low hemoglobin levels limit aerobic capacity, or the ability of the body to use oxygen. Second, low iron levels limit the amount of oxygen that can be carried to the muscles, reducing endurance and requiring harder work from the circulatory system (Thomas and Frankenberg, 2002). Thus, we would expect that if the iron supplements have a large effect in practice, removing indoor air pollution should also have a large productivity effect.

The available evidence suggests that iron supplements have a large effect. For example, Basta *et al.* (1979), found an increase in work output among anemic latex workers in Indonesia who were given iron supplementation. Note, however, that while the study by Basta et al was a randomized controlled trial, it was marked by problems of attrition, and so their estimate of a 20% increase in output may be

biased upwards. Similarly, Thomas et al (2003) used randomized evaluation techniques to measure the impact of iron supplementation on adult productivity in Indonesia. After six months, hourly earnings among self-employed males rose substantially, indicating an increase in productivity. In addition to the study by Thomas, one other randomized evaluation (Li et al, 1994) carried out with female factory workers in China supports the link between productivity and iron supplementation. Workers who received treatment (iron supplementation) increased their energy efficiency, experienced reduced heart rates, and increased production efficiency, allowing treated women to complete the same amount of work at a lower energy cost. There was no increase in output, however, potentially because the workers were based on a conveyor belt and constrained by their co-workers.

In addition to reducing adult productivity, there is considerable evidence that health also affects the school attendance and productivity of children. For example, previous studies (Duflo and Hanna, 2005) have found a very large absence rate from school in rural India (on the order of 60%). This high level of absence is in part due to poor health. Two recent randomized evaluations have quantified the impact of improving health on attendance. First, Bobonis, Miguel, and Sharma (2004) report results from an evaluation of the impact of a combined iron supplementation and deworming program on preschoolers in Delhi. They find that participation in treatment preschools increased *substantially* in response to the iron supplementation and deworming program. Second, Miguel and Kremer (2004) also find a substantial effect of a school health intervention (deworming) on schooling in Kenya. The program they evaluated led to a 7.5 percentage point gain in attendance, reducing student absenteeism by nearly a quarter. One might, therefore, expect that an intervention reducing indoor air pollution could have significant impacts on schooling outcomes.

Pitt et al (2006) provide indirect evidence on the effect of indoor air pollution on productivity by constructing a model where households allocate female labor between cooking, agricultural labor, and child care, in order to maximize overall productivity. Their model suggests that when exposure to smoke reduces health and consequently reduces labor productivity, it is efficient for households to allocate one member to specialize in cooking, and that when health status within the household is heterogeneous, women with poor health will be allocated to this role, so that the other members' health is protected. Indeed, they find that this is exactly what households do, and that the allocation of household members to the cooking task is endogenous to prior health endowments, with the weakest female household members more likely to specialize in cooking.This evidence indirectly suggests that there are productivity effects of IAP and that households try to shield themselves against these effects, at the cost of exacerbating the already poor health status of some of their members. In sum, indoor air pollution has the potential to not only impact health, but also impact the general economic well-being of the household. While evidence from the literature on iron supplements suggests that this may be a large effect, further research is needed to understand the magnitude of the effect of indoor air pollution on well-being.

INDIAN SITUATION

According to the 2001 Indian Census, 72.3% of households in India—and 90% of the population in poorer, rural regions—use traditional fuels. In response to perceived health threats from the traditional fuels, both the Indian government and many non-governmental organizations (NGOs) have implemented clean stove programs. During the 1980s and 1990s, the government of India alone subsidized and distributed 32 million improved stoves. However, there is little evidence on whether the stoves improve health, and if effective, how the stoves compare with other possible health interventions. These stoves enclose the cooking flame, which in laboratory settings leads to increased

efficiency and lower biofuel requirements. Importantly, they also include a chimney that directs the smoke out of the room.

IMPACTS ON HEALTH

4.3 million people a year die prematurely from illness attributable to the household air pollution caused by the inefficient use of solid fuels (2012 data) for cooking. Among these deaths:12% are due to pneumonia, 34% from stroke, 26% from ischaemic heart disease, 22% from chronic obstructive pulmonary disease (COPD) and 6% from lung cancer.

PNEUMONIA

Exposure to household air pollution almost doubles the risk for childhood pneumonia. Over half of deaths among children less than 5 years old from acute lower respiratory infections (ALRI) are due to particulate matter inhaled from indoor air pollution from household solid fuels (WHO, 2014).

STROKE

Nearly one quarter of all premature deaths due to stroke (i.e. about 1.4 million deaths of which half are in women) can be attributed to the chronic exposure to household air pollution caused by cooking with solid fuels.

Ischaemic heart disease

Approximately 15% of all deaths due to ischaemic heart disease, accounting for over a million premature deaths annually, can be attributed to exposure to household air pollution.

Chronic obstructive pulmonary disease

Over one-third of premature deaths from chronic obstructive pulmonary disease (COPD) in adults in low- and middle-income countries are due to exposure to household air pollution. Women exposed to high levels of indoor smoke are more than 2 times as likely to suffer from COPD than women who use cleaner fuels. Among men (who already have a heightened risk of COPD due to their higher rates of smoking), exposure to indoor smoke nearly doubles (i.e. 1.9) that risk.

