

RURAL DEVELOPMENT - CONTEMPORARY ISSUES AND PRACTICES

Editors

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ISBN : 978-81-928721-9-3

Edition : May, 2016

Published by : Rohini Nandan
19/2, Radhanath Mallick Lane
Kolkata - 700 012
Ph.: +91 9231508276
E-mail: rohininandanpub@gmail.com

Printed at : R. N. Udyog
19/2, Radhanath Mallick Lane
Kolkata - 700 012
E-mail: rnudyog@gmail.com

Price : ₹/- (..... only)

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Editorial

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Impact of Microfinance on Employment and Income: A Case Study

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Abstract

Primary objective of microfinance programme is to provide easy finance and microcredit to the rural poor. Micro finance through SHG-Bank linkage model has been able to inspire hope in the lives of thousands of rural poor, especially rural poor women and enable them to contribute to their families' well being through creation of self-employment and income generation. Microfinance, a new anti-poverty programme, influences the quality of life and is considered to be a powerful tool for positive socio-economic changes in rural society. However, till now no investigation has been undertaken on the performance of SHGs and their impact on creation of employment and income generation for the poorer section of Nadia district, West Bengal. The main objective of this write up is to analyze the impact of microfinance through SHGs on employment and income of the rural poor women in Nadia District. The study is mainly based on primary data collected from Ranaghat block-II of Nadia district. Yet we have also collected secondary data according to our need. At first, from the mentioned block, 30 SHGs (under SGSY) have been selected which have passed second gradation and got project loan. Next, 5 members from each group have been chosen randomly. Altogether 130 women member have been taken for the study. Specially prepared SHG scheduled is used to collect information regarding employment and income. To get meaningful result, data are interpreted by tabular analysis and paired-t test is used.

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From the findings and discussion, it can be concluded that microfinance plays an important role for generating employment as well as income of the rural poor women. Moreover, along with economic improvement social outlook has also been changed to the poor women. Thus we can say that the microfinance programme, indeed, is a right anti-poverty programme.

Keyword: Microfinance; Self-help Group (SHG); Employment.

Introduction

The basic problem of our country is the problem of poverty and underutilization of the nationally cheap labour resource. India's effort to eradicate poverty has a long history. As we have seen, since the inception of our planning exercise, that various antipoverty programmes were being undertaken for the poverty-stricken population to reduce their number who lie below the poverty line. Still, even after six decades of planning, we have rather failed to reduce the number of rural poor in real term. As a result, we have had another important problem that also crop up side by side in our rural society is the minimal use of the working potentiality of the employable female adults. This is equally true, more or less, for the men but for women it is in point of serious concern. From a recent village study it has been seen that more than 91 percent employed female adults are failed to make use even 40 percent of their labour power (Kar, 2009). Therefore, we have failed to expand the good opportunity of livelihood before the rural employable adults.

Needless to mention that India is an agro-based country where around 70 per cent of the population depend upon agriculture for their livelihoods. The rural poor farmers cannot get satisfactory services by the formal and informal financial sectors in our country. Most of the time, the poorest of the poor is deprived of credit due to absence of adequate and suitable collaterals. Besides, the poor need credit in small doses frequently and that should be made available when it is needed the most. Therefore, the access to credit by the rural poor is very much limited.

In order to examine whether the microfinanc activities have

helped in this pursuit of economic empowerment or not, an endeavor has been made in this paper to study the impact of microfinance programme on employment and income in Nadia district of West Bengal.

Review of Literature

Literature related to the employment has been cited in this study. We mention them below:

Khandker et al. (1998) reported substitutions from wage employment to self-employment in the survey of 29 districts in Bangladesh undertaken for the World Bank and the Bangladesh Institute of Development Studies (BIDS). They concluded that microfinance as delivered by Grameen Bank, BRAC and Rural Development-12 (RD-12) accelerated the shift from wage employment in the informal rural sector to self-employment among the poor participants. But they added that absence of technological development had slowed down the overall increase in production and employment.

World Bank (1999) survey conducted for the mid-term review of the poverty alleviation and microfinance project among 675 micro-credit borrowers in Bangladesh showed that there had been positive change in the economic and social status of the surveyed borrowers. The survey showed that income had increased for 98 per cent of borrowers; 89 per cent of the borrowers' accumulated new assets; and 29 per cent had purchased new land, either for homestead or for agriculture. Food intake, clothing and housing had improved for 89, 88 and 75 per cent of the borrowers. Sanitation conditions improved for 69 per cent and child education for 75 per cent of the borrowers. The improvements had mainly achieved due to the increased level of self-employment of women participants.

Dunn and Arbuckle (2001) studied the impact of micro-credit on the Mibanco clients in Peru. The impact was measured using cross-sectional data collected in two parts, once in 1997 and again in 1999. The study demonstrated a very significant positive impact

on its clients in terms of income and employment generation. It was found that the participation in the programme led to 9 additional days of employment per month.

Objectives

The main objectives of this write up are:

To analysis the socioeconomic characteristics of the respondents in the study area.

To examine whether there has been any improvement or not in the employment and income of the respondents in the study area after joining the SHGs.

Hypothesis:

Null Hypothesis (H₀): There has been no improvement in the employment and income of the respondents after joining the SHGs.

Alternative Hypothesis (H₁): There has been improvement in the employment and income of the respondents after joining the SHGs.

Methodology

Selection of the study area:

Ranaghat block-II of Nadia district, West Bengal has been selected for the purpose of the study. This block has been selected for the study because of the SHGs under SGSY scheme in this block are functioning in a very successful manner. Secondly, among 17 blocks of Nadia district the highest number (526 SHGs up to March 2013)) of SHGs that have taken up economic activities formed in this block. Thirdly, So far no study has been undertaken in this block to assess the impact of microfinance through SHGs on employment and income generation of the rural poor women. As a result we think that the study has been more representatives by selecting the Ranaghat block-II of Nadia district as the study area for our case study purpose.

Sources of data: The study is based on both primary and

secondary data. Primary data was collected from a field survey in the Ranaghat block-II of Nadia district of west Bengal. Secondary data was collected from various journals, articles, working papers, Block development office, DRDC reports etc.

Sampling technique: purposive random sampling technique has been used for the study. The study was conducted in the Ranaghat block-II of Nadia district through a field survey. We have selected only those SHGs members who have passed second gradation and got project loan.

Sample size: We have taken 30 SHGs. Taking 5 respondents from each group in total 130 respondents have been considered to conduct the present study.

Method for data collection: A structured interview schedule was prepared and used for collecting data from the respondents who are engaged in income generating activities.

Statistical tools: only simple statistical tools like percentage, frequency distribution, paired t-test, are used for the analysis of the data.

Socio-Economic Background of the Respondents

In order to get a better understanding about the impact of microfinance through SHGs on income and employment generation of the rural poor, it is very important to study the socio-economic background of the sample respondents. In this section caste, age, marital status, level of education, family size, family type, etc. are found to be important variables that affect the life of the poor particularly women in their empowerment and development. Detailed information with regard to each variable are described as follows.

Table 1: Distribution of Respondents by Caste

Caste	No.	Percentage
SC	83	63.85
ST	20	15.38
GEN	27	20.77
Total	130	100.00

Source: Field survey

As shown in Table 1 above, it is found that majority (63.85%) of the respondents belong to scheduled caste community. The Scheduled Tribes and General caste members belong to 15.38% and 20.77% respectively

Table 2: Distributions of Respondents by Age

Age Group	No.	Percentage
Below-30	24	18.46
30-40	80	61.54
40-50	20	15.38
50 & above	6	4.62
Total	130	100.00

Source: Field survey

From the Table 2 it is found that a large number of SHG members are in the age group of 30 to 40 years. It shows that the younger generations have been actually involved in the economic activities in the study area.

Table 3: Distribution of Respondents by Education

Education	No.	Percentage
Illiterate	34	26.15
Can just sign	23	17.69
Primary(class I-IV)	24	18.46
Junior High (V-VIII)	30	23.08

High School(IX- X)	14	10.77
Higher Secondary	3	2.31
Graduation	2	1.54
Total	130	100

Source: Field survey

Table 3 illustrates the educational status of the respondents in the study area. The educational status revealed that 26.15% members are illiterate; 17.69% members can just sign; and 18.46% members complete primary education i.e. up to class I to IV; 23.08% members complete Junior High School; 10.77% members complete High school; 2.31% members complete higher secondary; and only 2 members(1.54%) complete their graduate degree. Therefore, we see that there is that illiterate as well as highly educated members are found in SHGs. Such variations found in these groups help the groups functioning.

Table 4: Distribution of Respondents by Marital Status

Marital Status	No.	Percentage
Married	117	90.00
Unmarried	3	2.31
Widow	10	7.69
Total	130	100

Source: Field survey

From Table 4 we see that maximum number of respondents is married (90%). Among total respondents 2.31% unmarried and 7.69% widows are found in the study area.

Table 5 : Distribution of Respondents by Family Type

Family Type	No.	Percentage
Nuclear	95	73.08
Joint	35	26.92
Total	130	100

Source: Field survey

We have shown the living patterns of the respondents in the Table 5. From the table we found that majority of the respondents are found living in nuclear families (73.08%). Only 26.92% respondents are living in joint families.

Table 6 : Distributions of Respondents by Family Size

Family size	No.	Percentage
1-2	8	6.15
3-4	55	42.31
5-6	42	32.31
Above 6	25	19.23
Total	130	100

Source: Field Survey

Based on the number of the members, the selected households are broadly classified into four categories which are given in the above Table 6. It is observed that 6.15% households are having 1-2 members; 42.31% household are having 3-4 members; 32.31% households are having 5-6 members and 19.23% households are having 6-7 members.

Occupation Profile of the Respondents:

The SHGs organized in the rural areas generally consist of members from the very poor households' i.e. small and marginal farmers, animal husbandry and agricultural labour households. Therefore, their occupation pattern is related to agriculture, agricultural labour and non-agricultural labour. Some of the

members, because of family's economic position and cultural practices may limit their activities as housewives only. Some of the members are engaged in agriculture and agricultural labourers. Some of the members have small business like vegetable vending, pan shop, tea shop, chira and muri processing, readymade garment sell, rice pounding, grocery, banana sale, flower sale, egg sale, electrical shop, nearby their houses. Some members are artisans who engage in silver ornament making, tailoring. Some of the members are engaged in animal husbandry such as poultry, cow and goat rearing and piggery. Some members are engaged in beedi rolling. Occupation profile of the respondents before and after joining the SHGs has been shown in table 7.

Table 7 : Occupations of the Respondents before and after joining the SHGs

Occupation	Before joining SHGs		After joining SHGs	
	No.	percentage	No.	percentage
Farming	30	23.08	12	9.23
Agricultural Labourers.	53	40.75	16	12.31
Animal Husbandry	6	4.62	20	15.38
Handloom Weaving	3	2.31	15	11.54
Rural Artisans	15	11.54	30	23.07
Small Business	5	3.85	32	24.62
Beedi rolling	5	3.85	5	3.85
No occupation	13	10.00	-	-
Total	130	100	130	100

Source: Field survey

Table 7 brings out the primary occupational details of the respondents. It is found that before joining the SHGs 10% respondents are engaged only in house work and they have no any economic activities. But after joining the SHGs, 10% housewives have got different types of economic activities. As far as the

farming and agricultural labourer are concerned, before joining the SHGs they were 40.75% 23.08% respectively and the same will be 9.23% and 12.31% respectively after joining the SHGs. In case of small business it is found that only 3.85% respondents are engaged in small business before joining the SHGs but after joining the SHGs it is 24.62%. This analysis clear shows that there is a significant occupational change from agricultural activities to self-employment remunerative activities which fetch them more income.

Distribution of Employment Days

Table 8 shows the distribution of employment days (per annum) of the respondents before and after joining the SHGs.

Table 8 : Distribution of Employment Days (per annum)

Employment Days	Pre-SHG	Post-SHG
0-50	55 (42.31)	13 (10.0)
50-100	10 (7.69)	26 (20.0)
100-140	26 (20.0)	19 (14.62)
140-180	29 (22.31)	30 (23.07)
Above 180	10 (7.69)	42 (32.31)
Total	130 (100)	130 (100)

From the Table it is found that 55(42.31%) respondents got employment for less than 50 days before joining SHGs but after joining the SHGs the number of respondents has reduced to 13 (10%). Again only 10 (7.69%) members got employment for more than 180 days before joining the SHGs but after joining the SHGs the number of members has gone up to 42 (32.31%). From the above Table it is found that there is a difference regarding

distribution of employment days of the respondents before and after joining the SHGs. After joining the SHGs, employment level of the respondents has completely changed. One can therefore conclude clearly that the number of days of employment for respondents has significantly gone up after joining SHGs.

Test of Hypothesis:

H_0 : There has been no significant improvement in the employment level of the respondents after joining the SHGs.

H_1 : There has been significant improvement in the employment level of the respondents after joining the SHGs.

To test this hypothesis Paired t-test is used and the result of the test is given below:

Table 9 : Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Before SHG	93.4923	130	70.55772	6.18832
	After SHG	136.0846	130	63.05652	5.53042

Table 9a : Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Before & After	130	.913	.000

Table 9b : Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Before -After	-42.59231	28.88220	2.53314	-47.60418	-37.58044	-16.814	129	.000

From the above Table it is found that the calculated value is 16.814 and the Table value at 0.05 is 1.645. Since the calculated value is greater than the table value, H_0 is rejected and the inference

is that there has been improvement in the employment level of the respondent after joining the SHGs.

Income Generation Through Microfinance

To know whether the economic status and living standards of the respondents has got improved, the monthly household income of the respondents is enquired. It is understood that the monthly household income of the respondents has increased considerably to a good extent. The data pertaining to the incomes of the respondents prior to joining SHGs as well as the income after joining SHGs is presented in the Table 10

Table 10 : Monthly household income before and after joining SHG

Income (in Rs.)	Pre-SHG		Post-SHG	
	No.	Percentage	No.	Percentage
Below 2500	65	50.00	20	15.38
2501-3500	40	30.77	55	42.32
3501-4500	22	16.92	35	26.92
4501-5500	2	1.54	12	9.23
Above 5500	1	0.77	8	6.15
Total	130	100	130	100

Source: Field survey

Before joining the SHGs, the household income of the 65 respondents that is 50 per cent of total 130 respondents was below Rs. 2500/-, while the household income of the 40 respondents constituting 30.77 per cent was in the range of Rs. 2501/- to Rs. 3500/-. The household income of 22 respondents (16.92%) was between Rs. 3501/- and Rs. 4500/-, the household income of respondents, i.e. 1.54 per cent was between Rs. 4501/- and Rs. 5500/- and the income of 1 household (0.77%) was above Rs. 5500/-.

After joining the SHGs, the income levels of the respondents have completely changed. The number of respondents whose monthly family income were below Rs. 2500/-, has got remarkable

decreased to 20 from 65 (From 50% to 15.38%). On the other hand, the number of respondents whose monthly family income was Rs. 2501/- to Rs. 3500/- has got increased to 55 from 40 SHGs (From 30.77% to 42.32%). Similarly, the number of respondents whose family income are between Rs. 3501/- and Rs. 4500/- has increased to 35 from 22 (from 16.92% to 26.92%). The number of respondents whose family income are Rs. 4501/- to 5500/- has got tremendous increase from 2 to 12 (1.54% to 9.23%). Again, the number of respondents whose family income were above Rs. 5500/-, has increased remarkably i.e. from 1 to 8 (0.77% to 6.15%). The data clearly shows that after joining the SHGs the household's income levels of the respondents have increased a considerable level.

Test of Hypothesis:

H_0 : There has been no significant improvement in the income level of the respondents after joining the SHGs.

H_1 : There has been significant improvement in the income level of the respondents after joining the SHGs.

To test this hypothesis, Paired t-test is used and the result of the test is given below:

Table 11 : Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1				
Before SHG	2707.5462	130	892.52826	78.27991
After SHG	3466.3692	130	1099.42518	96.42597

Table 11a: Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Before & After	130	.866	.000

Table 11b: Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Before -After	-758.82308	553.71577	48.56409	-854.90831	-662.73784	-15.625	129	.000

From Table 11b it is found that the calculated value is 15.625 and the table value at 0.05 is 1.645. Since the calculated value is greater than the table value, H_0 is rejected and the inference is that there has been improvement in the income level of the respondent after joining the SHGs.