LUNG CANCER

Approximately 17% of annual premature lung cancer deaths in adults are attributable to exposure to carcinogens from household air pollution caused by cooking with solid fuels like wood, charcoal or coal. The risk for women is higher, due to their role in food preparation.

OTHER HEALTH IMPACTS AND RISKS

More generally, small particulate matter and other pollutants in indoor smoke inflame the airways and lungs, impairing immune response and reducing the oxygen-carrying capacity of the blood.

There is also evidence of links between household air pollution and low birth weight, tuberculosis, cataract, nasopharyngeal and laryngeal cancers.

Mortality from ischaemic heart disease and stroke are also affected by risk factors such as high blood pressure, unhealthy diet, lack of physical activity and smoking. Some other risks for childhood pneumonia include suboptimal breastfeeding, underweight and second-hand smoke. For lung cancer and chronic obstructive pulmonary disease, active smoking and second-hand tobacco smoke are also main risk factors.

Impacts on health equity, development and climate change

Without a substantial change in policy, the total number of people relying on solid fuels will remain largely unchanged by 2030 (World Bank, 2010). The use of polluting fuels also poses a major burden on sustainable development.

Fuel gathering consumes considerable time for women and children, limiting other productive activities (e.g. income generation) and taking children away from school. In less secure environments, women and children are at risk of injury and violence during fuel gathering.

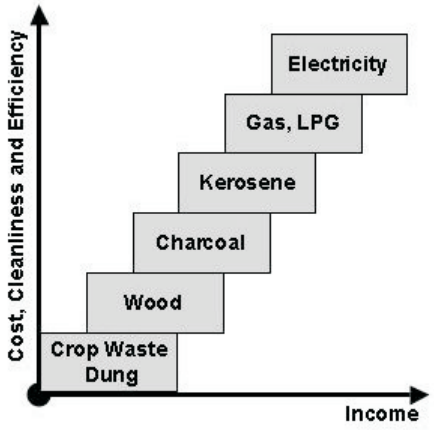
Black carbon (sooty particles) and methane emitted by inefficient stove combustion are powerful climate change pollutants.

The lack of access to electricity for at least 1.2 billion people (many of whom then use kerosene lamps for lighting) exposes households to very high levels of fine particulate matter, as well introduces other health risks, e.g. burns, injuries and poisonings from fuel ingestion, constraining other opportunities for health and development, e.g. studying or engaging in small crafts and trades, which require adequate lighting.

FUEL TYPES, TRADITIONAL COOKING STOVES AND AIR POLLUTION LEVELS

Households at lower levels of income and development tend to be at the bottom of the energy ladder, using fuel that is cheap and locally available but not very clean nor efficient (see Figure 1). According to the World Health Organization, over three billion people worldwide are at these lower rungs, depending on biomass fuels—crop waste, dung, wood, leaves, etc.—and coal to meet their energy needs. A disproportionate number of these individuals reside in Asia and Africa: 95% of the population in Afghanistan uses these fuels, 95% in Chad, 87% in Ghana, 82% in India, 80% in China, and so forth. Coal is seen as a higher quality fuel due to its efficiency and storage, and thus is higher on the energy ladder, but as Holdren and Smith (2000) describe, coal can in fact be dirtier than wood. As incomes rise, we would expect that households would substitute to higher quality fuel choices. However, this process has been quite slow. In fact, the World Bank reports that the use of biomass for *all* energy sources had remained constant at about 25% since 1975. For empirical tests of the energy ladder, see, for example, Hosier and Dowd (1987) and Chaudhuri and Pfaff (2003).

Figure 1: The Classic "Energy Ladder"



This ladder describes tr... ...development *(adapted from Holdren and Smith, 2000).*

Analysis of Ujjwala scheme in India

Prime Minister Narendra Modi on May 1st, 2016 launched the Pradhan Mantri Ujjwala Yojana, which aims to provide five crore LPG connections to women in Below Poverty Line (BPL) households over

the next three financial years, at a cost of Rs. 8,000 crore. The scheme, launched at Ballia in Uttar Pradesh, is to be partially funded from the savings accruing to the government from LPG users who gave up their subsidy as part of the Give It Up programme. Over one crore consumers have given up their subsidy, leading to savings of nearly Rs. 2,000 crore per year. This money would be utilised to provide LPG connections to BPL families. Finance Minister Arun Jaitley had, in his Budget speech in February 2016 , announced a provision of Rs. 2,000 crore this financial year to provide LPG connections to 1.5 crore women from BPL households.

The new users who receive LPG connections under the scheme will not have to pay the security deposit, while the Rs. 1,600 administrative costs, cost of pressure regulator booklet and safety hose will be borne by the government.

OBJECTIVE OF THE SCHEME

The main objectives of the Ujjwala Scheme are:

1. To prevent trafficking of women and children for commercial sexual exploitation through social mobilization and involvement of local communities, awareness programmes, workshops/seminars and other innovative activity.
2. To facilitate rescue of victims from the place of their exploitation and place them in safe custody.
3. To provide rehabilitation services both immediate and long-term to the victims by providing basic amenities/needs such as shelter, food, clothing, medical treatment including counselling, legal aid and guidance and vocational training.
4. To facilitate reintegration of the victims into the family and society at large.
5. To facilitate repatriation of cross-border victims to their country of origin.