Conclusion

This paper describes how microfinance through SHGs plays an important role for income and employment generation to the rural poor women. The rural poor particularly the rural poor women are able to generate more employment after joining SHGs and as a result their income also increases.

First, the analysis of annual household income of sample members for both pre-SHG and post-SHG situation showed that there was a substantial increase in the annual income of the households in the post-SHG stage. Further, when sources of income of SHGs are analyzed, we find a substantial increase in household income from self-employment in non-farm activities such as livestock, handloom weaving, and business and so on. In fact, we find there was a shift in the composition of activities due to joining the SHG.

Forth, it is found that besides economic improvement the social outlook of rural women has undergone a radical change. The involvement in the group significantly contributed to improving the self-confidence of the members.

Therefore, it can be concluded that the microfinance programme is a successful step in generating employment and income to the rural poor especially the poor women in the grassroots rural areas.

Thus, we can say that the microfinance programme, indeed, is a right anti-poverty programme.

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Accessibility to stable source of livelihood in India: Evidence from IHDS data

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Abstract

In a general sense livelihood can be understood as means of living. All that means which is being used by a person or a family for their survival is called their livelihood. A livelihood is sustainable which has potential to fulfill the basic needs of a household and which can cope with and recover from stresses and shocks. With the recent pace of development in globalization, livelihood pattern of rural poor is also expected to be changed. New livelihood opportunity is emerging in rural non-farm sector, while there is less hope in traditional agricultural sector. Thus it is necessary to see how the pattern of livelihood is changing with emergence of new opportunities and constrains and which are the household, able to access and secure their livelihood in present context. The IHDS survey data is used to fulfill the objective of study, which is collected in 2004-05. The result suggest that in rural area a big non-farm sector has emerged but its benefit is limited to only a smaller section of population. The majority population which depends upon agricultural or non-agricultural laborer, poverty and insecurity is widespread among them. Education has emerged as the most important factor which leads the household to access the secured source of income and thus is a potent tool of social mobility in present context.

Introduction

In a general sense livelihood can be understood as means of

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living. All those means, which are being used by a person or a family for survival, may be called as their livelihood. The concept of 'sustainable livelihoods' is getting immense focus in the debate of rural development, poverty reduction and environmental management. The word livelihood is distinguished differently from employment; employment refers to working status while livelihood refers to the dependency on the source of survival (Chambers, 1995). At one time, a household may depend upon several sources for their survival and with passes of time they may shift from one source to another to ensure stability of their living; thus the livelihood is a diverse and dynamic concept (Eriksen et. al., 2005). The framework, which explains livelihood, keeps a household in the center instead of individual because the co-residents of household is likely to share most of the aspects of consumption and income (Schmnik, 1984). In the framework household is considered, not just a passive victim of economic and political circumstances neither it is considered an entirely free entity from it; but it is considered as an active agent which acts in a certain circumstances and responds according to it (Scooners, 1998). Capability, equity and sustainability are three basic concepts, which are considered as means and ends of livelihood. Capability refers to what a person is capable of being or doing. Livelihood capability includes being able to find and make use of livelihood opportunities and also being able to respond to adverse change in condition. In the context of livelihood equity imply to a less unequal distribution of opportunities of livelihood, assets and capabilities and especially enhancement of those of most deprived. Sustainability refers to the ability to maintain and improve livelihoods while maintaining local and global assets and capability on which livelihood depends (Chambers and Conway, 1992). The most popular definition of livelihood is given by R. Chambers and R. Conway that is, "A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets,

while not undermining the natural resource base” (Scooners 1998).

It is being recommended that to improve the livelihood of a household improvement in the macro-economic circumstances and improvement in the capability of a household should go hand in hand (Rural poverty report, 2011). Since household respond the macro-economically condition dynamically, the policy should improve their ability to choose and to act. Interventions designed to improve the well being of rural households often focus on expanding asset ownership and access based on the view that it is the household’s low asset position that limits its ability to take advantage of opportunities. Thus, it is necessary to understand that in a given context, accessibility to which kind of asset promotes participation in a better and sustainable source of livelihood (Winters, 2009). In the rural area, historically, farming has been considered the principal economic activity of rural households, particularly poor rural households, and the dominant view of development has been the small-farm first paradigm which emphasizes promoting agriculture among smallholders (Ellis & Biggs, 2001). As such, the main asset whose accumulation has been promoted has been land, based on the argument that land ownership and access are closely linked to agricultural production and, correspondingly, to food security and rural income generation. Recent evidence clearly shows, however, that rural households are involved in a range of economic activities and that agriculture, while remaining important, is not the sole, or in some cases, even the principal activity of the poor (Davis et al., 2008). This observation has led some, such as Riggs (2006), to question the merit of a land-focused vision of rural development and Riggs further argue that the best means of promoting pro-poor growth in the countryside is through endowing rural households with skills, presumably through increased education.

According to rural poverty report 2011, urbanization, increasing rural-urban integration, integration to the global market and increasing source of information and communication are the basic responsible factors for the spread of non-farm activities in the rural

area. India is also experiencing this phenomenon like the other part of the world, so growth and dependency on non-farm sector is expected to increase at here also. In the country in 1990-91, more than 78 percent of farmers were small holders (those owning less than 2.0 ha of farmland), and their proportion is likely to increase at present. Agriculture has shown a sluggish growth in the past two decades; many times less than 1.3% of human population increase (Singh et. al. 2002). This situation is likely to create the crisis of food and livelihood security to the vast majority of small holders who are surviving on the verge of the poverty line and push them to take up employment in the non-farm sector. Thus both from push and pull side, non-farm sector is expected to expand in Rural India as means of livelihood.

Various evidence from studies conducted at different part of developing world shows that farm and non-farm sectors both co-exist together as livelihood portfolio of a household (Eliss, 1998). It has been widely debated that a poor household prefer to diversify their source of income instead of depending upon one source because more than one source not only supplement the essential need of household together but it co-insure each other against the probability of failure one any one source (Chambers, 1995; Eliss, 1998). While, non-farm activities are expected to expand in rural India, it is necessary to understand that whether a poor household is diversifying their source of income with it or not; means either they are choosing in agricultural or non-agricultural separately or taking up both kinds of activities together. It has been seen that the poor household are not able to take in the activities which generates higher income. Their assetlessness work as an entry barrier for them to participate in higher income generating nieces and their diversification limits to only low income generating activities and hence they remain poor instead of diversification (Davis et. al., 2008). Thus, it is necessary to understand that what are the sources of income being accesses by mostly poor and unsecured households and at the same time what are the assets which leads a household to access a better source of livelihood. It is expected that poor

households are getting engaged in activities like a labourer in farm or non-farm sector , and this may be the basic reason of persisting poverty among them while activities like salaried or business related work may be accessed by better off; which has capabilities like better education or skill.

Along with rural area, this paper explores the livelihood pattern of the urban area also, because, there is less of literature related to livelihood in the urban context. Thus, the main objective (explained in the next paragraph) has been applied even in the urban context.

Objectives and Methodology

In Indian context, the research on livelihood remains limited mostly due to the because of lack of macro level data sources for Income. First time, a nation-wide income data has been collected in this in IHDS-2005 survey, which has been used for the research. The first objective of the study is to understand the main source of livelihood in rural and urban area and to whether the household is diversifying their source of income or not and whether the diversification is taking place across the sector or not. The second objective of the study is to understand the relationship between poverty and insecurity of a household with their source of livelihood or to identify that, which source provides a better and secured living. The third objective is focused on the assets and capability, which determine their accessibility to a better source of living. The fourth objective is to identify how income form a better or substandard source of living varies with the background characteristics of the household.

Choice of a particular concept and definition is very important in this study because it can vary from one study to another. Some concepts and definitions, which are used in the study, are defined below-

Source of livelihood: In this research, source of income is considered as the main source of livelihood (though, the concept of livelihood is not simply limited to the source of income). In

IHDS data, source of income of a household has been categorized in ten categories. In the study, all these categories has been taken as it is to understand the contribution of different portfolio of income generation in household income and then it has been classified as agricultural, non-agricultural and other sources. Agriculture source includes agricultural wages, farm (cultivation), animal husbandry and renting land. Non-agricultural source includes salary, non-agricultural wages and business. Remittances, income from property and income from the scheme of government has been included in other sources. Again for section 4, 5 and 6, income has been categorized again. For this section, income from farm (cultivation), animal husbandry, and renting land has been clubbed together and named as income from farming; again the clubbing of income from other sources has been used for these sections also.

To understand the contribution of a particular income portfolio in total income, following concepts has been used. Share of means: income shares are calculated as the share of a given source of income over a given group of households

Mean of share: income shares are calculated for each household, and then the mean of the household shares of each type of income (MSi) is calculated

Income source is shown by i , total income is by Y , household is by h , and n shows the number of households. According to Davis and winters et. al. (2008), the mean of shares reflects more accurately the dependency of an average household on a given source, regardless of the magnitude of income; while the share of means reflects the importance of a given income source in the aggregate income.

Diversification or specialization: Davis and winters et. al. (2008), defined that if a household get more than 75 percent of its income from a single source (highly dependent at a single source), than it is specialized otherwise it is diversified.

Stable source of livelihood: In this study, stability has been

considered as the ability of a household to avoid poverty not only for a particular point of time but for a period. When the household income is not sufficient to fulfill the consumption needs, the household can be considered as poor, and its source of income can be considered as facing a situation of failure or income or source of livelihood. This study considers that the household income should be higher to some extent from the poverty line, than household is likely to resist to any adversity, and the household is less likely to experience income failure against essential consumption needs. To understand the proportion of such household, the poverty line has increased up to 20 percent and 50 percent. Stability and instability of a household has been seen against sources of income, and the source of income, which mostly leads a household to security, has been considered as a stable source of income.

Regions: States (provinces) of India has been clubbed into regions, in the North, Jammu and Kashmir, Punjab, Haryana, Delhi, Himachal Pradesh and Uttarakhand are clubbed, in Central, Rajasthan, Uttar Pradesh, Madhya Pradesh and Madhya Pradesh is included, in the East, Bihar, West Bengal, Odissa and Chhattisgarh are included, in North-east, all the seven states of North-east and Sikkim is included, in West, Gujarat, Maharashtra and bordering union territories are included, in South, all four South-Indian states and bordering state Goa is included.

Source of Livelihood in Rural and Urban Area and Diversification

Table 1 (a) (b) and (c) shows the importance of different source of income in both rural and urban area of India. Table 1 (a) shows the proportion of household by their source of income. In the rural area, there are 83 percent of household, which get its income from agricultural source and around 57 of percent household get its income from non-agricultural sources, and around 27 percent of household get their income from other sources, which includes remittances, property, rent and pension and benefit of the government scheme. Among agricultural sources, the highest proportion of household gets their income from animals (52

percent), farm (51 percent) and agricultural wage (44 percent) and renting agricultural land (13 percent). Among non-agricultural sources, non-agricultural wages (25 percent), salary (18.6 percent) and business (16 percent) are important. In the urban area around 91 percent of household get its income from non-agricultural sources and around 16 percent of household get its income from agricultural sources and around 24 percent of household get its income from other sources. In the urban area, salary is the most important source of livelihood as around 51 percent of household get income from it, followed by business (27 percent) and non-agricultural wage (25 percent). Overall at national level, around 67 percent of household get its income from non-agricultural source and around 64 percent of household get its income from agricultural sources.

Table 1 (b) shows the share of mean of different sources in average income of household of rural area. Agricultural sources contribute about 4.7 percent in rural income and non-agricultural sources contribute about 46.9 percent and rest 7.4 percent are contributed by other sources. Farm contributes highest (30.4 percent) to rural income, followed by salary (20 percent), agricultural wage (14.3 percent), business (12.3 percent) and non-agricultural wage (11.7 percent). In the urban area, the main contributors of income are salary (53 percent), business (24.6 percent) and non-agricultural wage (10.1 percent) the total contribution of agricultural sources are just 3.7 percent.

Table 1 (c) shows the mean of proportion share in household income by different sources. In the rural area, 46.9 percent of household income is shared by on an average, agricultural wage share the highest proportion of household income (31 percent) in the rural area, followed by farm income (26 percent). In non-agricultural sector, non-agricultural wage (16 percent), salary (13 percent) and business (10 percent) are the important contributor. Pension and renting property contribute 3 percent, remittances contribute 2.5 percent and benefit from government scheme

contributes 1.4 percent of household income to a household in the rural area. In the urban context, 85.1 percent of household income is being shared by non-agricultural sources; salary contributes 43.4 percent, followed by business (20.6 percent) and non-agricultural wages (20.3 percent).

Table 2 shows the relative importance of different source of income to the household; it shows that how the household income in rural and urban area is being contributed from different sources and whether the household is mostly specialized to one source or diversified to different sources. The result shows that the pattern of specialization is more common in Indian context, instead of diversification. In the rural area, there is 41.3 percent of household, which get its more than 75 percent of income from farm sources and interestingly 31.2 percent of household gets more than 75 percent of its income from non-farm sources. It shows a strong presence of non-farm sector in the rural area without the phenomena of diversification. When we take each and every source separately (from farm and non-farm sector), it is being resulted that more than 61.4 percent of household income is earning more than 75 percent of their income from only one source and more than 94.6 percent of household is earning more than 50 percent of their income from only one source. However, the result derived from table 1 (a) shows that a significant proportion of household is there in every activity, it shows that; however, the household has diverted their labor force to multiple activities they are mostly depending upon one activity for survival. The table-2 again shows the significance of agricultural wage in rural livelihood as around 18.1 percent of household get their more than 75 percent of income, 25.2 of household percent get more than 50 percent of their income from it. From farm source only 14.3 percent of household get their most of income, while, 46.3 percent of household get some kind of income from it, it indicate that diversification may be highest among the household which is engaged in cultivation, again from animal there are 31 percent of household get some kind of income, but, only 1.9 percent of household get more than 75 percent of their income

from it, thus animal husbandry is just a subsidiary activity which is practiced widely, but household doesn't depend upon it.

The result from the urban area shows that the household of the urban area depends mostly upon salaried income, non-agricultural wage and business. Around 38.3 percent of household depends upon salary; in 44.2 percent of household salary contributed more than half of the income and around 51.3 percent of household get some of their income from salary. Around 17.5 percent of household depends upon business; in 20.8 percent of household business contributed more than half of the income and around 26.9 percent of household get some of their income from business. Around 17.2 percent of household depends upon non-agricultural wage, in 20.5 percent of household it contributes more than half of the income and around 26.9 percent of household get some of their income from it.

Source of Livelihood and Stability

As described in the methodology section, if income of household remains below the consumption poverty line, household can't be considered as stable. Table 3 shows the proportion of household, which income and consumption value are below the defined poverty line. Around 21.0 percent of household is consuming below the defined poverty line while the income of around 39.5 percent of household is lower than this. In every state except Jharkhand and Chhattisgarh, the proportion of poor is higher by income than consumption value. By consumption measure, poverty is higher than the national average in Chhattisgarh (56.6 percent), Jharkhand (40.3 percent), Madhya Pradesh (39.4 percent), Orissa (38.4 percent), Uttarakhand (26.2 percent), Uttar-Pradesh (25.9 percent), and Rajasthan (24 percent). By putting income value, poverty is higher than the national average in Orissa (56.8 percent), Madhya Pradesh (55.3 percent), Bihar (52.4 percent), Uttar Pradesh (50.3 percent). Except Jharkhand and Chhattisgarh, in general poverty level is found higher in every state by using income value of household compared to consumption value. One

of the important reasons behind it is may be a household don't compromise to its essential consumption needs and try to maintain it even by borrowing, taking debt or from other sources.

It has been argued that income of a household always get underestimated, at the same time, it has also been accepted that measurement related error occur least in case of salary because salaried income is easiest to assess while farm income is the most difficult to assess. Table 4 shows the proportion of poor by applying value of consumption and income. It has been shown that in each type of household (by their prime source of livelihood), proportion of poor is higher by income value. By income value, agricultural wages (58.3 percent) followed by depends upon non-agricultural wages (50 percent), farming (48.8 percent). Poverty is lower than the average is in salaried household (16.5 percent), household depends upon other sources such as remittances renting property, pension and benefit from government scheme (31.1 percent).

Table 4 shows that there is around 36.5 percent of household is poor, but once the poverty line has increased by 20 percent 44.2 percent of household dip down into poverty , and if the poverty line has increased by 50 percent, there is around 54.3 percent of household dips into poverty. In the rural area poverty are 41.2 percent, by increasing poverty line by 20 percent, 50.2 percent of household and by increasing the poverty line by 50 percent, 60.6 percent of household plunge into poverty. When the poverty line is increased by 50 percent, 87.7 percent of household which survive on benefit of the government scheme, 78.6 percent of household which depends upon agriculture, 69.3 percent of household which survive on agricultural wages and 60.2 percent of household which survive on farm income will plunge down into poverty.

Table 5 compares the economic condition of household by type of their livelihood. Salaried households are the most concentrated in fifth quintile as 45 percent of them is in the group, and only 5 percent of them are in poorest (1st) quintile. The household depending upon agricultural wage is mostly concentrated in the

1st (39.7 percent) or the 2nd quantile (31.5 percent), and only 1 percent of them is in fifth quantile. The household depends upon non-agricultural wage is mostly concentrated in 1st (20 percent), 2nd (30 percent) and middle (26.5 percent); in fifth quantile they are just 4.8 percent. The household, which depends upon business, are mostly concentrated in 5th (26.6 percent) 4th (27.1 percent) and middle (21 percent) quantile; just 9.9 percent of them are poorest. Household surviving on farming is distributed in every category, but their proportion is higher in poorest (24.2 percent) and lesser in richest (14.4 percent), and a significant proportion of them have earned zero or negative income (7.5 percent). The household surviving on the other source of livelihood is concentrated either in poorest (25 percent) or 4th (22.8 percent) and 5th (22.7 percent).

Determinant of Accessibility to Source of Livelihood

Table 6 shows the result of binary logistic regression, in which the independent variables are participation household in different source of income. Area of residence (rural or urban), religion and caste, highest educational achievement of the adult (21+) of the household, number of adult (14+) in the household, size of landholdings (in Hectare), income quintile and region.

Area of residence - Area of residence (rural or urban) plays important role in determining participation in different activities, the household of urban area is 76 percent more likely to participate in salaried activities and 29 percent more likely to participate in business, while in likelihood decreases in urban area in case of farm (83 percent less likely), agricultural wage (82 percent less likely), and other activities (47 percent less likely).

Caste- Caste hierarchy is an important determinant of socio-economic and occupation status of a family in India. The result shows a surprising trend in case of salary, although salaried income gives the most stable livelihood to the household, participation in salaried income decreases as the caste hierarchy increase, for SC it is just 29 percent less likely of ST, for OBC it is 33 percent less likely, for Muslims it is 34 percent less likely, for upper caste it is 36

percent less likely and for Minorities (Christian, Jain and Sikh) it is 64 percent less likely compared to ST. In case of agricultural wages likelihood decreases drastically by hierarchy of caste, for SC it is 79 percent less likely compared to ST, for OBC it is 54 percent less likely, for Muslims it is 76 percent less likely, for upper caste it is 69 percent less likely and for Minorities (Christian, Jain and Sikh) it is 87 percent less likely compared to ST. In case of non-agricultural wages, participation again follows the hierarchy of caste, for SC it is 21 percent less likely of ST, for OBC it is 50 percent less likely, for Muslims it is 42 percent less likely, for upper caste it is 65 percent less likely and for Minorities (Christian, Jain and Sikh) it is 76 percent less likely compared to ST. In case of Business, only Muslims shows a higher likelihood of participation (19 percent) compared to ST, while likelihood decreased in case of Upper caste (22 percent less likely), Minorities (Christian, Jain and Sikh) (25 percent less) and SC (42 percent less). In farming activity caste doesn't emerged as important determinant of participation. Only OBC shows 1.47 times higher propensity of participation; for other categories, the likelihood doesn't differ significantly from reference category. In case of participation in other activities, likelihood is least among OBC (50 percent less) followed SC (43 percent less), Minorities (37 percent less), Muslims (35 percent less) and Upper Caste (20 percent less).

Educational achievement- Educational achievement is considered as an important asset because it open the gate way for better non-farm source of income, particularly salaried income. The regression result also proves it as likelihood of participation in salaried income increases drastically as the level of education increases. Highest educational achievement of adult (21+) is considered as the educational achievement of household. It has been found that the household which has graduate is 4.8 times more likely to get a salaried job followed by the household which has intermediate (3.04 times), matriculation (2.21 times), completed 6th to 9th (1.66 times), completed 1st to 5th (1.27 times). An absolutely reverse trend has come out in case of participation in agricultural

wage. It is least likely to be participated by a household which has graduate (83 percent less likely) followed by a household which has intermediate (72 percent less likely), matriculation (65 percent less likely), 6th to 9th (40 percent less likely), 1st to 5th (65 percent less likely). Participation in non-agricultural wage also decreases with educational achievement (however the decline is sharper in case of agricultural wage). Again, it is least likely to be participated by a household which has graduate (67 percent less likely of illiterate) followed by a household which has intermediate (49 percent less likely), matriculation (30 percent less), 6th to 9th (20 percent less). In case of business, the trend got reversed again in favor of higher educational achievement. However, the difference in likelihood is not as high as it is in case of salary. The household which has graduate is 2.33 times more likely to get a salaried job followed by the household which has intermediate (2.32 times), matriculation (2.01 times), completed 6th to 9th (1.76 times), completed 1st to 5th (1.56 times). In case of participation in farming activities, except 1st to 5th other type of household shows lesser likelihood in participation in the activity compared to illiterate. For the category 1st to 5th the likelihood doesn't differ significantly from reference category. In case of getting income from other sources; households show higher likelihood of participation compared to the reference category.

Number of adults- Number of able bodied person in the household increases the participation in economic activities, particularly more in case of manual work. Result from logistic regression also proves it. In case of salaried income, it's not a significant determinant. In case of agriculture work, participation increase with increment in the number of adult in household. The likelihood of participation is highest in case of household which has five or more adult member (1.74 times), followed by household which four adult members (1.36 times) and household which has three or more adult (1.11 times). Participation in non-agricultural activities also follows the similar trend. The likelihood of participation is highest in case of household which has five or more

adult member (1.46 times), followed by household which four adult members (1.20 times). Likelihood of participation in business also increases with the increase in the number of adult household, but for most of the category the result is not significant. The variable plays the most significant role in determining participation in farming activities. The likelihood of participation is highest in case of household which has five or more adult member (2.69 times), followed by household which four adult members (1.62 times) and household which has three or more adult (1.36 times).

Size of land holding- Size of landholding again determine participation in many important activities, it encourage in participation in farm related activities and discourage non-farm activities. Again if land size is enough, household may not need to participate in other kind of manual work to get their livelihood. The result of the regression shows that land-size adversely affect participation in farm related activities. The household which has more than 5 hectare is just 75 percent less likely to participate in salaried work compared to landless. Land size most adversely affects the participation in agricultural wage activities; the household which has more than 5 hectare is just 85 percent less likely to participate in agricultural wage work compared to landless. Likelihood decrease in case of participation in non-farm work also. The household which has more than 5 hectare is just 76 percent less likely to participate in non-agricultural wage work compared to landless. In business activities also a lesser likelihood of participation has found in the household which have higher size of land in their hold. The household which has more than 5 hectare is just 60 percent less likely to participate in business compared to landless. In case of participation in farming, likelihood reaches to very high for the household which has small piece of land, but then it starts decreasing as the size of land increases. In case of participation in other activities, the household which possess land shows lesser likelihood of participation compared to landless.

Household income- Income doesn't cause the participation

in livelihood activities, but it is an outcome of participation and associated to it in reverse. However taking it as background variable may show the association between the two. In case of salary, the result shows that as income of a household increases, participation in it increases drastically. Probability of participation of households of second income quintile in it 2.10 times higher compared to poorest quintile, of middle quintile participate it is 3.56 times higher, of 4th quintile it is 5.33 times higher and of 5th (affluent) quintile it is 13.3 times higher. Participation in agricultural wage increases (1.36 times) in second income quintile compared to poorest, middle quintile doesn't show any significant difference, than it decreases for 4th (41 percent less likely) and affluent quintile (83 percent less likely). In case of participation in non-agricultural wages, probability increase for the 2nd quintile (1.84 times) and middle quintile (2.01 times) compared to poorest, than it decreased for the 4th quintile but higher compared to poorest (1.71 times), only fifth quintile shows lower probability of participation (0.8 times) compared to poorest. In case of business, probability of participation increases with increase in income quintile, however it doesn't increase as sharply as in case of participation salary. Probability of participation of households of second income quintile in it 1.45 times higher compared to poorest quintile, of middle quintile participate it is 1.84 times higher, of 4th quintile it is 2.55 times higher and of 5th (affluent) quintile it is 3.03 times higher. In case of participation in farming, probability increases with increase in income quintile. Probability of earning from remittances also increase as income quintile ascends, but for 4th and 5th quintile it descends (but remains higher from reference category).

Region- The different region of India has climbed on the path of development with different rate. The regional variation may get reflected in involvement in sources of livelihood also. North is selected as reference category. Probability of participation in salaried income is lowest in the central (31 percent less), followed by west (14 percent less) and south (11 percent less), for east and north-

east, the result is not significant. Its surprise to see that in west and southern region, where industrialization is higher, participation in salaried income is lower. In case of participation in agricultural wage activities, likelihood is highest in case of West (7.69 times) followed by South (5.79 times), East (3.90 times) and central (2.43 times), only in case of North-east probability is lower (0.38 times). In case of participation in business, East shows the highest probability of participation (2.42 times) followed by Central (2.08 times), West (1.49 times) and south (1.36 times). In case of participation in non-agricultural wage activities, likelihood is high in Central (1.49 times), for east likelihood is not significant, likelihood is lowest in North-east (75 percent less of North), followed by west (51 percent less compared to of North) and south (35 percent less of North). In case of participation in farm activities, for central, likelihood is not significantly different from North, for east likelihood decreases and for other regions it increases compared to North. In case of dependency on other activities, Central, East and North-east shows lower likelihood and west and south shows higher likelihood of participation compared to North.

Determinant of Earning from Different Sources of Livelihood

Table 7 shows the result of log-linear regression, in which the independent variables are net income of household and income from different portfolio of activities. Area of residence (rural or urban), religion and caste, highest educational achievement of the adult (21+) of the household, number of adult (14+) in the household, size of landholdings (in Hectare), and region.

Area of residence - Area of residence (rural or urban) plays important role in determining income from different activities, the household of urban area likely to earn 45% higher of income than rural area, from agricultural wages their income is likely to be lower by 447 percent income of rural area, from non-agricultural wages, people of rural area is likely to earn 14 percent lower, from salary they are likely to earn 340 percent higher, from business, they are likely to earn 108 percent higher, from farming they are likely to

earn 278 percent lower and from other activities they are likely to earn 29 percent lower.

Caste- Ln of Income of ST is selected here as reference category. Ln of income of SC and OBC doesn't vary significantly from that of ST. Among Muslim, Upper caste and Minorities it is 11 percent, 19 percent and 29 percent higher respectively. Income from agricultural wages is inverse to the order of caste hierarchy. Among SC, OBC, Muslims, Upper caste and Minorities income from agricultural wages is lower by 90 percent, 228 percent, 373 percent, 294 percent and 330 percent in respective categories. In case of non-agricultural wages, SC earns 31 percent higher compared to ST, OBC (84 percent), Upper caste (185 percent) and Minorities (148 percent) earns lower compared to ST. For Muslim, the difference is not significant. The result shows a surprising trend in case of salary, although salaried income gives the most stable livelihood to the household, participation in salaried income decreases as the caste hierarchy increase, for SC it is just 61 percent of ST, for OBC it is 83 percent, for Muslims it is 66 percent, for upper caste it is 64 percent and for Minorities (Christian, Jain and Sikh) it is 36 percent of ST. In case of non-agricultural wages, SC and Muslims earn 31 percent and 15 percent higher compared to income of ST while, OBC, Upper Caste and Minorities earn 83 percent, 185 percent and 149 percent lower. Earning from salary doesn't follow the caste hierarchy, earning of SC, OBC, Muslims, Upper caste and Minorities is lower by 61 percent, 83 percent, 146 percent, 55 percent and 157 percent. In case of Business, SC earns 62 percent lower compared to ST while other categories such as OBC, Muslims, Upper caste and Minorities earn 69 percent, 156 percent, 76 percent and 54 percent higher compared to ST. In agriculture, likelihood of earning of SC is 24 percent lower compared to income of ST, OBC and Minorities earn 34 percent and 37 percent higher and for Muslims and Upper caste, the difference is not significant. In case of earning from other source, Muslims earn 58 percent lower compared to SC and Upper caste earns 25 percent higher, for rest of the categories, the difference is

not significant.

Educational achievement- Educational achievement seems playing the most important role in determining level of income from different sources. Ln of income of the household which all adult (more than 21 years) members are illiterate is selected here as reference category. The household categories whose adult member has completed 1st to 5th, 6th to 9th, Matriculation (10th to 11th), Intermediate (12th to 14th), and graduate and above earn higher in the order of 11 percent, 32 percent, 52 percent, 66 percent and 106 percent compared to income of reference category. In case of agricultural wage, the income of these respective categories were 96 percent, 238 percent, 368 percent, 400 percent and 420 percent compared to the reference category. In case of non-agricultural wages, the difference between completed 1st to 5th standard and the reference category is not significant. For rests such as completed 6th to 9th, Matriculation (10th to 11th), Intermediate (12th to 14th), and Graduate and above, likely to earn is higher by 34 percent, 163 percent, 276 percent and 399 percent correspondingly. In case of salary, the likelihood of the earning of the categories, completed 1st to 5th, 6th to 9th, Matriculation (10th to 11th), Intermediate (12th to 14th), and graduate and above is higher by 58 percent, 163 percent, 335 percent, 459 percent and 708 percent correspondingly, compared to the reference category. In case of business, the likelihood of the earning of the categories, completed 1st to 5th, 6th to 9th, Matriculation (10th to 11th), Intermediate (12th to 14th), and graduate and above is higher by 86 percent, 134 percent, 189 percent, 235 percent and 201 percent correspondingly, compared to the reference category. In case of agriculture, for the category 1st to 5th completed, the likelihood doesn't differ significantly, for the other categories, likelihood of earning decreases as level of education increases. In case of earning from other sources, likelihood of earning is lower among completed 1st to 5th and 7th to 9th compared to reference category and it exceeds with matriculation to higher level of education.

Number of adults- Number of able bodied person in the household also has a positive and significant impact on household income which is proven by the analysis. The household which has two or lesser number of adult members is selected as reference category. The household which has 3 adults, 4 adults or five or more adults earns 23 percent, 33 percent and 52 percent higher in respect to the reference category. Higher number of adult member is likely to increase income from every activity, as number of adult increase in the household, income from every activity increases (except other activities).

Size of land holding- Size of landholding has been historically important determinant of economic status. Landless has been selected as reference category. The result of shows that the household which holds a small size of land, their income is lesser compared to landless. Household income is 19 percent and 13 percent lesser of the household possessing .1 to 0.5 hectare and 0.5 to 1 hectare of land compared to reference category. Again for the higher possession, 1 to 2.5 hectare the income difference is not significant. Over again the income exceeds to the reference category for further higher possession. It is higher by 27 percent and 68 percent for the household, which holds 2.5 to 5 hectare and more than 5 hectare. Income from agricultural and non-agricultural wages, salary and business decreases contently as the possession of land increases. Only the income from cultivation increases with increase in the possession of land.

Region- North is selected as reference category. In Central, East and South, income is higher by 36 percent, 35 percent and 5 percent and in the East and North-east income is lower by 4 percent and 3 percent. In central region earning is higher by salary, agriculture and else compared to North. In case of non-agricultural wage and business, the difference is not significant and in case of agricultural wages, earning is 324 percent lower compared to reference category. In East, income from non-agricultural wage is lower, in case of salary, the difference is not significant and in

case of non-agricultural wages, business, agriculture and else, earning is higher. In case of North-east income from agricultural wage is lower and higher income is earned in business, agriculture, salary, other activities and non-agricultural wages. In case of West income earned from agricultural wages (514 percent) and non-agricultural wages (122 percent) is lowest and income earned from salary is highest (213 percent) in reference to North. In case of south, income earned from non-agricultural wage and else is not as significant. In case of salary, business and agriculture, income is higher compared to the reference category.