TARGET GROUP

Women and children who are vulnerable to trafficking and commercial sexual exploitation. Consumers will have the option to purchase gas stove and refills on EMI.

UJJWALA SCHEME AND HEALTH PERSPECTIVE

The scheme is remarkable for two reasons. First, it has brought focus to the important developmental issue of enabling clean cooking energy. This is because indoor air pollution, caused by smoke from the traditional *chulha* stove leads to 1.3 million premature deaths in the country every year. Second, the scheme improves the quality of life of poor women whose health interests are usually neglected in household priorities.

The largest rural energy access survey of India which was conducted last year by the Council on Energy, Environment and Water (CEEW) and the Department of Political Science at Columbia University, shows that as many as 95 per cent of LPG-deprived households cite their inability to pay as a barrier to their adopting LPG. Thus, the scheme is well-targeted to address the crucial impediment of a high upfront cost, which has limited the transition towards LPG use in poorer households. While the move is appreciable, other challenges that limit the use of this clean fuel in India must be resolved simultaneously.

This is a historic opportunity to improve the health and well-being of India's poorest, who now bear the health and labour burden of using biomass for cooking. About 700 million people have been using biomass as cooking fuel in India for the last several decades. Without a focused programme like this to accelerate usage of clean fuels, a similar number could be caught in this 'chulha trap' for many years to come. Although the funds being devoted to the new programme are large, the programme is expected

to be more cost-effective in producing health benefits compared to many other possible expenditure.

There are five important diseases that have been established to be caused by exposure to combustion and pollution whether as outdoor air pollution, tobacco smoke and household (cooking) smoke — pneumonia in young children and chronic lung disease, heart disease, stroke and lung cancer in adults.

All forms of smoke produce these kinds of diseases, although of course at different rates due to the different levels of exposure, with active smoking producing the highest risk per person. Each of these diseases has other risk factors as well, but use of solid fuels is thought to be responsible for a significant amount of each in India

From the health perspective, once people have access to clean fuel, the key become finding way to encourage them to use it instead continuing also to use traditional polluting fuels. Thus, the relevant central and state agencies, including ministries of health, should develop programmes for ongoing encouragement and rewards for households to use the clean fuel, for example by linking to other national schemes, such as health insurance, rural employment, and health are for pregnant women, one of the most vulnerable groups.

The government has embarked on one of the most pioneering, innovative, and apparently successful programmes in the form of the 'Give It Up' campaign, through which middle-class households directly support access to LPG among BPL families. This has triggered a truly massive response with more than one crore households having participated so far and tens of thousands more signing up every day. What is needed now is a parallel campaign at similar scale for the BPL communities in the country to Give It Up as well, but in this case, finding ways to encourage them to rapidly give up their chulhas and use clean fuels for all their needs.

Major Challenges and Barriers

One such challenge is the high monthly expenditure incurred which 88 per cent of LPG-deprived households in the survey cited as a barrier. The survey was across 8,566 rural households in 714 villages of Bihar, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh and West Bengal. Similarly, National Sample Survey Office (NSSO) data from the past also highlight the low expenditure capacity of poorer households in having access to LPG. However the high recurring cost is not only a problem of purchasing capacity but also a perception and cash-flow issue. An increasing number of rural households rely on commercially procured biomass to meet their cooking energy needs. The rural informal markets for firewood and dung cakes are thriving across India. CEEW analysis suggests that households that buy some or all of their biomass end up paying more than those who rely on LPG. Thus, LPG would be an economically attractive proposition for such households. However, those relying completely on free-of-cost biomass (about 50-60 per cent of the rural population) would possibly opt for the subsidised connection, but would not spend on refilling cylinders regularly. We need to focus on reducing this gap between adoption and sustained use. In this, a threefold approach is needed. First, creating awareness about the actual cost of fuel and its benefits, especially those related to health, over status quo.

Second, tackling the issue of cash flow, especially for the strata of population who find it difficult to pay for the aggregated cost of refilling a large cylinder. Introducing smaller LPG cylinders (2 to 5 kg) for this section could be a solution.

Third, leveraging mobile money for LPG payments. As LPG coverage expands in rural areas, the Direct Benefits Transfer of LPG (DBTL) subsidy programme could create additional barriers for economically weaker households. These could be in the form of no bank account or the distance the person travels to have access to banking services. While the Pradhan Mantri Jan-Dhan Yojana has

increased the number of rural households with bank accounts, we need innovative payment approaches to fill the gap of last mile access to banking services.

Fourth, Limited LPG distribution networks in rural areas also need simultaneous attention to cover five crore households in the next three years. The government and oil marketing companies have already established at least one LPG distributor in each block. But much additional work needs to be done. Most rural areas are served under the Rajiv Gandhi Gramin LPG Vitaran Yojana (RGGLVY). Here, the consumer has to collect the cylinder from a dealer. Such consumers typically travel 3-11 km (one way). Innovation is required in distributing LPG in the rural areas, beyond the traditional realm of a dealership model. Leveraging rural supply chains, only for the delivery of the regulated commodity, could be one such approach.

Finally, the fifth major barrier — awareness and administrative issues. About 40 per cent of LPG-deprived households in rural areas cite a lack of information about the process of getting a connection as a challenge. Therefore, awareness creation in rural areas and among the urban poor is a must. For households in urban slums, the absence of residential proof or a lack of interest by urban dealers to serve them also pose a barrier. The government's scheme of selling 5 kg LPG cylinders at petrol pumpsand *kirana* stores may help, as proof of address is not required. However, its limited penetration and retail pricing still make it challenging for many poor households. Opening exclusive dealerships for smaller cylinders (2 and 5 kg), with specific provisions to serve urban poor areas, could help overcome some of these challenges.

CONCLUSION

Indoor air pollution (IAP) may have potentially large impacts on the health and well-being of poor families. The literature indicates ambient IAP levels and personal exposure levels from cooking with traditional fuels are dramatically high. Although the literature is growing, there is currently a deficit of information on the impacts of IAP on health, and even less on the impacts on the economic well-being of the family, with much of the evidence—except from the RESPIRE study—resulting from observational studies. In the observational studies, we cannot rule out the possibility that observed respiratory illnesses are not due to other factors that also contribute to a households' decision to use a traditional stove, including poverty and health preferences. Thus, our understanding of the causal impact of IAP is weak.

It is welcome that the government has recognised the importance of clean cooking energy with the launch of this mammoth scheme "Ujjwala". However, we need to go beyond subsidising connections and fuel costs and focus on issues of cash flow, awareness, availability and administration. Only such a comprehensive approach will help poor households have a better life. Also, much work is needed to better understand the welfare effects of reducing IAP within households and to better understand the most cost effective way to reduce it.

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DR. B. R. AMBEDKAR IDEAS ON DEVELOPMENT OF INDUSTRY: AN EVALUATION

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ABSTRACT

The paper concludes that after independence, India adopted the policies of Ambedkar; encouraged public & private sectors both but much emphasis was given to public sector till 1991. However, the country has ignored in the recent times the development of secondary sector which was the basic idea of Ambedkar's philosophy of development. Nevertheless, if we want to accelerate growth along with job creation, we will have to stick to the Ambedkar's philosophy of development by giving more importance to development of industrial sector with more state patronage.

Key words : *British Raj, Ambedkar, Industrial development.*

INTRODUCTION

Almost two centuries of British Raj altered India from a prosperous nation that was the hub of economic activities and centre of attraction for foreign merchants into an economy that engulfed into poverty and backwardness. The misery of the nation was coupled with the dormant socio-political activities in the country. However, the ray of hope was resting on the shoulders of some of the worthy sons of the nation. Some of them were fighting for the Independence of the nation and others devoted their life more for dreaming for the cause of development. B.R. Ambedkar was comparatively more concerned with the cause of socio-political upliftment of the deprived sections of the society. The objectives of the paper are :

- To assess the ideas of Dr. Ambedkar regarding industrial development;
- To evaluate Dr. Ambedkar's ideas of industrial development in the context of present policy scenario of the government.

The paper concludes that after independence, India adopted the policies of Ambedkar; encouraged public & private sectors both but much emphasis was given to public sector till 1991. However, the country has ignored in the recent times the development of secondary sector which was the basic idea of Ambedkar's philosophy of development. Nevertheless, if we want to accelerate growth along with job creation, we will have to stick to the Ambedkar's philosophy of development by giving more importance to development of industrial sector with more state patronage.

Almost two centuries of British Raj (1757-1947) altered India from a prosperous nation that was the hub of economic activities and centre of attraction for foreign merchants into an economy that engulfed into poverty and backwardness. On the eve of independence Indian economy was colonial in character and underdeveloped and stagnant in nature. Semi feudal agrarian formation as well as disintegrated industrial structure was the root cause of backwardness in economy. The drain of economy completed with the drain of resources from India. The misery of the nation was coupled with

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the dormant socio-political activities in the country. However, the ray of hope was resting on the shoulders of some of the worthy sons of the nation. Some of them were fighting for the Independence of the nation and others devoted their life more for dreaming for the cause of development. B.R. Ambedkar was comparatively more concerned with the cause of socio-political upliftment of the deprived sections of the society. Undignified life and a life of utter deprivation that a large section of the society was living attracted most the persons' like Ambedkar. Having a probing and research based mind; a brain that can analyze the issues in depth with his vast knowledge and readings; he jotted his pen on those problems and rendered some path breaking solutions for every aspects affecting the life of the citizens of India. Great as he was, took the issues to the philosophical realm that has been guiding the nation and providing lasting solutions. Like Gandhi and Nehru, Ambedkar's policies and ideas become torch bearer and any effort to dilute or distort policies by any government attracts sever probe in the sphere of their philosophical domain.

OBJECTIVES OF THE PAPER

- To assess the ideas of Dr. Ambedkar regarding industrial development;
- To evaluate Dr. Ambedkar's ideas of industrial development in the context of present policy scenario of the government.

PLAN OF STUDY

The present paper is divided into three parts. Part one is concerned with introduction, while part second is related to Ambedkars' ideas on industrial development. The third part compares the present policy pursued by the government to that of Ambedkar's ideas on industrialization.