Discussion and Conclusion

The evidences discussed above suggest that the livelihood of rural area has transformed in a big way. Now around 57 percent of rural household is participating in non-agricultural sector and it is contributing around 44 percent of income of rural area and around 42 percent of income of rural household. Salary, Business and Non-agricultural wages are the three important non-agricultural sources, contributing significantly in household income in rural area. However, there is lack of the phenomena of household income diversification across sector and within sector; it suggests that with divergence of source of income generation in rural area, household is not diversifying their income portfolio to various sources, instead of its dependent upon one kind of employment either agricultural or non-agricultural. Since, the source of income in rural area is mostly specialized, proximate reasons of instability and inadequacy of rural income becomes easier to identify; lack of income from any single sources on which household depends, may be identified as the reason of its poverty and insecurity. Thus it becomes easier to track the path of poverty in India. The household which, depends upon agricultural wages are found as the group which is most insecure and similarly poverty and insecurity is prevalent among those households which depends upon farming or non-agricultural wages. Dependency of most of the rural households is confined to these three kinds of activity, which makes the rural area as the place, where poverty is concentrated. In most of the cases, earning

from salary or business leads a household to escape from poverty, but this is practiced by smaller group. In urban area, population is mostly depends upon salary, business and non-agricultural sources and they are even more specialized compared to rural area. Thus dependency upon non-agricultural wage seems the prime responsible factor for prevalence of poverty in the area. Residing in rural area, lower position in caste hierarchy and lack of education are the prime factors, identified as reasons leading a household to depend upon unsecured sources. Getting better education is identified as the most prominent determinant for accessibility and higher income from secured source, which suggest that education remains as the most important factor for social mobility in rural and urban area. Again, number of adult has also emerged as an important factor determining participation and earnings from economic activities, thus importance of demographic factor should also not ruled out, while forming policy for development and household security. Land-holding discourages participation and earning from not only non-agricultural sources such as salary and business but from the activities which gives lower and unsecured income such as agricultural wages and non-agricultural wages. Regional variation in accessing and earning from any particular source has also emerged as important in this context for example in western and southern India; household shows more likelihood in participation in agriculture wage.

Table: 1 (a) Source of household Income by area

	Ag-wage	Farm	Animals	Renting land	Ag-sources	Salary	Non-ag-wage	Business sources	Non Ag-sources	Remittances	Property, Rent, pension etc.	Benefit of govt-scheme	Other Sources
Rural	43.9	51	52	12.8	82.7	18.6	25.2	16.2	57	5.3	7.6	14.3	26.8
Urban	6.1	4	6.9	3.6	15.9	51	25.2	26.8	90.6	3.7	16.6	7	24
Total	30.3	34	35.7	9.5	63.5	30.3	25.2	20	66.6	4.7	10.9	11.7	26

Table: 1 (b) Mean of proportion share of household income by area

Farm	Ag-wage	Animals	Renting land	Ag-sources	Salary	Non-ag-wage	Business	Non Ag-sources	Re-mittances	Property, Rent, pension etc.	Benefit of govt-scheme	Other Sources	
Rural	26.1	31	-3.5	1	51.1	12.9	16.1	9.7	41.7	2.5	2.9	1.4	7.1
Urban	2	4	0.6	0.2	6.4	43.4	20.3	20.6	85.1	1.7	6.6	0.6	8.5
Total	17.4	21.3	-2	0.7	38.3	23.9	17.6	13.6	54.2	2.2	4.3	1.1	7.5

Table 1 (c): Proportion share of mean of different sources of income by area

Farm	Ag- wage	Ani- mals	Rent- ing land	Ag- sour- ces	Salary	Non- ag- wage	Busi- ness	Non Ag- sour- ces	Re- mit- tances	Prop- erty, Rent, pen- sion etc.	Benefit of govt- scheme	Other Sour- ces
Rural	30.4	14.3	3.9	0.9	49.5	20	11.7	12.3	44	2.4	3.6	0.5
Urban	1.4	1.4	0.5	0.4	3.7	53.1	10.1	24.6	87.8	1.2	6.8	0.3
Total	15.2	7.5	2.1	0.6	25.4	37.4	10.9	18.7	67	1.8	5.3	0.4
												6.5
												8.3
												7.5

Table 2: Cumulative proportion of mean of income share of household by sources

	=>75	=>50	=>25	=>1	<=0
Rural					
Salary	9	12.7	16.1	18.6	100
Ag-wage	18.1	25.2	34.2	43.8	100
Non-ag-wage	10.5	15.8	21.4	25.2	100
Business	6.3	9.2	12.7	16.2	100
Farm	14.3	21.2	31.1	46.3	100
Animals	1.9	3.8	9.1	31	100

Renting land	1	1.8	3.2	7.6	100
Remittances	1.3	2.1	3.4	5.3	100
Property, pension, rent etc.	1.3	2.2	3.7	7.6	100
Benefit of govt-scheme	0.4	0.6	1.2	14.2	100
Farm sources	41.3	50.9	62.6	78.2	100
Non farm sources	31.2	42.3	51.4	57.0	100
Other sources	3.5	5.6	9.0	26.7	100
Urban					
Salary	38.3	44.2	48.8	51.3	100
Ag-wage	3.1	3.8	4.7	6.1	100
Non-ag-wage	17.2	20.5	23.6	25.4	100
Business	17.5	20.8	24.3	26.9	100
Farm	0.9	1.2	1.9	3.4	100
Animals	0.3	0.6	1.2	4.3	100
Renting land	0.2	0.2	0.6	3.3	100
Remittances	1	1.4	2.1	3.7	100
Property, pension, rent etc.	3.9	5.2	8.5	16.6	100
Benefit of govt-scheme	0.2	0.3	0.6	7	100
Farm sources	4.5	5.6	7.6	13.7	100
Non farm sources	81.7	87.3	90.0	91.1	100
Other sources	5.0	6.7	10.7	24.1	100

Table 3: Proportion of poor household by applying the amount of income and consumption of household to poverty line

States	Consumption	Income
Jammu & Kashmir	3.7	24.2
Himachal Pradesh	3.3	22.9
Uttarakhand	26.2	37.6
Punjab	3.2	24.0
Haryana	9.3	28.5
Delhi	9.9	16.0
Uttar Pradesh	25.9	50.3

Bihar	15.9	52.4
Jharkhand	40.3	38.1
Rajasthan	24.0	38.6
Chhattisgarh	56.6	37.3
Madhya Pradesh	39.4	55.3
Northeast	8.9	17.1
Assam	16.3	32.7
West Bengal	16.0	30.1
Orissa	38.4	56.8
Gujarat	10.6	34.2
Maharashtra, Goa	20.2	32.7
Andhra Pradesh	5.6	26.4
Karnataka	13.9	37.3
Kerala	19.3	24.2
Tamil Nadu	18.1	34.1
Total	21.0	39.5

Table 3: Proportion of poor household by applying the amount of income and consumption of household to poverty line

	Consumption	Income
Salary	11.1	16.1
Ag-wage	30.0	58.7
Non-ag-wage	34.9	50.3
Business	15.2	28.6
Farm	18.3	48.8
Others	11.9	31.1
Total	21.0	39.5

Table 4: Proportion of poor by income at poverty line, 20 percent and 50 percent above of poverty line by area

	Rural			Urban			Total		
	Pov-erty line	20 per-cent above	50 per-cent above	Pov-erty line	20 per-cent above	50 per-cent above	Pov-erty line	20 per-cent above	50 per-cent above
Salary	19.6	25.0	35.7	13.6	19.1	26.7	16.1	21.6	30.5
Ag-wage	58.4	69.8	80.8	62.3	70.5	84.4	58.7	69.8	81.0
Non-ag-wage	50.7	61.7	73.4	49.3	62.1	74.9	50.3	61.8	73.8
Business	33.0	42.5	53.2	23.5	30.4	41.2	28.6	36.9	47.6
Farming	48.9	56.0	65.2	46.7	53.3	61.4	48.8	56.0	65.1
Others	33.7	40.8	49.5	25.3	30.0	37.7	31.1	37.4	45.8
Total	44.9	53.7	64.2	25.9	33.2	42.7	39.5	47.9	58.0

Table 5: Economic condition of household by type of livelihood

	0	Poorest	2nd	Middle	4th	Affluent
Salary	.1	5.4	8.3	15.4	25.8	45.0
Ag-wage	.6	39.7	31.5	18.8	8.5	1.0
Non-ag-wage	.3	20.0	30.0	26.5	18.4	4.8
Business	.0	9.9	15.3	21.0	27.1	26.6
Farming	7.5	24.2	17.4	18.4	18.0	14.4
Others	2.0	25.0	11.2	16.3	22.8	22.7
Total	1.9	19.8	19.5	19.6	19.8	19.4

**Table 6: Determinants of participation
in income generation activities**

	Salary	Ag-wage	Non ag- wage	Business	Farming	Else
Area of residence						
Rural	1.00	1.00	1.00	1.00	1.00	1.00
URBAN	1.76***	.18***	1.06	1.29***	.17***	.84***
Religion and caste						
ST	1.00	1.00	1.00	1.00	1.00	1.00
SC	.71***	.79***	.79***	.58***	.90	.57***
OBC	.67***	.46***	.50***	0.89	1.41*	.50***
Muslims	.66***	.24***	.58***	1.19*	.97	.65***
Upper caste	.64***	.31***	.35***	.78***	1.07	.80*
Minori- ties	.36***	.13***	.24***	.75**	.99	.63***
Highest educational achievement of Adult (21+)						
Illiterate	1.00	1.00	1.00	1.00	1.00	1.00
1 to 5th	1.27***	.85***	1.05	1.56***	.88	1.29***
6th to 9th	1.66***	.60***	.88***	1.76***	.69**	1.53***
Matricu- lation	2.21***	.35***	.70***	2.01***	.71***	1.63***
Interme- diate	3.04***	.28***	.51***	2.32***	.72**	1.31***
Graduate	4.80***	.17***	.33***	2.33***	.70**	1.26***
Number of Adult (14+) in Household						
1 to 2	1.00	1.00	1.00	1.00	1.00	1.00
3	1.01	1.11**	1.05	0.99	2.69***	1.13**
4	0.89	1.36***	1.20***	1.1	1.52***	.82***
=>5	0.99	1.74***	1.46***	1.22***	1.36***	0.95
Land size in Hectare						
No land	1.00	1.00	1.00	1.00	1.00	1.00

.1 to 0.5	.85**	.67***	0.92	.74***	135.09***	.84*
0.5 to 1	.70***	.51***	.57***	.64***	3.87***	.69***
1 to 2.5	.53***	.47***	.41***	.66***	2.74***	.73***
2.5 to 5	.34***	.31***	.31***	.44***	1.74	.82**
=>5	.25***	.15***	.24***	.40***	1.69	0.97
Income quintile						
1st (Poorest)	1.00	1.00	1.00	1.00	1.00	1.00
2nd	2.10***	1.36***	1.84***	1.45***	1.27**	1.81***
Middle	3.56***	0.96	2.01***	1.84***	1.61***	1.69***
4th	5.33***	.59***	1.71***	2.55***	1.57***	1.59***
5th (Affluent)	13.03***	.27***	.80***	3.06***	2.19***	1.22***
Region						
North	1.00	1.00	1.00	1.00	1.00	1.00
Central	.69***	2.43***	1.49***	2.08***	.93	.64***
East	1.03	3.90***	1.06	2.42***	.66***	.71***
North-east	1.07	.38***	.25***	1.1	1.55**	.71***
West	0.86*	7.69***	.49***	1.49***	2.19***	1.18*
South	0.89*	5.79***	.65***	1.36***	4.45***	1.26***

*1% level of significance ($p < 0.01$)

** 5 % level of significance ($p < 0.05$)

*** 10 % level of significance ($p < 0.1$)

Table 7: Determinants of earning from income generation activities

	Income	Ag-wage	Non-ag-wage	Salary	Business	Farming	Else
Area of residence							
Rural	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Urban	0.45***	-4.47***	-1.14	3.40***	1.08***	-2.78***	-0.29***
Religion and caste							
ST	1.00	1.00	1.00	1.00	1.00	1.00	1.00

SC	0.02	-0.90***	.31**	-0.61***	-0.62***	-0.25***	0.13
OBC	0.02	-2.28***	-.84***	-0.83***	0.69***	0.35***	-0.19
Muslims	0.11***	-3.73***	.15	-1.46***	1.56***	0.00	-0.59***
Upper caste	0.19***	-2.94***	-1.85***	-0.55***	0.76***	-0.02	0.25*
Minorities	0.29***	-3.30***	-1.48***	-1.57***	0.54**	0.36***	-0.14
Highest educational achievement of Adult (21+)							
Illiterate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1 to 5th	0.11***	-.96***	.06	0.58***	0.86***	0.00***	-0.51***
6th to 9th	0.32***	-2.38***	-.33***	1.63***	1.34***	-0.16**	-0.45***
Matriculation	0.52***	-3.67***	-1.63***	3.35***	1.89***	-0.21***	0.18
Intermediate	0.66***	-4.00***	-2.76***	4.59***	2.35***	-0.32***	0.82***
Graduate	1.05***	-4.20***	-3.99***	7.08***	2.01***	-0.53***	1.80***
Number of Adult (14+) in Household							
1 to 2	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	0.23***	.34***	.35***	0.50***	0.34***	0.53***	0.92***
4	0.33***	.65***	.69***	0.58***	0.73***	0.71***	0.70***
=>5	0.52***	.94***	1.34***	0.94***	1.39***	1.18***	0.72***
Land size in Hectare							
No land	1.00	1.00	1.00	1.00	1.00	1.00	1.00
.1 to 0.5	-0.19***	-.44***	-.55***	-1.10***	-1.11***	11.17****	0.62***
0.5 to 1	-0.13***	-1.12***	-1.88***	-1.46***	-1.41***	11.95***	0.38***
1 to 2.5	0.01	-1.45***	-2.57***	-1.90***	-1.25***	12.52***	0.11
2.5 to 5	0.27***	-2.72***	-3.02***	-2.49***	-1.94***	13.10***	-0.11
=>5	0.68***	-4.13***	-3.34***	-2.75***	-2.09***	13.84***	-0.07
Region							
North	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Central	0.36***	-3.24***	-.15	1.78***	0.12	1.52***	0.56***
East	-0.04***	-2.14***	1.28***	-0.08	1.47***	1.34***	0.62***

North-east	-0.03***	-1.26***	.32***	0.54***	1.69***	1.45***	0.53***
West	0.35***	-5.14***	-1.22***	2.13***	0.99***	1.02***	0.07
South	0.05***	-.14	-1.17***	0.89***	0.87***	0.53***	-0.92***

*1% level of significance ($p < 0.01$)

** 5 % level of significance ($p < 0.05$)

*** 10 % level of significance ($p < 0.1$)

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Inequalities in Health and Medical Pluralism in India: Role of Traditional, Complementary and Alternative Medicine (TCAM) and the Social Network of its Practitioners.

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Abstract:

Glaring inequities in health care delivery in India is alike contrasting scenario among South Asian countries. External resource oriented, foreign technology based and vertically designed healthcare programs have been a major stumbling block for not achieving desired health outcomes in many developing countries. The WHO identifies the main constraints as being low literacy and income levels, socio-cultural beliefs and practices, and suboptimal utilization of health facilities. In India, among classified health care professionals, there has been an emerging dialogue on how best to extend health care coverage and reach underserved and marginalized communities. Within this dialogue, the Traditional Complementary Alternative Medicine (TCAM) system has become increasingly recognized as an alternative and viable approach for addressing population health and health equity concerns. One of the dimensions that need to be studied is therefore the role and network of practitioners as a key stake holder/ key agent in influencing people's choice for adopting health practices, which are preventive in nature at the micro level. The nature and approach of TCAM rests on holistic healing and maintaining the functional balance of the human body with its environment. It is

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in this context that there has been a national and international resurgence of interest in TCAM. The rich and mature medical heritage of India and its TCAM practitioners puts this country in a position to provide leadership to the emerging complementary health movement, and how it might be leveraged to achieve public health goals. However there has been a general neglect of using TCAM for addressing wider public health dimensions. More needs to be known and understood about the TCAM system, especially in rural areas where there is limited access to conventional health care provided under various national health programmes and missions. Therefore the paper attempts to highlight that before being able to possibly leverage the TCAM system for public health goals, we need to study about the structure of the TCAM system (e.g., information sharing among practitioners, professional associations, social groups etc.) and how this structure interfaces with community systems, including patients.