Part II

Ambedkars ideas, policies and programmes were the outcome of the pathetic situation which the country was facing in the hands of the British government and the social structure that was prevailing in that era. There were at least two peculiar situations existing in the country and the first situation, i.e. suppression & subjugation, was applicable to all the Indians and the second one, i.e., untouchability was applicable to a section of the society, namely to the Dalits. Gandhi and his disciples were fighting for the cause of freedom of the country and their socio-political-economic policies were pertinent to all the citizens of the country. However, Ambedkar, though a champion of social harmony yet pondered more over the plight of oppressed class, such as dalits as they were living an undignified life, a life that was characterized by untouchability; a life that shows utter deprivation; despite the fact that it was the very section of the society that was the real working and producing class. This was the working class which was giving its blood for any production in the country. However, despite its tireless work, dedication, devotion and fidelity, this section of the society suffered with injustice and indignity. They were deprived of the land, an asset for the farmers, though they were working on that as a labourer; sometimes as bonded labourers, for a long time. While, rest of the population other than dalits were experiencing the subjugation of Britishers only, the dalits were experiencing this malaise of repression from two corners, one from the Britishers and other from its own brethren. The inhumane behavior that this section of the society was experiencing for ages made them speechless, soulless and lifeless. In this hour of darkness, a ray of hope emerged in the form of Ambedkar for the oppressed class including dalits. He was very much clear that life should be provided to this lifeless and oppressed class first. Dalits should be liberated from both the tyrants. The country should end discrimination and bring dignity. Hence, Ambedkars' philosophy hovers over dignity, justice and equity.

Bane of suppression at the hand of British has a daunting effect on the society and it altered not only the societal attitude but also to the life and lifestyle. The divisive and negative attitude between

citizens lowered not only the moral of common citizen of the country, but its demoralizing effect was seen much more on socio-economic parameters like life expectancy at birth, literacy rate, per capita income, growth rate, agricultural and industrial growth, etc. All these parameters showed a sluggish picture. The average life expectancy was 36.7 years in 1951 in India. Likewise, literacy rate in 1951 was 18.33. Similarly, birth rate 41.7 per thousand & death rate 22 per thousand were very high between1951-60. The occupational structure was highly in favor of primary sector. In 1951, 72.1 per cent of the population was engaged in primary sector activity. This shows a poor rate of development. The indices of growth rate as per Sivasubramaniam[1] during 1914-1946 grew only by 0.26%. Similarly, annual compound rate of growth in average per capita income grew only by 0.5% during the period 1860-1945. It is crystal clear that from a prosperous country, India converted itself into a ruined country and a disintegrated society under the aegis of British government. Under such conditions, it was a daunting task before Ambedkar and other national leaders to think over to the questions of the poverty and its eradication.

Ambedkar analyzed the remorse of the poverty and disintegration of the society in some details and came to the conclusion that government should adopt a policy that encourages development. However, according to him, development has a chain of cause and effect relationship. In the process of his analysis of question of development, he confronted with three basic questions. First, who should spearhead, rather control the development process; second, how the fruits of development should be distributed among masses of the country and which section of the society should be benefited most in this process? For him this question had a paramount importance. Third, what should be the mode of development, i.e., which segment of the economy should lead the development process?

Like Nehru, Ambedkar also confronted with the development philosophy prevailing in the world. In between socialist versus capitalist mode of development models, his ideas of development tilted more towards socialist philosophy and acclaimed that future development of the country should be guided and controlled by the State. Hence, he visualized a great role of State in the process of development. He, hence, became an ardent follower of State Socialism. State socialism was buzzing word for him. He carved three basic functions of state. First, State should govern the State. Second, State should protect and augment the people's right in the political democracy and third State socialism is essential for the rapid industrialization of India[2]. He acclaimed that state should be the master of economy[3]. He says, 'In an economic system employing armies of workers, producing goods en masse at regular intervals, someone must make rules so that worker will work and the wheels of industry run on. If the state does not do it, the private employer will.[4] In fact he was of the view that 'the state (should) plan the economic life of the people on lines which would lead to highest point of productivity without closing every avenue to private enterprise, and also provide for equitable distribution of wealth.'[5]It is clear that Ambedkar visualized State not only as a rule maker but it should acts as a planning and controlling agent of the economic life of its citizen. For Ambedkar, private sector has to play a vital role in economic development of the country as it is an actor and facilitator of the production of goods and services in the economy that employs work force to economic activities and generates employment. However, according to Ambedkar, activities of private sector should be monitored and controlled by the State. State should play a critical role in this arena. The gamut of the State role of rule setting encompasses encouraging, inspiring and developing industrial sector, raising the productivity and distributing the fruits of economic development equitably. He felt strongly that 'the state shall not delegate powers to private persons to govern others'.[6] He observed that 'the system of social economy based on private enterprise and pursuit of personal gain violates these requirements.'[7] He reiterated that people's rights should be prevented and augmented in political democracy but not at the level of

'liberty'. He said that 'it is true that where the state refrains from intervention what remains is liberty. Unrestrained freedom would in fact encourage landlords to increase rents, for capitalists to increase hours of work and reduce rate of wages' [8]. Hence, state should govern economy by rule making and controlling.

In the course of his analysis towards second question, he came to the conclusion that in the process of development, protection of the oppressed class has paramount importance. "My social philosophy may be said to be enshrined in three words: liberty, equality and fraternity" [9] He regarded that development should be egalitarian, i.e. it should be pro-poor and that should benefit to the common man first. For him increase in productivity was critical but egalitarian distribution was much more crucial. Egalitarian distribution should help oppressed class, i.e. dalits and OBC most. This aspect of Ambedkar was visible in his entire writings of Constitution of India.

With regard to the third question, he opined that development of both the major segments of the economy, i.e. agriculture and industry are vital but they are in the rudimentary stage of development, rather in the ruined state. However, for the speedy development of the economy, his thinking crystallized in favor of industrial sector. Here too he provided answers of the three basic questions. One, why the development of industrial sector is required and how is the economy benefited? Second, what will be the role of public and private sectors in the scheme of industrial development? Third, he categorized the industries for the benefit development. Industrialization is required because it will shatter the zincs of non development. It was obvious for Ambedkar that in any plan of development, industrialization would be one of the basic pillars of that scheme. It is the industrial sector that utilizes the factors of production especially technology and capital much better and increases productivity. In fact, with the help of industries large scale of employment can be created; large number of consumers can be evolved that are ready to purchase commodity; consumption and capital goods can be made available with the help of the use of raw materials and finally, security to labours can be enhanced. For him, rural development can only be achieved with industrialization. Large scale employment can be generated in the non agricultural activities with the help of rural and small scale industries. Ambedkar even was of the firm belief that industrialization was pre-requisite for agricultural development. He opined that 'industrialization of India is the soundest remedy for the agriculture problems'[10] and he suggested 'to cure agriculture by the reflex effects of the industrialization.'[11] He felt that with the use of small and big industries the surplus and idle labour of the agriculture sector can be absorbed in productive avenues. Transfer of surplus labour from agriculture to industrial sector would lessen pressure on land and surplus (capital) can be generated by employing them in industries which can be used again in the development of agriculture sector. With this scheme of development, agriculture can shatter the zincs of non development.

He advocated the following policies for the development of industries :[12]

- State socialism for the development of industries;
- Industries which are key industries or which may be declared to be key industries should be owned and run by the state.
- Those industries which are not key industries but which are basic industries should be owned by the state and shall be run by the state or by corporation established by the state.
- That the insurance should be a monopoly of the state.

The above policy perspective of Ambedkar shows that development of industries is not restricted to the private sector only. It is rather the responsibility of both the public and the private sector to develop it. As far as development of industries in non agricultural activities are concerned, private sector would play vital role. However, he visualized greater role of State in the development of key and basic

industries. Industries falling into the ambit of these categories should be owned and run by the State only. State should foster them. It is amply clear that mixed economy concept or concept of State socialism prevailed in his scheme of thinking. It is also apparent that his ideas of development were similar to that of Pandit Nehru. Emphasizing state run enterprises by him to the key areas was to curb the problems of concentration of economic power and monopoly along with establishing equality, etc. Again, his thinking crystallized in favor of establishing industries under corporation so that they can run professionally and without interference. The landmark idea, however, was related to the monopolizing of the insurance sector because it is this sector that furnishes enormous capital required for the development. Secondly, it involves citizen who has invested in any insurance scheme to the development process including industrialization of the economy.

Part III

Realities of Industrial Policies & Development, Testing on Ambedkar's Parameters:

Tracing India's development strategies we find that India wanted a leap forward, a development stride to telescope the dreams into reality very fast; a reality based on the dreams of its masses and imaginations of some worthy sons like Ambedkar. Dreams were related to removal of destitution and poverty, feeding the belly of its hungry people, clothing the people, providing employment and a speedy development of the economy, etc. For achieving the goals of development, the country followed mixed economy concept, and policies were conceived accordingly. Thinking crystallized that public and private sectors should shoulder the responsibility of development. This thinking was the result of the Pundit Nehru's vision and Dr. Ambedkar's mission that India can move forward with the help of mixed economy concept.

EVIDENCES

PROGRAMMES OF DEVELOPMENT

It is clear that Ambedkar's economic development visualized a more emphasis on the growth of industrial sector. This was also the policy of Pundit Nehru too. In order to make this policy successful, government after independence till 1991 adopted a policy that fostered the development of large industries with the help of public sector. In order to promote public sector as was visualized by Dr Ambedkar, a host of industries were reserved for that sector. The banking sector was nationalized and insurance was mostly in public sector. Establishment of corporation was promoted. Development of rural sector was encouraged with the help of small scale industries and a number of commodities were reserved for this sector alone. Industrial policy, trade policy, all was conceived to promote public sector and discourage development of private sector. Indigenous capital and technologies were more preferred. The policy of import substitution was adopted. The result of this policy was astonishing. Let us examine this with some details.

India, which was a traditional society at the time of Independence, took a development strides and attained the Rostow's 'take off stage' of development at the end of 1991. Though, it grew by a “Hindu Growth Rate” of 3.5 per cent per annum during this period, yet the economy diversified manifold. The share of agriculture in GDP went down considerably and raised considerably that of industry and services sectors. The share of agriculture, industry and services sectors in GDP at constant price during 1950-51, being 55.3, 15.1 & 29.6 per cents respectively, changed to 31.4, 25.9 & 42.7 percent in 1990-91, respectively. In 2009-10 the share of these sectors was 14.6, 28.2 & 57.2 per cent[13], respectively; showing a sharp decrease in the share of agriculture sector in GDP and a sharp increase in the share of services sector. Share of industry too increased during this period but this increase was not very significant. This reveals that till 1991 economy grew and transformed in expected traditional pattern, i.e. from agriculture to industry and then to services sector, however, after 1991, economy

jumped from agricultural sector to services sector directly in its development pursuits. It is obvious that till 1991, the country followed more to the ideas of Ambedkar but after 1991 it has been ignoring the basic philosophy of Ambedkar of giving more importance for the development of industry.