Introduction

The World Health Organization (WHO) defined Health inequality and inequity as two distinct attributes. Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes. It is important to distinguish between inequality in health and inequity. Inequalities exist in many areas and can be measured using various indicators. Often, inequalities are quantified by comparing the national average value of an indicator across countries. Such national figures, however, do not account for inequalities that exist within countries, that is, between the different subgroups that comprise the national population. In addition to cross-country inequality, it is important to also consider within-country inequality, which captures the different experiences of men and women, boys and girls, rural and urban residents, the rich and the poor, the young and the old, the educated and the non-educated, etc in terms of health knowledge.

The 1978 Alma Ata declaration called for traditional medicine treatments and practices to be “preserved, promoted and communicated widely and appropriately based on the circumstances in each country.” Thirty years later, the 2008 Beijing Declaration on Traditional Medicine called for the integration of providers into national health systems, recommending systems of qualification, accreditation, regulation and communication (with allopathic providers)(WHO,2011). These features of the Beijing Declaration were echoed at the 62nd World Health Assembly in 2009, putting out a call to action to United Nations member states to move forward with their plans for integration (WHA,2009).The global positioning of Traditional, Complementary and Alternative Medicine (TCAM) has issued from and tends to imply a central focus on clinical and experimental medicine (Bodekar et al. 2002) yet recent calls for health systems integration draw attention to features such as education, accreditation, regulation and health services provision, and the TCAM health workforce itself.

In India, one can also find a larger integrative framework, one that mandates the ‘mainstreaming’ of codified TCAM in India, collectively referred to as AYUSH, an acronym for Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa-Rigpa and Homoeopathy. The National Rural Health Mission (NRHM), launched in 2005 to fortify public health in rural India, took particular interest in integrating AYUSH practitioners through facilitation of specialised AYUSH practice, integration of AYUSH practitioners in national health programmes, incorporation of AYUSH modalities in primary healthcare, strengthening the governance of AYUSH practice, support for AYUSH education, establishment of laboratories and research facilities for AYUSH, and providing infrastructural support (DOHFW-AYUSH,2011).

On a larger scale, current practices of integration (as in NRHM) have been described as substitution and replacement; which tend to ignore the merits of TCAM and present more barriers than facilitators of integration(Khan,2006). In particular,

given the strong push towards co-location and other strategies of integration as part of India's move towards Universal Health Coverage, the integration of AYUSH practitioners could result in a doubling of the health workforce. Yet there are strong fears that such an emphasis on quantitative aspects of integration, that is, having the right number of practitioners placed at facilities, is inadequate. There is a need to critically and qualitatively appraise the government infrastructure to support TCA, identify barriers and facilitators to integration that have emerged from this rapid placement of these practitioners, and how these TCA practitioners, allopathic practitioners and health system actors are reacting and adapting to each factor (Nambiar et al.2014).

Concept and background

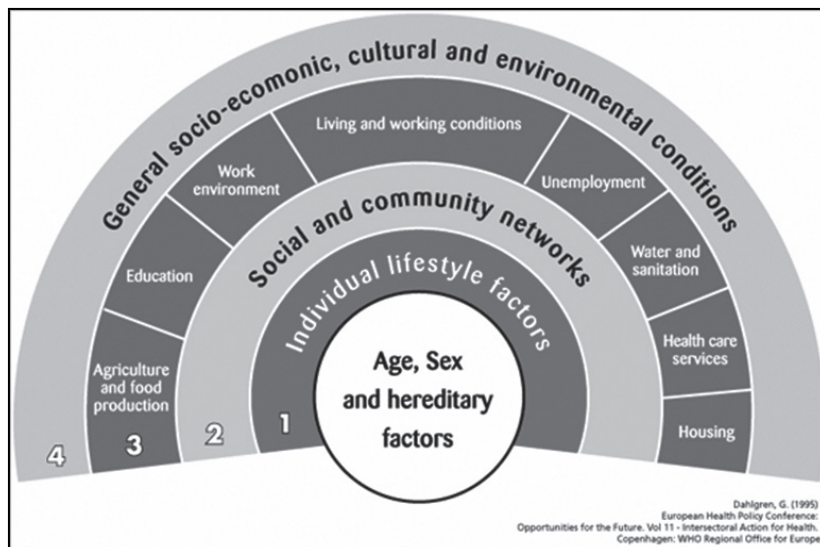
According to the World Health Organization, one third of the global population has no regular access to essential modern medicines, and in parts of Africa, Asia and Latin America, about half of the population faces shortage of minimum healthcare. Studies on public health in the developing world repeatedly point to inadequacies in health care financing by the states, which has led to a situation of highly limited material and human resources for healthcare services. Patwardhan (2005) cites the density of physicians of modern medicine per 100,000 persons in various countries as on year 2004 as: Rwanda 1.9, Ethiopia 2.9, Uganda 4.7, Benin 5.8, India 51.3 and China 164.2. This is in contrast to countries such as Australia and the USA where the figures are 249.1 and 548.9 respectively. This reveals the glaring inequities in health care delivery in developing countries. External resource oriented, foreign technology based and vertically designed healthcare programs have been a major stumbling block for not achieving desired health outcomes in many developing countries. WHO identifies that the main constraints are low literacy and income levels, socio-cultural beliefs and practices, and suboptimal utilization of health facilities.

HeavyburdenofcommunicablediseasesuchasHIV,malariaand

other parasitic diseases, pneumonia, diarrhea, tuberculosis, coupled with chronic diseases such as diabetes, ischemic heart diseases etc., (a situation often referred as double burden), persistently torment lives in these countries. High maternal and child mortality, rapid demographic changes and urbanization, under utilization of public healthcare, ineffective health support systems for poor population, increasing privatization of health facilities, migration of medical professionals, environmental changes and related epidemics are some other major public health concerns in such economies. High out of pocket spending on health in countries like India, which is around 78%, and lack of appropriate health insurance or social security are other concerns. Added to this, in the wake of globalization and WTO regime, there is a perceived challenge of increased inaccessibility and unavailability of healthcare to the economically disadvantaged people of such societies (Nambiar et al. 2007). To quote Nambiar et al. further, “a major challenge for health care planners is integrating health promotion and disease prevention on the one hand, and treatment of acute illness and chronic care on the other. This has to be done at all levels of the health system with the aim of delivering quality services equitably and efficiently to the whole population.”

While the United Nations Millennium Development Goals (MDGs), WHO strategies and United Nations Human Rights office (UNHCHR) call for immediate actions to address access to health care, it vastly continues to remain a challenge at global and national levels. This is because access involves physical, social, political and economic dimensions. The distribution of health is determined by a wide variety of individual, community, and national factors (See Figure 1). There is a growing body of evidence documenting inequalities in both the distribution of health (i.e. health outcomes) and access to health care globally. Access to health care is a supply side issue indicating the level of service which the health care system offers the individual.

Figure 1: Determinants of health



Researchers have documented inequalities in the distribution of health by social class, gender, and ethnicity. Inequalities in health have been measured using many different outcomes including infant deaths, mortality rates, morbidity, disability, and life expectancy.

In many regions of the world where modern healthcare is not readily available or affordable, public continue to rely on indigenous medicines which are based on locally available natural resources and cultural knowledge. In a public health context, availability, accessibility, affordability, utility, quality, efficiency and equity have relevance in respective order in promotion of indigenous medicine (Payyappallimana, 2010). While much of the attention in TCAM sector has been given to address clinical, regulatory and supply oriented issues, there is a general neglect of wider public health dimensions (Bodeker and Kronenberg, 2002). Quantitative research to ascertain levels of existing access (both financial and geographic) and qualitative research to clarify constraints to extending such access are important (WHO 2002).

The focus should be for those diseases, which represent greatest burden for poor populations.

According to Kleinman (2002) health-seeking arenas can be classified into three: home level, informal and professional sector. Of this, home level covers 75% and in every 1,000 illness episodes 750 never get outside of family sector and are managed through household means. The remaining 25% is divided among the professional sector such as hospitals, clinics of biomedicine or western medicine, Chinese medicine, Ayurvedic medicine etc., and the non-professionalized, folk sector such as local healers, lay therapists with no institutional support. Literature reviews on the global attention to universal health care across rural and urban geographies signify scope for potential interventions of TCAM health care systems.

Medical Pluralism, Inequalities in Health and Health System

Inequalities in health continue to be a major problem in the world. Health differences exist between sexes, between social groups within countries, between countries. The patterns of health differences change as living conditions evolve as demonstrated by the health seeking behaviour of the people in rural areas towards existing medical pluralism in India.

Rural people in India in general, and tribal populations in particular, have their own beliefs and practices regarding health. Some tribal groups still believe that a disease is always caused by hostile spirits or by the breach of some taboo. They therefore seek remedies through magico-religious practices. On the other hand, some rural people have continued to follow rich, undocumented, traditional medicine systems, in addition to the recognized cultural systems of medicine such as Ayurveda, Unani, Siddha and Naturopathy, to maintain positive health and to prevent disease.

Much has been achieved in the last 69 years. The first landmark in official health policy of independent India was the acceptance of the Bhore Committee recommendations of 1946, which laid

the foundations of comprehensive rural health services through the concept of primary health care. India, like several other countries of the South, has a medical setup which is dominated by the Western allopathic system of medicine with its heavy dependence on high-tech equipment and serviced by a drug market controlled largely by multinational drug corporations. This system was imported during colonial rule and initially, its practice was kept aside exclusively for the ruling class. Today that bias remains, as most allopathic doctors prefer to remain in the urban centres. The allopathic system with its emphasis on the curative approach and its dependence on capital-intensive technology and invasive techniques, including expensive drugs, fails to meet the basic health needs of the Indian population, thereby increasing out of pocket expenditure for both the urban and rural poor.

The impact of colonialism and the health system introduced by the British forced us to look down on indigenous systems of medicine. The progress and advancement made in the field of allopathic medicine is commendable and we cannot undermine the system but very little was actually done to either support or promote indigenous medical systems while India was under foreign rule. On the contrary, efforts were made to deride them and drive them out of existence. This policy changed somewhat after the Indian independence movement gained strength in the 1930's. Largely as a result of the Swadeshi agitation, the National Planning Committee (NPC) set up by the Indian National Congress in 1938 took a decision to absorb practitioners of Ayurveda and Unani systems into the formal health set-up of independent India. In 1946, the Health Ministers' Conference adopted the NPC proposals and resolved to make appropriate financial allocations for (a) research, based on the application of scientific methods, in Ayurveda (b) the establishment of colleges and schools for training in diploma and Unani; degree courses in indigenous systems; (c) the establishment of postgraduate courses in Indian medicine for graduates in western medicine (d) the absorption of Vaid and hakims as doctors, health workers etc, (e) the inclusion of departments and practitioners of

Indian medicine on official boards and council.

As a result of the Conference resolutions, the government set up the Chopra Committee on the Indigenous Systems of Medicine (ISM) to work out guidelines for the implementation of the above proposals. The Chopra Committee eventually came out in support of a synthesis of the Indian and Western systems through integrated teaching and research. The Chopra Committee was followed by the Dave Committee, which went into the issue of establishing standards in respect of education and regulation of practice in ISM. The Committee recommended an integrated course of teaching and some states in the Indian Union in fact started integrated colleges, which taught both modern medicine and ayurveda. In other states, however, pure ayurveda colleges were also established. Eventually, the support for integrated colleges declined while pressure for pure ayurvedic colleges increased. Eventually, the supporters of a pure system of education and training for ayurveda gained political support in the country's political circles. This led to the formation of several independent Councils for looking after the research, development, training and regulatory aspects relating to ISM.

The global scenario also geared favourably for indigenous medicine when WHO and UNICEF passed the resolution in 1977 supporting the utilization of indigenous practitioners in government sponsored health care system. During 1980s and 1990s economic and political changes were experienced globally. End of the cold war towards late 1980s and adoption of economic reforms by most countries during early 1990s, paved way for many changes in health sector. The government of India launched National Health Policy in 1983, which was adopted to give effect to the commitment of Health for All (HFA) as a signatory to the Alma Ata Conference held in 1970. The establishment of indigenous medicine program as part of attaining primary health care at the WHO in 1978 is an important milestone in the resurgence of interest in indigenous medicine. Consequently the governments created a legal framework for standardizing and regulating diverse

traditional medical practices within their borders (Guite, 2014).

Challenges and Prospects of TCAM in addressing Health Inequality

TCAM generally refers to health care practices not offered within hospital facilities (or by clinical practitioners). Traditional medicine (TM) refers to local indigenous practice and belief systems that are used largely in developing countries for health-related purposes (Bodekar et al.2002). Complementary and alternative medicine (CAM) is generally used to refer to a range of non-indigenous, unorthodox practices including homeopathy, naturopathy, herbalism, etc. (Broom et al.,2008). TM has often been the dominant means of treatment for health problems for centuries, and in some cases, it continues to dominate health care beliefs and practices. India's indigenous systems of medicine, such as Ayurveda, Siddha, and Unani, are more than 5,000 years old, and in rural areas, the Indian population has relied heavily on these practices, particularly Ayurveda.

In the recent decades though there have been certain international and national policies for preserving and promoting traditional medicine, the progress of their implementation has been rather slow. Additionally these policies fall short of adequately addressing a number of concerns related to indigenous medicine or TCAM such as safety, efficacy, quality, rational use, availability, preservation and development of such health care, sustainable use of natural resources and assuring equity in transactions at various levels and so on (WHO 2002, Bodeker et al. 2007). Lack of sound scientific evidence relating to safety and efficacy, problems in ensuring quality and rational use, inadequate understanding of socio-cultural context of their practice and usage, protection of intellectual property rights of knowledge holders, assuring sustainable natural resource use, regulation and capacity building of non-formal practitioners, developing appropriate methodologies for evaluation, resolving conflicts with mainstream medicine are some of the key challenges in the sector.

Another challenge is in the area of research in the various aspects of indigenous medicine. Epidemiological and public health mapping exercises are neglected aspects in the field of indigenous medicine. They are important to study population-based effects of indigenous medicine use as well as creating data on the presence and quality of service by Traditional health providers, especially in areas where there is limited access to conventional health care (Bodeker and Burford 2007: 434). There are also insufficient contributions from social sciences to indigenous medicine and most studies consider cultural knowledge as a stumbling block for health sector development.

Other factors concern for indigenous medicine is the protection of natural resources and their sustainable use. Indigenous medicine is highly dependent on biodiversity and there is increasing demand for plants, animal and mineral resources. This has led to a situation of endangering many important medicinal plants. There is still no country wise estimation of medicinal plant diversity, data on cultivated and wild sources and trade data in terms of domestic and exports demand. There is also insufficient data on agro-technology of medicinal plants. Variation in active ingredients in plants collected from different agro-climatic locations is also a major problem. Though many countries have initiated efforts of both in-situ and ex-situ conservation of medicinal flora and fauna, efforts in this area remain abysmally low and confounded by non-transparency. It is estimated that in countries like India, 95% of medicinal resources are harvested from the wild through unsustainable collection methods. Around 300 medicinal plants in the country have been categorized under different levels of threat status (FRLHT 2002). WHO has prepared guidelines on good agricultural practices but the implementation of this has also been low.

It is therefore, necessary to understand these challenges in light of the historical background of post-colonial developments of these knowledge systems. One of the major influences has been the positivist school of both modern natural and social sciences,

which continued to marginalize contributions of indigenous knowledge till recent times. In the promotion of TCAM in the contemporary context it is essential to have an alternative approach in public health system. As mentioned earlier traditional medical knowledge in various countries have evolved within socio-cultural and historical context and their epistemic framework, principles, concepts and practice are quite different from those of modern science (WHO 2002: 7, Shankar et al. 2007).

While there is a contemporary value in applying modern science and technology tools for creating objective and verifiable standards for traditional knowledge products and concepts, currently the approach to creating standards is one-sided. We need to adopt social science approach in studying the role of practitioners, their social network and social relation in addressing health inequalities. Medicine and public health have a rich tradition of efforts to change norms and hence move individuals and communities toward better health. However, a key task of interventions seeking to do this is to identify the valid community or “reference group” for each individual in the population of interest. This paper identify the practitioners of TCAM as a reference group from which individuals take their guidance and place a value with whom the practitioners share their social connections.

In terms of prospects in regard to accessibility and cost effectiveness, TCAM and its practitioners needs to be promoted where the health system is weak and people have to spend majorly from their out of pocket. Over 50% of deaths in developing countries are due to five infectious diseases. Common communicable diseases are widely prevalent in areas where access to modern drugs is limited (WHO 2002: 24). In the developing countries TCAM continues to be comparatively inexpensive though it is feared that a technology intensive production process would make TCAM unaffordable. For the health sector to improve, measures such as improving physical and economic access, preventive strategies, wellness management, promotion of best and essential practices

in both communicable and chronic diseases, increased cooperation between various medical systems, sustainable natural resource use, protection of intellectual property rights, and equitable transactions are vital.

It is unfortunate that while the incidence of all diseases are twice higher in rural than in urban areas, the rural people are denied access to proper health care, as the systems and structures were built up mainly to serve the better off. While the urban middle class in India has ready access to health services that compare with the best in the world, even minimum health facilities are not available to rural and tribal people, and wherever services are provided, they are inferior. While the health care of the urban population is provided by a variety of hospitals and dispensaries run by corporate, private, voluntary and public sector organizations, rural healthcare services, mainly immunization and family planning, are organized by ill-equipped rural hospitals, primary health centres and sub-centres.

Scope of learning and evidence using Social Network Analysis of TCAM Practitioners

Diffusion of innovations theory provides a framework for explaining how new ideas and practices spread within a social system (Rogers,2003). Social network analysis (SNA) offers a means of mapping and exposing the hidden channels of communication and information flow, collaboration and disconnects between people in strategically important groups within an organization (Wasserman et al.1994; Cross et al.2004; Hanneman et al.2005; O'Malley et al.2008). Rather than focusing solely on the strength of individual relationships, it explores the types of relationships that condition communication and learning. Social network analysis has been widely used across a range of disciplines but is most commonly applied to help improve the effectiveness and efficiency of decision-making processes in commercial organizations. It does have some tradition of use in diffusion research (Coleman et al.1957),(Valente,1996).

Social scientists have established that those of their network peers in many social domains influence individuals' choices. It is observed that the ubiquity of network effects and tendencies toward cumulative advantage are related. Inequality is exacerbated when effects of individual differences are multiplied by social networks: when persons must decide whether to adopt beneficial practices; when network externalities, social learning, or normative pressures influence adoption decisions; and when networks are homophilous with respect to individual characteristics that predict such decisions. We review evidence from literatures on network effects on technology, labor markets, education, demography, and health; identify several mechanisms through which networks may generate higher levels of inequality than one would expect based on differences in initial endowments alone; consider cases in which network effects may ameliorate inequality; and describe research priorities.

Network social capital refers to the actual or potential resources to which individuals and potentially groups have access through their social networks. Network social capital is an emergent property of interpersonal relations and network structures with its health benefits accruing to individuals. Most studies of network social capital and health have examined its association with average population health. Research has shown that people with more diverse and a broader range of network social capital, hereafter social capital, tend to have health-beneficial behaviour and better health status. For example, high network capital has been shown associated with physical inactivity, obesity, better self-reported health (SRH) and lower chances of depressive symptoms. Little is known about the factors contributing to social capital inequalities in health (Moore et al. 2013).

Map and assessing the structure of the TCAM practitioner and patients networks evolves as future path of research interest to understand in-depth network TCAM healthcare ecosystem of treatment care modalities, which makes a distinct choice for care

recipient. Consolidated literature review reflects a future study of reference that time and accessibility for individual choices for availing health care may address TCAM health care system as cost-effective and comprehensive approach to reduce health inequality. Further this is to establish an empirical model in regard to examine at time scarcity and a limited resource what are the factors that motivate patients to adhere to TCAM treatment care. Adopting those type of treatment among patients from mixed urban and rural habitation may define what is the gap exist in adhering to health & behaviour promotion of better lifestyle and promote preventive health seeking behavior. Future research studies would explore importance of alternate health care system as indigenous network for accessing affordable health care that suffice national and global agenda for reducing health inequality particularly in developing nations.

Conclusion

The reference point of TCAM in addressing health inequalities is the failure of the conventional system of medicine in promoting health equities. The TCAM practitioners thrive in the niche created by the limitations of conventional medicine. Assessing and understanding of the TCAM practitioners' social network will enable us to examine and reflect on the politics of medical and therapeutic pluralism in the global context. The narratives and accounts of TCAM practitioners through social network analysis are expected to illustrate the contradictions and co-optations of practitioners' vis-à-vis conventional that have given to pluralism. It will also highlight the challenges of co-habitation of plural therapies or different system of medicine in the pursuit of healing in an era of increasing commoditization of health care and a competitive medical care market.

To conclude, it is evident that any model of healthcare based on a single system of medicine will find it difficult to cope with the health care demands in near future. It is also obvious that traditional and cultural medical knowledge has a catalyzing effect

in meeting health sector development objectives and will continue to be so in both the worlds. But there exist major differences in the usage of TCAM as an alternative and complementary medicine in developed and developing world. While safety is the prime concern in developed countries, access and cost seem to be issues in developing countries. Challenges and issues also seem to be quite different in the eyes of various stakeholders such as regulators, consumers, practitioners and the industry.

There is scant data on utilization of indigenous medicine as an alternative and complementary medicine and a dearth of policy research as well as good integration models in the sector. It is essential not to exaggerate TCAM as an alternative and complementary medicine but seriously consider issues of safety, efficacy and quality, access and rational use through suitable policy measures and appropriately integrate them with the mainstream health system without compromising the diversity and unique aspects. A Social Network Analysis of the TCAM practitioner is one such scientific method that can be adopted as an effort in this direction.

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Nutritional Status of Under-Five Children and its Contextual factors in India: Evidences from IHDS Data

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“The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition” W.H.O. (1989)

Introduction:

One of the major goal of any nation is to have a high standard of public health by effective policy formulation, meaningful programs and foresighted planning. Apart from development of health infrastructure, strengthening of health plans, programs and resource allocation, individual level of nutritional standard also plays a very vital role in ascertaining a positive stride towards a firm and better scenario in terms of public health. Nutrition is not only an input but also a foundation of better health. It is one of the prime indicators of development. An individual who has satisfactory level of nutrition is implied to have a stronger immune systems, less illness and better health outcomes. The lack of nutrition effects all the sub groups present in a nation. Children are usually considered to be one of the most vulnerable population group. Child health has captured a lot of attention in public policy framing, health program launches and research. Lack of nutrition would severely affect the growth of the children and thereby hinder the pace of public health achievements. According to Noble Laureate AmartyaSen health achievements of a given society are a better

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signal of social wellbeing than any conventional macroeconomic measure. Health of an individual is the most important individual & social asset. No matter which strata of society one belongs to “health is wealth” for all. Good health is not only the need but also the right of the children as the citizen of a country. India’s higher economic growth has not translated into a better health outcome, particularly of nutritional status for the country’s children, as the country is the home to the largest number of underweight children globally. The prevalence of underweight children in India is among the highest in the world. Citing estimates by the World Health Organization (WHO, 2008), about 49 percent of the world’s underweight children, 34 percent of the world’s stunted children and 46 percent of the world’s wasted children live in India. The prevalence of malnutrition varies across states, demographic and socio-economic groups. Severe lack of nourishment always determine the mental and physical growth of the children. It is not only affected by food intake alone; it is also influenced by access to health services, quality of care for the child and their social status.

Since independence child health and welfare have been a parts and partial of central and state health policy. But these policies would not be fruitful without having proper knowledge about the varied dimensions of contextual factors as the determinant of child health outcomes. It is also well known that socio-economic and demographic characteristics are different for these states. Impact of contextual factors related to residential place, social group, mass education, hygiene and sanitation are also different. It is needed to compare the role of contextual factors as the determinant of nutritional status of children in a single framework. In this paper an attempt has been made to show the influence of contextual factors on child health and compare their impact on the same. In the present analysis, nutritional status of children is taken as a proxy of health outcomes. The nutritional status of children can be studied using clinical signs of malnutrition, biochemical indicators and anthropometrics surveys. However, the use of anthropometrics measurement has some advantages over other

approaches. This is because they are cheaper and relatively easier to obtain. Theoretically, the body of a child responds to malnutrition in two ways that can be measured by anthropometrics survey. First, a reduction in growth over the long-term results in low height-for-age or stunting. Second, a short-term response to inadequate food intakes is assessed by weight relative to height (wasting). The combination of short-term and long-term food shortage and growth disturbances produces low weight-for-age (underweight) (de Onis, 2000). The main objectives of the present study is to analyze the nutritional status of under-five children in rural and urban India and compare its variations with respect to different contextual factors such as caste, gender, education, place of residence etc.

Materials and methods:

Data

The data for this study have been taken from the India Human Development Survey. The India Human Development Survey 2005 (IHDS) is a nationally representative, multi-topic survey of 41,554 households in 1,503 villages and 971 urban neighborhoods across India. The smallest geographic unit of the study was state. The survey was conducted from November 1, 2004 to October 30, 2005. Methodology adopted in collecting data were record abstracts, coded on-site observation, cognitive assessment test, face-to-face interview, mixed mode and on-site questionnaire. The Response rates were calculated as 82 percent for the re-contact sample, 98 percent for the new sample and 92 percent for the total response Rate. The uniqueness of the survey is that it was designed to complement existing Indian surveys by bringing together a wide range of topics in a single survey. Most of the traditional socio, economic indicators are present and they have been supplemented with additional measures that provide a fuller understanding of actual human development.

Data Screening

For all the sampled 24314 children, Z scores have been calculated from the anthropometric data (for age, weight, height)

using the WHO Anthroplus software. According to WHO there is a range for each type of z scores i.e. weight-for-height (WHZ) z score, height-for-age (HAZ), weight-for-age (WAZ) z score. Ranges are given as: WAZ should lie in the limit (-6 to 5), HAZ should lie in the limit (-6 to 6), WHZ should lie in the limit (-5 to 5). There is a BAZ value indicates usual combination of WAZ and HAZ. Given the close association between BAZ and WHZ, range of BAZ is almost same as the WHZ. It is (-5 to 5). The z scores which do not lie within the limits are indicated as flag values. For example if the length or height of a child of age less than 24 months not less than 45 cm and not more than 120 cm. Otherwise height related z scores are shown as flag values. It is assumed that the height is reported wrongly. WHO suggests to exclude all these flagged z scores from the analysis. In the present analysis all the flagged z scores are excluded from the analysis. The reduced sample size is 14380.

Distribution of samples according to some background characteristics like place of residence, sex, literacy, economic status, age and caste has been tested for before and after exclusion of samples. It is found that there is marginal change in sample distributions according to background characteristics. Table 1 shows the percentage distribution of samples before and after exclusion. So it can be concluded that sample distribution according to these background characteristics changed only marginally.

Methodology

According to world Health Organization (Multi Centre Growth Reference study) weight-for-height, height-for-age and weight-for-age are taken here as the indices of nutritional status of children. Weight-for-height represents wasting or thinness due to starvation or other causes, height-for-age represents stunting, reflects chronic under nutrition and weight-for-age represents underweight or the body mass. The last one is regarded as a composite index of other two. So underweight is the resultant of both stunting and wasting.

Z of anthropometric measures is calculated by the formula-

(Nguyen, Popkin: 2004)

$$Z_{ij} = [(X_{ij} - M_j) / (S_j)]$$

i refers to individual children, $j=1,2,3$. (Z_{i1} height for age z score for i th individual, Z_{i2} weight for height z score for i th individual, Z_{i3} weight for age z score for i th individual.)

Where X_{ij} is the observed value for an individual (age, weight, height), M is the value of the mean for the reference group population and S is the standard deviation for the healthy population. Z score is also sex independent. So Z score can be defined as the ratio of difference between observed and mean value to standard deviation of the same measurement. Deviations of Z -scores less than -2 (standard deviation) from the international reference population were used to classify children as moderately low weight-for-age, low height-for-age and low weight-for-height, Deviation of Z -scores less than -3 (standard deviation) put children in the severe under nutrition category. The preliminary analysis of identifying the quantum of under nutrition among children not more than five years was based on this categorization and this procedure was followed universally across regions and countries. In addition z scores are also sensitive to the socio economic correlates. So; in a nutshell z scores capture the nutritional status. Scatter plot and distribution of these z scores are shown in figure 1.

In order to understand the effect of contextual factors on child nutrition these are integrated in regression based model with Z score as the dependent nutritional status of children. Contextual variables are incorporated in the model. Contextual variables like education of the female member in the family, duration of breast feeding, toilet facilities, access to drinking water, immunization status of the children are linked to other variables.

Next simple regression model (table 4) is used to analyze the socioeconomic and individual level variables. model1, model 2, model 3, model 4 show the regression models. In the first individual levels variables is used. The variables are sex of the individual.

Another variable is whether the child is suffering from diarrhea.

In the next model contextual variables have been considered. The variables are level of education of eldest female member in the family and caste. General caste is considered as reference category. Economic related variable is position in wealth quartile (lowest in the reference category), the influence of these variables like sanitation, drinking water, morbidity, economic status can be understood.

Results and Discussion:

It comes out from the present analysis that malnutrition is a common problem for all the Indian states whatever be the level of inequality. The percentage of stunted population is higher for the north Indian states. It is highest in (table2) Uttar Pradesh (18.35) followed by Madhya Pradesh (9.75), Rajasthan (8.2) and Bihar (7.08), Maharashtra (6.66). Among the south Indian states percent of stunted as well as wasted population are highest in Karnataka. Proportion of stunted (7.73), wasted (8.13) and underweight (8.01) population are high in Karnataka. Kerala shows a better result for all the cases. Proportion of stunted (1.80), wasted (2.16) and underweight (1.65) population are low in Kerala. Comparatively percentages of stunted, wasted and underweight population lower in Tamil Nadu than Andhra Pradesh. With the modern infrastructure and other facilities Delhi shows better result among the Indian states. Percent of stunted (1.33), wasted (.99) and underweight (1.17) population are quite low in Delhi. Children in J&K are in better position considering their nutritional status (stunted (.98), wasted (.42) and underweight (.78)).

Table-2 shows the percentage distribution of stunted, wasted and underweight population according to some background characteristics. Children whose z scores are below -3 are considered as severely malnourished, whose z scores lie in the range (-2 to -3) considered as moderately malnourished. The table has been arranged in a way that each cell shows percentage of children in that category out of the total children for all categories for the

characteristics. As an example general category contains 14.71 % of total severely malnourished children. In a word it shows the distribution of children in respective categories. It is observed that age wise distribution of malnourished children is quite uniform. The proportions of stunted and underweight children are relatively high for the children in the age group (24-35) months. From the caste wise distribution it is seen that proportion of stunted, wasted and underweight children is high in the OBC people. On the contrary it is found that proportions of stunted (10.30, 8.52), wasted (9.88, 12.01) and underweight (11.18, 10.62) children are lowest among ST population. Children in the highest income quartile are in a better position than children in the other group. It is clear from the (table3) that as the economic status improves, nutritional status also improves. Male children are in better position than female children but the difference is not very high. The scenario changes when urban rural population is taken into consideration. Children in the rural area are severe affected by malnutrition. The difference is quite higher between these two groups of population. Difference is almost 50% for all the cases except moderately wasted population (nearly 40%).Rural population having nearly 75% of stunted, wasted and underweight population shows the infrastructural development in urban area.