In order to evaluate the incorporation of Dr. Ambedkar's ideas in the Indian economy further, we have assessed the share of public and private sectors in net capital stock; the progress of small sector and tiny industries; and performance of central government enterprises. The details are as follows:

Share of public and private sectors in net capital stock:

As far as share of public sector and private corporate sector in net capital stock is concerned, we find the above pattern in the case of contribution of public sector in the net capital stock, too. Till 1991, share of public sector in net capital stock was increasing but after 1991 share of this sector decreased.(Table-1). The reason is obvious, i.e. the country adopted new economic policy and much emphasis was now being given to private corporate sector. The share of public and private corporate sectors in net capital stock in 1991 was 46.58 & 11.91 per cent, respectively. It changed in 2008 and constituted 31.37 & 28.15 per cent, respectively, revealing that the importance of public sector in net capital stock is going down and that of private corporate sector has been increasing. This trend is further strengthened by the fact that since 1991 government has adopted the policy of disinvestment of public sector units. NITI AYOG has been created instead of Planning Commission to shun the plan development and providing more emphasis to private sector.

Table-1: Share in Net Capital Stock

As of End-March Base year 1999-2000 At constant Price	Net Capital Stock	Public Sector	Private Corporate Sector
1981	2129912	926853 (43.53)	158547 (7.44)
1991	3364499	1567343 (46.58)	400773 (11.91)
2008	9206589	2888247 (31.37)	2592359 (28.15)

Source: India, A Pocket Book of Data Series, EPW Research Foundation, Academic Foundation, Table 9, 2010-11, p. 34

DEVELOPMENT OF SMALL SCALE & TINY INDUSTRY

Ambedkar was of the view that misery and destitution of Indian masses can only be removed with the help of fostering non agricultural activities on mass level. Post Independence Indian governments have, hence, promoted the enterprises of MSMEs on a large scale. Due to this policy approach of the different governments, during 1990-91, 68 lakh of these units were established with a fixed investment of Rs. 93,555 crore. In the same period, these units made a production of Rs. 78,802 crore and employed 158 lakh people. An astonishing increase in the number of unit established, investment made, increased production and employment is visible even during the regime of new economic policy. (Table-2)

Table-2: Overall Performance of MSMEs

Year	Number of MSMEs (in Lakh)	Fixed Investment (Rs. Crore)	Production (Rs. Crore)	Employment (Lakh)
1990-91	68	93555	78802	158
2001-02	105.2	154349	282270	249.3
2005-06	123.4	188,113	497842	294.9
2011-12	447.7	1176939	1834332	1012.6

Note: Data up to 2005-06 refer to only Small-Scale Industries. Data from 2006-07 refer to micro, small and medium enterprises (MSMEs).

Source: Government of India, Ministry of MSME, Annual Report 2012-13, Table 2.1, pp. 15-15 as quoted by V.K.Puri & S.K.Mishra, Indian Economy, Himalaya Publishing House, 2014, p. 382.

EMPLOYMENT GENERATION IN ORGANIZED PUBLIC & PRIVATE SECTORS IN INDIA

The Ambedkar model of development suggests creation of employment opportunities in the economy, particularly in the industrial sector so that idle manpower in agricultural sector can be absorbed in this sector. Further, it was hoped that in the development pursuit, public sector would play a dominant role. Table-3 reveals employment generation in the organized public and private sectors and their relative importance in securing employment generation. The table suggests that the percentage of employment in the manufacturing, mining & quarrying sector of the organized public sector increased from 12.24 % in 1961 to 38.36 % in 1991 but went down to 31.43% in 2007. As against this, opposite trend was visible in relation to the percentage of employment in the manufacturing, mining & quarrying of the organized private sector. Employment generation in the sub sector of organized private sector, i.e., the manufacturing, mining and quarrying went down to 61.63% in 1991 from 87.75% in 1961. It went up and constituted to 68.56% in 2007.

Table-3: Employment Generation in organized Public & Private Sectors in India

Year	Employment generation in organized public sector				Employment generation in organized private sector				Total employment generation in organized public & private sectors			
	Total	Agriculture, hunting, etc	Manufacturing, mining & quarrying	Others	Total	Agriculture, hunting, etc	Manufacturing, mining & quarrying	Others	Total	Agriculture, hunting, etc	Manufacturing, mining & quarrying	Others
1961	70.50 (58.31%)	1.80 (15.3%)	4.98 (12.24%)	63.72 (87.98%)	50.40(41.68%)	6.70(78.82%)	35.70(87.75%)	8.7 (12.01%)	120.90 (100.0%)	8.5 (100.0%)	40.68 (100.0%)	72.42 (100.0%)
1991	190.58(71.43%)	5.56 (38.42%)	28.51(38.36%)	156.51(87.65%)	76.77(28.77%)	8.91(61.57%)	45.81(61.63%)	22.05 (12.34)	266.77 (100.0%)	14.47 (100.0%)	74.32 (100.0%)	178.56 (100.0%)
2007	176.88 (65.68%)	4.75 (33.33%)	22.24 (31.43)	149.89 (81.33%)	92.40 (34.31%)	9.50 (66.66%)	48.50(68.56%)	34.4(18.66%)	269.28 (100.0%)	14.25 (100.0%)	70.74 (100.0%)	184.29 (100.0%)

Source: Computed on the basis of Tables 180 & 181 of India, A Pocket Book of Data Series, EPW Research Foundation, Academic Foundation, 2010-11, pp. 189 & 190.