In Table 3, model 1, two individual level variables have been considered. Analysis shows that male children are more likely to have better nutrition than female children in terms of the weight for age value. Children, who had suffered from diarrhea, are disadvantage and the WAZ value decreases suggesting lower nutritional status due to morbidities. Model 2 shows the effect of contextual variables. The more the level of education of the eldest female member in the family, WAZ increases. Simply it means that as she is more educated she applies her knowledge for the well-being of the family and her suggestions and experience are more valuable. Place of residence is a significant determinants of nutritional status. Children who live in the urban areas enjoy modern facilities of life. So the nutritional status for the urban

children is higher compared to children in rural area. Safe drinking water increases the nutritional status with safe drinking water; some diseases that distorted growth and development of children can be controlled. Children from homes who have access to personal toilets facilities belong to higher nutritional status. It is expected so, children who belong to the cast group other than general caste are suffering from malnutrition. Children in the Scheduled tribe group are the worst sufferer. It is because of environment level of education of parent's etc matters. In model 3 lowest quintile group is taken as reference category. The analysis suggests that position of the family is a significant determinant of the level of nutrition. As the family moves to higher quintile group, nutritional status of the children becomes better. As children, whose family are in a better economic position are well nourished with high quality of food, medicine and other facilities. In the fourth model an attempt has been made to capture some individual and contextual related variable in a same model. Nutritional status positively related with place of residence, family income, and educational status of the female member. All these variables are significant. In the urban area the income level is high; all the modern facilities are available and standard of living is also high. Educational status of the elder female members of family deals with consciousness. In the families with educated or well educated mothers or other female members lead to a higher nutritional status for the children. Accordingly prolonged breastfeeding, morbidities like diarrhea leave negative impact on nutritional status. If duration of breastfeeding is long children are deprived from having solid food. This is a hindrance to their growth as the child is not having sufficient food intake. As a proxy of morbidities diarrhea is taken and it has a negative impact on child health. As health is related to hygiene, access to toilet facilities influences the child health and nutritional status. A child who is brought up in safe and hygienic environment is healthier. States which are socially developed the family structure is also well developed. For example Kerala is socially developed more than Karnataka and status of women also high in Kerala

than Karnataka. As the analysis suggests that female education has a positive impact on child health, it explains the higher rate malnutrition in Karnataka than in Kerala though both are southern states. Another southern state Tamil Nadu which has the highest proportion of urban population shows comparatively lower rate of malnutrition. Also they performed well in other socio-economic sectors. Northern states like Uttar Pradesh, Bihar and Rajasthan suffer most from this problem. Prolonged breast feeding, insufficient calories Intec, illiteracy among the people, especially among the women are responsible for severe malnutrition.

Conclusion

In the paper an attempt has been made to examine the role of contextual factors as the determinant of Child health. For these purpose major Indian states has been taken into consideration based on a representative sample of 14,380 children aged less than 5 years. Nutritional status of the children is taken as the representative of health status. Anthropometric measures have been used to assess the nutritional status in terms of height-for-age, weight-for-height and weight-for -age. It is found that northern states like Utter Pradesh, Madhya Pradesh, Rajasthan, and Bihar suffer most from this problem. When contextual variables like literacy of female of member in the family, number of children and place of residence, access to drinking water and toilet facility, position of social groups are taken into consideration, these states are also treated as backward states. Nutritional status of children from Delhi, Punjab and Haryana is quite well. So it can be concluded that and contextual factor are significant determinant. States where contextual factors are not developed are worst sufferer (U.P., Maharashtra). States where contextual factors are quite developed are in better position (West Bengal, Tamil Nadu). States where contextual factors are developed are good performer (Delhi, Punjab and Haryana). States with the most well developed contextual factors are the best performer. So developing contextual factors are the most necessary factors for having a better nutritional status and better child health. Developing contextual factors in state and

district level lead to improvement of basic health care facilities So finally it can be concluded that improvement in contextual factors is a necessary condition to provide basic facilities to childrens.

Limitation

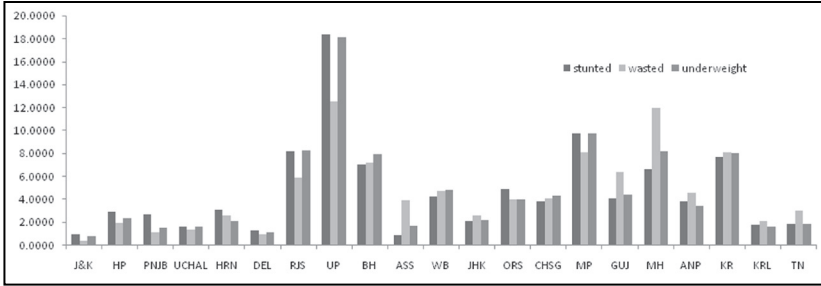
Earlier it is mentioned that nearly 10,000(40%) sample is dropped from the analysis. So the sample size reduces at a large scale. Also proper and adequate data is not available for small states. So they are also excluded from the analysis. The study is based only on the nutritional indicators of health. Due to short period of time the study has to be confined to cross sectional analysis. No time series analysis has been done.

Table:1 Percentage distribution of stunted, wasted and underweight population for major Indian states.

States	Stunt-ed	Wast-ed	Under-weight	Number Of			Sam-ple Size
				Stunt-ed	Wast-ed	Under-weight	
Jammu &Kashmir	0.98	0.42	0.78	66	9	36	153
Himachal Pradesh	2.95	1.97	2.36	200	42	109	489
Punjab	2.73	1.18	1.58	185	25	73	450
Uttarakhand	1.64	1.36	1.65	111	29	76	215
Hariyana	3.09	2.63	2.12	209	56	98	389
Delhi	1.33	0.99	1.17	90	21	54	154
Rajasthan	8.20	5.88	8.27	555	125	382	1064
Uttar Pradesh	18.35	12.51	18.10	1242	266	836	2282
Bihar	7.08	7.19	7.92	479	153	366	956
Assam	0.93	3.95	1.73	63	84	80	162
West Bengal	4.28	4.75	4.87	290	101	225	733
Jharkhand	2.11	2.59	2.23	143	55	103	343
Odisha	4.90	4.00	4.05	332	85	187	787
Chhatisgarh	3.89	4.09	4.35	263	87	201	556
Madhya Pradesh	9.75	8.09	9.74	660	172	450	1216
Gujarat	4.14	6.39	4.46	280	136	206	623

Maharashtra	6.66	11.94	8.21	451	254	379	1241
Andhrapradesh	3.83	4.61	3.44	259	98	159	568
Karnataka	7.73	8.13	8.01	523	173	370	992
Kerala	1.80	2.16	1.65	122	46	76	316
Tamilnadu	1.91	3.06	1.86	129	65	86	403

Figure 2: Percentage distribution of stunted, wasted and underweight population for major Indian states.



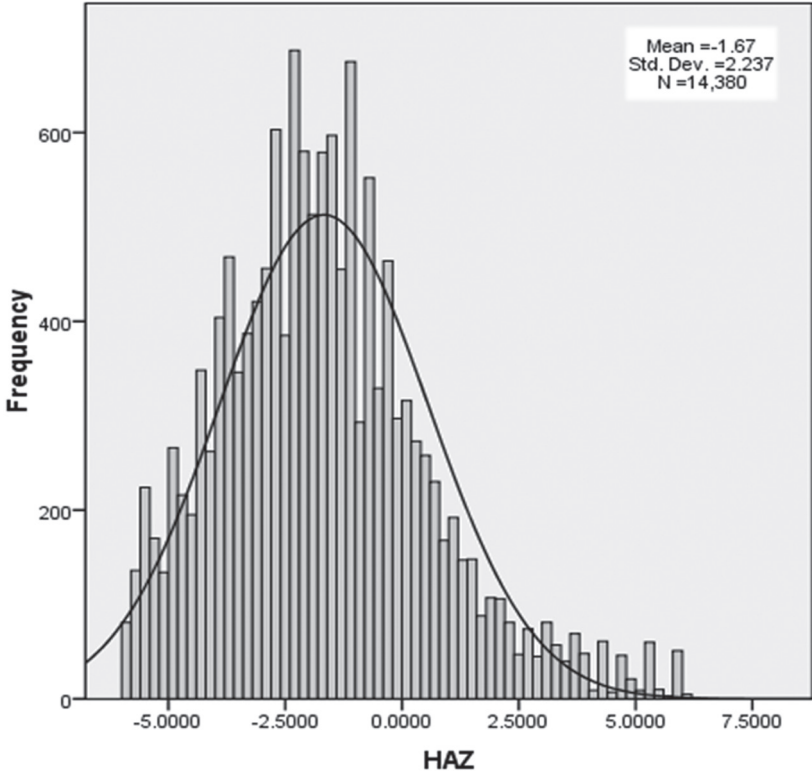
Age In Months	Stunted		Wasted		Underweight	
	Below (-3Sd)	Between (-3,-2 Sd)	Below (-3Sd)	Between (-3,-2 Sd)	Below (-3Sd)	Between (-3,-2 Sd)
0-11	16.09	10.77	21.33	17.78	14.20	11.07
12-23	23.98	20.99	22.65	19.89	23.57	19.41
24-25	22.67	24.05	20.48	19.81	22.29	23.92
36-47	18.24	23.20	18.19	21.37	18.57	23.58
48-59	19.02	20.99	17.35	21.14	21.36	22.03
	100	100	100	100	100	100
Caste						
General	14.71	17.48	15.66	16.15	14.26	15.17
OBC	33.32	34.64	36.75	33.07	33.00	34.85

Table-3: Percentage distribution of stunted, wasted and underweight by selected background characteristic.

Age In Months	Stunted		Wasted		Underweight	
	Below (-3Sd)	Between (-3,-2 Sd)	Below (-3Sd)	Between (-3,-2 Sd)	Below (-3Sd)	Between (-3,-2 Sd)
0-11	16.09	10.77	21.33	17.78	14.20	11.07
12-23	23.98	20.99	22.65	19.89	23.57	19.41
24-25	22.67	24.05	20.48	19.81	22.29	23.92
36-47	18.24	23.20	18.19	21.37	18.57	23.58
48-59	19.02	20.99	17.35	21.14	21.36	22.03
	100	100	100	100	100	100
Caste						
General	14.71	17.48	15.66	16.15	14.26	15.17
OBC	33.32	34.64	36.75	33.07	33.00	34.85
SC	25.26	23.24	20.96	23.56	26.02	23.65
ST	10.30	8.52	9.88	12.01	11.18	10.62
Others	16.41	16.12	16.75	15.21	15.54	15.72
	100	100	100	100	100	100
Income quartile						
Lowest	22.89	20.80	23.86	21.06	26.20	22.50
Lower	23.95	20.32	18.80	23.24	24.30	22.80
Middle	19.66	20.84	17.59	19.66	18.40	20.30
Higher	18.31	20.55	21.69	19.50	17.10	19.60
Highest	15.18	17.48	18.07	16.54	14.00	14.80
	100	100	100	100	100	100
Sex	below (-3sd)	between (-3,-2 sd)	below (-3sd)	between (-3,-2 sd)	below (-3sd)	between (-3,-2 sd)
Male	50.71	52.53	54.46	53.28	51.34	50.50
Female	49.29	47.47	45.54	46.72	48.66	49.50
	100	100	100	100	100	100

Residence	below (-3sd)	between (-3,-2 sd)	below (-3sd)	between (-3,-2 sd)	below (-3sd)	between (-3,-2 sd)
Rural	75.46	71.89	72.05	69.23	76.72	74.97
Urban	24.54	28.11	27.95	30.27	23.28	25.02
	100	100	100	100	100	100

Figure 1: Distribution of z scores



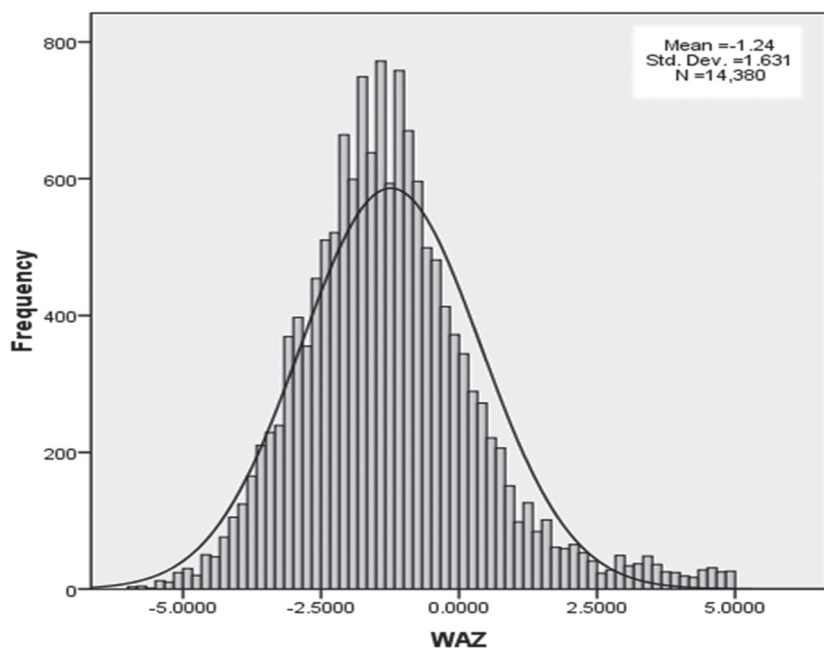
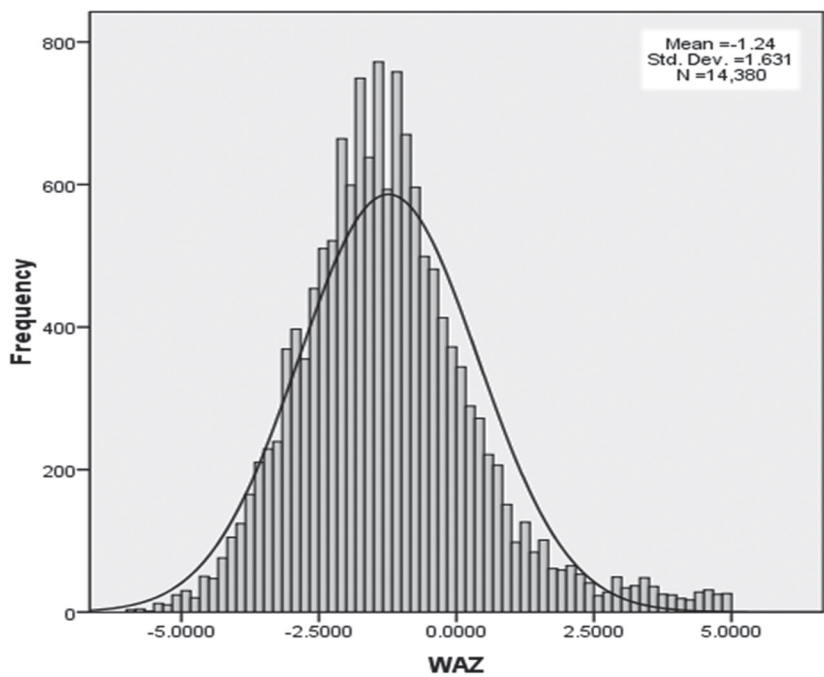


Table 4: Parameter estimates for regression model of weight-for-age z scores for children aged less than five years.

Variables	Model 1	Model 2	Model 3	Model 4
Individual characteristics				
Sex (femaleR)	0.0114849			-0.0559004
Diarreah	-0.1486397*			-0.1031541
Number of children				-0.0313582
Duration of breast feeding				-0.0086125
Contextual Variables				
highest educated female member in the family		0.0414671*		0.0268048*
Place of residence (ruralR)		0.1355618*		0.1405926*
supply of water		0.1194634*		0.1654608*
Toilet facility		0.000287		0.050192*
Caste(generalR)				
OBC		-0.0621557		
ST		-0.1369205*		
SC		-0.0474827		
Wealth quartile				
lowestR				
Lower			0.0200554	
Middle			0.1901281*	
Higher			0.291303*	
Highest			0.5379523*	
*p-value<0.05				
(R) = Reference Category				

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Appendix

**Table1: Percent Distribution of Characteristics
before and after exclusion of samples**

Selected Background	Percent Distribution	
Characteristics	Total Sample (24314)	Reduced Sample (14380)
Place Of Residence		
Rural	69.97	70.5
Urban	30.02	29.5
Sex		
Male	52.4	52.5
Female	47.6	47.5
Literacy		
Literate	90.1	91.6
Illiterate	9.9	8.4
Economic Status		
Poor	32.3	32.5
Noon-Poor	67.7	67.5
Age		
0-11	27.1	29.8
12-23	17.3	19.9
24-35	18.5	19.4
36-47	17.2	16.3
48-59	19.8	14.7
Caste		
Brahmin	4.6	4.5
High Caste	13.9	13.6
Obc	33.8	34.4
Dalit	21.9	22.7
Adivasi	9	8.6
Muslim	14.6	14.1
Sikh,Jain	1.2	1
Christian	1.1	1.1

Does Microfinance through SHGs Matters the Poor Enough? A study of CoochBehar District in West Bengal.

Ratul Saha*

Abstract:

“If we are looking for one single action which will enable the poor to overcome their poverty, I will focus on credit” –Dr. Mohammad Yunus.