PERFORMANCE OF CENTRAL GOVERNMENT ENTERPRISES

Performance of central public sector enterprises shows a reasonably good result despite its criticism on this account. In 1990-2000, number of these enterprises was 232. The number went down to 220 in 2010-11. It was result of adopting the new economic policy. Despite this, the capital employed in these enterprises rose tremendously. It was Rs. 3,02,947 crore in 1990-2000 and rose to Rs. 9,49,499 crore in 2010-11. Between these periods, total turnover rose tremendously. Profit after tax to capital employed which was 4.7 per cent in 1990-2000 grew to 9.1 per cent in 2010-11. Similarly, contribution to Central Exchequer and profit after tax to turnover can be regarded well. (Table-4) Thus, lessening role of public sector as per Ambedkar is not appropriate.

Table-4:Performance of Central Public Sector Enterprises

Running Enterprises (No.)	1990-2000	2006-07	2008-09	2009-10	2010-11
	232	217	213	217	220
	(Rs.)				
Capital Employed	3,02,947	6,61,338	7,92,232	9,08,007	9,49,499
Turnover	3,89,199	9,64,890	12,71,529	12,44,805	14,73,319
Dividend Payment	5,455	26,819	25,493	33,223	35,681
Interest	20,333	27,481	40,330	36,060	38,998
Profit Before Tax	22,037	1,11,527	1,03,095	1,23,957	1,31,627
Profit after Tax (PAT)	14,331	77,175	69,267	83,939	86,324
Contribution to Central Exchequer	56,157	1,48,789	1,51,728	1,39,918	1,56,124
PAT to Turnover (%)	3.7	8.0	5.4	6.7	5.9
PAT to Capital Employed (%)	4.7	11.7	8.7	9.2	9.1

Source: Tata Services Ltd., Statistical Outline of India 2012-13 (Mumbai, 2012), Table 130, p. 112; (ii) Government of India, India 2012- A Reference Annual (New Delhi, 2012), Table 4, p. 742; and (iii) Government of India, Economic Survey, 2011-12 (New Delhi, 2012), Table 9.20, p. 223- As quoted by V.K.Puri & S.K.Mishra, Indian Economy, Himalaya Publishing House, 2014, p. 409.

PRESENT POLICY PERSPECTIVE

The economic and industrial development results show that the pace of development was not fast till 1991, yet it is well established that we were able to set up a fairly developed infrastructure on the basis of which we have been able to develop our economy fast in recent times.

Despite the development of every sector of the economy fairly well, we changed our policies pursued un till 1991 and adopted a new economic policy based on liberalization, privatization and globalization stating that the previous policy did not have a desired effect on the development and hence it should be changed. Accordingly, entire policy perspectives are changed relating to fiscal, monetary, trade, export-import, industrial policies, etc. The changed fiscal & monetary policies restrict government expenditure and monetary control respectively. On the other hand, export led growth has occurred in place of the policy of import substitution. It is envisaged that trade should be augmented substantially and use of foreign capital and technology are not pariah today. Industrial policy has been changed substantially and number of companies under public sector is reserved to two only. Reservation of industries under small scale sector was done away and a policy of openness is followed. Instead of state socialism, neoliberalism is buzzing word today. Such policy changes more or less contradict the Ambdkar's policy of development.

CONCLUSION

The above discussion reveals the following points that deserve consideration.

- Ambedkar ideology harps on liberty, equality and fraternity;
- He advocated for economic development with equity and equality of opportunities to all concerned;
- State socialism was buzz word for him;
- He advocated for mixed economy concept, but not in literary word;
- Agricultural sector is facing chronic disguised unemployment;
- Idle manpower of agriculture sector can be absorbed through non agricultural activities;[14]
- Industrial development should be prime mover of the economy;
- Basic and key industries should be developed by public sector;
- Formation of corporations should be encouraged and insurance sector should be brought

under the control of state so that economies' savings can be collected and capital should be used for development;

- After independence, India adopted the policies of Ambedkar; encouraged public & private sector both but much emphasis was given to public sector till 1991;
- Small scale sector was encouraged with policies and programmes & this sector equally reciprocated with its results;
- Despite reasonably good performance by central public sector enterprises and laying down good infrastructure, after 1991, India adopted new economic policy;
- With the help of new economic policy, we have been able to increase our growth rate well, however, it has more been a job less growth;
- Share of services sector in GDP has increased sharply in recent years, however, share of secondary sector has not increased substantially;
- The country has ignored in the recent times the development of secondary sector which was the basic idea of Ambedkar's philosophy of development. Nevertheless, if we want to accelerate growth along with job creation, we will have to stick to the Ambedkar philosophy of development by giving more importance to development of industrial sector with more state patronage. However, a silver lining is that the present Modi government is giving much importance to the development of manufacturing sector through its scheme of Make in India which is somewhat similar to Ambedkar's view on development.

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