In India poverty is mainly a rural problem. More than 65 percent of the country's population lives in rural areas and every three of the four people in India survive on less than US \$ 1 a day live in rural areas. Agricultural wage earners, small and marginal farmers and casual workers engaged in non-agricultural activities, constitute the bulk of the rural poor. Such a high incidence of poverty is a matter of concern in view of the fact that poverty eradication has been one of the major objectives of the development planning process. However, after a pro-longed negligence in the initial phases of planning, grassroots development through people's 'participation' and 'empowerment' has become the buzzword in the development policies. In such a shifted development paradigm, microfinance through SHGs has evolved as a need-based policy to cater the marginalized groups of Indian society. It has been recognized and accepted as an effective and financially viable alternative to the existing methods to provide credit for addressing the rural poverty. In this context, the objective of our present study is to evaluate at what extent Micro-finance through SHGs contribute to the alleviation of poverty and inequality of income. For the purpose of the present study we have selected 15 SHGs

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formed under SGSY (now re-structured as NRLM) and 50 non-SHG households from Cooch Behar district in West Bengal. We use random sampling technique for the selection of the SHGs and non-SHG households. All the SHG member households and non-SHG member households are belonging to the category of below poverty line households. The study concluded that the Non SHG households suffer worst and reduction of poverty and inequality of SHG households are still in process.

Keywords: Microfinance, SHGs, Poverty alleviation, Income inequality

Introduction

Microfinance has gained a lot of significance and momentum, both theoretically and practically in the last decade. India now occupies a significant place in global microfinance through promotion of the Self Help Groups and the native SHG-Bank Linkage Programme (SHG-BLP) model. In the past, the poor had little access to credit due to the problem of collateral, inappropriate system and inadequate procedures followed. The beneficiaries did not feel the responsibility of repaying the loan; Bankers too did not have the time or mechanism to monitor the repayment process. Poor recovery and lack of responsibility of repayment had made the scheme non-viable and ineffective. However, Micro finance through SHGs is now recognized as a key strategy for addressing issues of poverty alleviation and women's empowerment. The Indian model of microfinance offers greater promise and potential to address poverty and marginalization as it focused on building social capital and ensuring empowerment through access to financial services and linking with the mainstream. Microfinance, it is believed, contributes to poverty alleviation in the following ways. First, the provision of savings facility of the members enables them to contribute small savings regularly and the savings amounts, thus accumulated, provide a sense of security to them and reduce their vulnerability. Second, the programmes make it possible for the members to create a credit fund from which they can avail loans for consumption purposes. This is expected to have a positive impact

on their well-being, and access to basic needs. Third, the facility to borrow for Income Generating Activities enables the members to undertake those activities which are expected to contribute to employment generation, income increase and asset acquisition. Forth, the non-credit support in the form of training on how to undertake feasible and viable Income Generating Activities is expected to the satiability of employment and income security.

So far various studies have been undertaken on the issue of poverty alleviation through microfinance in different countries. These studies have highlighted different aspects of poverty alleviation and women empowerment. Although it is generally hoped that women's access to credit by the working of the SHG, through the microfinance route can reduce poverty and inequality and finally empower women, the empirical evidence so far provided in support of this view is mixed. For example,

Hulme and Mosley (1996) suggest that by and large micro finance has a positive economic effect. They also show that, this positive effect is often larger for those who are closer to the poverty line.

Mayoux (1997) in his study concluded with frustration by saying that impact of micro finance on women is not always positive. Even the increase in income for women can also come in exchange of heavier workloads and repayment pressure.

Yunus (1997) opined that for making a poverty free economy, micro credit is not enough. The poor people should be linked to markets, financial institutions and even multinationals. Moreover, he also added that the social investment is able to convert the disadvantaged sections of the society into entrepreneurs.

Dadhich (2001) in his study on microfinance a panacea for poverty alleviation explained the performance of SHGs and pointed out that properly designed and effectively implemented microfinance is not only to alleviate poverty and empower women but also be a viable economic and financial tool.

Robinson (2001) observes that commercial microfinance is not meant for core poor or destitute but is rather aimed at economically active poor. She opines that providing credit to people who are too poor to use it effectively helps neither the borrower nor the lender and would only lead to increasing of debt burden and erosion of self-confidence. She suggests that this segment should not be the target market for financial sector but of state poverty and welfare programs.

Harper (2003) in his study revealed that saving mobilization on a regular basis make the poor empowered and can contribute to an important in the quality of their lives. It serves to capitalize on the productive activities which sustain the family and thereby enhancing income of the family.

Hayes et. al (1998) have discussed the relationship between poor women's participation in micro credit programmes and their empowerment by taking both SHG and non-SHG members in rural Bangladesh. They used three indices, viz. interspersed consultation index, individual autonomy index and authority index to show this relationship. The results have shown that the SHG members are ahead of non-members in all the three indices of empowerment. The authors suggest that by providing independent sources of income outside home, micro credit is able to reduce economic dependency of the women on husbands and thus help enhance autonomy.

Swaminathan (2007) in his study points out that by providing microcredit to the poorest of the poor, the gap in the formal rural credit sector can be filled. Microcredit is able to overcome the weakness in the banking system. However, while small-scale rural credit is necessary, overall credit policy must build on the strengths of the banking system in India.

Banerjee et al (2010) in his study of Spandana finds no significant impact of microfinance on measures of women's decision-making over issues of household spending, investment, savings, or education.

Sarumathi & Mohan (2011) found that microfinance brought psychological and social empowerment than economic empowerment. Impact of microfinance is appreciable in bringing confidence, courage, skill development and empowerment. The SHG members feel free to move with their groups and leaders. It leads them to participate on various social welfare activities with good co-operation.

Study Design

The first section of this write-up covers the introduction. Our second section deals with the objective of the study, study area, research methodology and determination of poverty line. The third section depicts the income distribution of SHG and Non-SHG household members. In the fourth section we measure poverty & Inequality of Income. Finally, we try to give some major findings and concluding remarks in fifth section of this write-up.

Objective of the Study

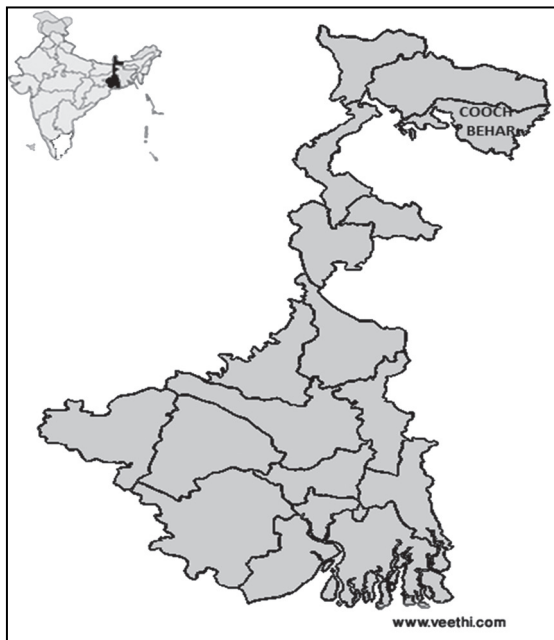
- 1) To find out the workability of the microfinance and SHG in the proposed area.
- 2) To find out the economic position of the SHGs and Non SHG household members.
- 3) To examine whether SHG activities have any impact in reducing poverty?
- 4) To examine whether the change in economic position of the SHGs members have any impact in reducing economic inequality.

Study Area

To give the objective a clear shape we have concentrated our study in the Dinhata -I Block of Dinhata Sub-division of CoochBehar District of state of West Bengal. Cooch-Behar is one of the five districts of Jalpaiguri Division with an irregular triangle shape. It is located in the north-eastern part of the state and bounded by the district of Jalpaiguri in the north, state of Assam in the east and the international border in the form of Indo-Bangladesh boundary in

the south as well as in the west. All are given in Map 1 & Map 2.

Map 1: Location of Coochbehar District in West Bengal



Map 2: District Map



Research Methodology

For shake of the present study we have selected 15 SHGs under Swarnajayanti Gram Sawarajgar Yojana (SGSY) scheme (now re-structured as NRLM) in which mainly the BPL people are being covered in the groups. The average size of the group in terms on number of members is 10.27. Thus as a whole we have 154 SHG members and accordingly 154 SHG households. We have used specially prepared SHG schedule and SHG household schedule for the collection of desired data. A very simple mathematical tool has been used for the presentation of the data. All the computations are being made on the basis of the receipt of returns from the respondents. For the selection of the block we have used purposive sampling method due to the better performance compared to other blocks in respect of SHG activities. Finally, we have used random sampling technique for the selection of the SHGs.

Again to measure the impact of the working of the SHGs we have taken also 50 poor households randomly from the same area that are not belonging to any SHGs. All of them belong to BPL category. We have also used the same household schedule for the collection of required information from these 50 poor households. Thus 15 SHGs, 154 SHG member households and 50 BPL non-member households become the universe of the study and the average family size for SHG household is 3.77 and same for Non-SHG household is 3.81

In this study we have used two indices to measure the poverty. One is report of the expert group under the Chairmanship of Dr. C. Rangarajan submitted in June 2014 and other One is UNDP index. Again to judge the inequality of Income we have calculated Gini Coefficient for every distribution of income given here and we have also drawn Lorenz Curve to display the income inequality.

Determination of Poverty Line

There is no doubt that the working of microfinance can significantly increase the income of the poor family (Murdoch and Haley, 2002) and improve the living conditions of the rural poor (Chavan and Ram Kumar, 2002). Here, we deal with these in the

light of the data collected from the study area. To assess the impact of the working of the SHGs on income we have considered the income of 154 SHGs household and 50 Non SHG households who belong to below poverty line.

As mentioned earlier in this study have used two indices to measure the poverty. One is report of the expert group under the Chairmanship of Dr. C. Rangarajan submitted in June 2014 and other One is UNDP index. According to the UNDP index, a family whose income per capita per day is less than \$1 is a poor family.

According to the expert group under the Chairmanship of Dr. C. Rangarajan submitted in June 2014, monthly per capita consumption expenditure Rs. 934.10 treated as the poverty line for rural West Bengal for 2011-12. Since our survey period is 2013-14, so we inflate Rs. 934.10 year to year, using CPI-RL, as published by ministry of Labour & Employment to get the poverty line for the year 2013-14 and finally we get Rs. 1014.80 per month per capita or Rs. 33.83 per capita per day as the poverty line for rural West Bengal in 2013-14. On the other hand, we consider the average rate 1USD= 61 INR during 2013-14 as the measure of poverty under UNDP Index. Since average family size in our sample for SHG household is 3.77, so Rs. 127.50 per day becomes the average poverty line for the households in our sample in Rangarajan Methodology. Same for the conventional method of UNDP stands at Rs. 229.97. On the other hand, average family size for Non SHG household is 3.81, thus Rs. 128.90 and Rs.232.40 becomes the poverty line according to Rangarajan Methodology & the conventional method respectively for Non SHG household. All these facts of poverty line are summarized in the following table.

Table 1: Poverty Line (Per family per day)

Methodology/ Method	Poverty Line	
	SHG	Non SHG
Rangarajan Methodology	Rs.127.50	Rs.128.90
Conventional Method	Rs.229.97	Rs.232.40

Income Distribution and a Measure of Poverty

Though it is very tough to calculate the income of the households by taking information from a single sitting. A rigorous interaction and at the same time a cross checking are needed to find out the accurate amount of income. We have noticed a common tendency among the respondents to hide their income in a fear that excess income will create a chance to earmark them as APL family. Here we try to overcome these problems by doing continuous cross checking in every aspect of income and expenditure items. Considering these limitations we have constructed the income distribution for both the SHGs households and Non SHGs households and their per capita income.

We have distributed all the 154 households of the SHGs by annual income per family in Table 2. The same for the Non-SHG households is given in Table 3. One can see from Table 2 that 35.07 percent SHG households are failed to cross the annual income per family limit of Rs. 30000.00 or Rs. 2500.00 per month. If we increase the annual family income level to Rs. 35000.00 then the above figure increases to 55.20 percent. That means 55.20 per cent households are failed even to earn Rs. 3000.00 per family per month. Only 13 households are succeeded to cross the income limit of Rs. 50000.00 per family per annum.

Table 2: Size Distribution of Annual Income of SHG households by Income per Family

Annual Income Per Family in Rs.	No of Household	P.C.	Cumulative P.C.
10000-15000	3	1.95	1.95
15000-20000	7	4.55	6.50
20000-25000	18	11.69	18.18
25000-30000	26	16.88	35.07
30000-35000	31	20.13	55.20
35000-40000	28	18.18	73.38
40000-45000	13	8.44	81.82

45000-50000	15	9.74	91.56
50000 & above	13	8.44	100.00
Total	154	100.00	-----

Mean=34602.34, SD=10549.16, CV=30.49

If we adopt the conventional method of measuring the households who lie below the poverty line by considering a Dollar per capita per day then a family is needed Rs. 82789.00 per year. Then we see that not a single household are succeeded to cross the poverty line during the reference period. If, on the other hand, we follow the Rangrajan Methodology then a family is needed Rs. 45900.00 per year. On the basis of this methodology 27 households are succeeded to cross the poverty line. That means 82.47 percent SHG households are lying below the poverty line.

We also distribute all the 50 Non-SHG households by annual income per family. This is given in Table 3. One can see from this table that 88.00 percent households of the Non-SHG are not succeeded to cross the annual income limit of Rs. 30000.00 per family or Rs. 2500.00 per family per month. Again if we increase the income level to Rs. 35000.00 & above per family per annum then only one household is succeeded to cross this income limit.

Table 3 : Size Distribution of Annual Income of Non-SHG households by Income per Family

Annual Income Per Family in Rs.	No of Household	P.C.	Cumulative P.C.
Upto 10000	7	14.00	14.00
10000-15000	5	10.00	24.00
15000-20000	12	24.00	48.00
20000-25000	13	26.00	74.00
25000-30000	7	14.00	88.00
30000-35000	5	10.00	98.00
35000 & above	1	2.00	100.00
Total	50	100.00	-----

Mean=19961.00, SD=8022.70, CV=40.19.

If we measure the percentage of households who lie below the poverty line by using either the conventional method or we follow the Rangrajan Methodology, then we see all the households of Non-SHG are lying below the poverty line. The two calculated means of the two income distributions of SHG and Non SHG households are Rs. 34602.34 and 19961.00 respectively.

Now we like to examine whether the observed difference in annual average family income between SHG and Non-SHG households in two sub- samples are statistically significant or not. For that purpose we apply Z test.

Null Hypothesis; $H_0: X_1=X_2$ i.e., there is no significant difference in the average income of SHG households and Non SHG households.

Alternative Hypothesis; $H_1: X_1>X_2$ i.e. average income of the SHG households is greater than the average income of the Non SHG households.

The calculated value of Z is 10.32 which is greater than the table value of $Z= 2.33$ at 1% level of significance. Thus the null hypothesis is rejected. It implies that the observed differences in incomes are statistically highly significant for both the samples. Thus we can say that the average income of the households of SHGs has increased as a result of working of the SHGs. If we compare these two income distributions on the basis of calculated values of Coefficient of Variation (CV) then we can say that the Non-SHG households are less homogeneous than the households of the SHGs.

Measure of Poverty Using Different Poverty Indices

The common measure of over-all poverty is the head-count measure H, which measures the proportion of people who fall below the specified poverty-line income.

$$H= p/n$$

Where, p= the number of people who are identified as being

poor.

n = the total population.

Another standard measure is the income-gap ratio I , is used to measure the intensity of poverty. Sen defined it as-

$$I = \frac{g}{p\varpi}$$

Where, g = aggregate short-fall of income of all the poor from the specified poverty line.

ϖ = the poverty line

But the problem is that, the head-count measure H ignores the extent of income short-falls, while the income-gap ratio I ignores the numbers involved. Again, the combination of the two is still inadequate, because if a unit of income is transferred from a person below the poverty line to someone who is richer but still remains below the poverty line, then both the measures H and I will remain completely unaffected. So, Sen has given another measure P to capture the Relative Deprivation among the poor.

$$P = H \{I + (1-I) G\}$$

Where, G = Gini coefficient of the distribution of income among the poor.

H = Head-count ratio.

I = Income-gap ratio.

We have used above measures to compare the poverty among the SHG and Non-SHG households using average annual income. We have already mentioned earlier different poverty lines for SHG & non SHG households depending upon average family size, using Rangarajan Methodology and the conventional method. However, here we have only used the poverty lines according to Rangarajan Methodology for the following measures of poverty.

Table 4 : Different Measure of poverty

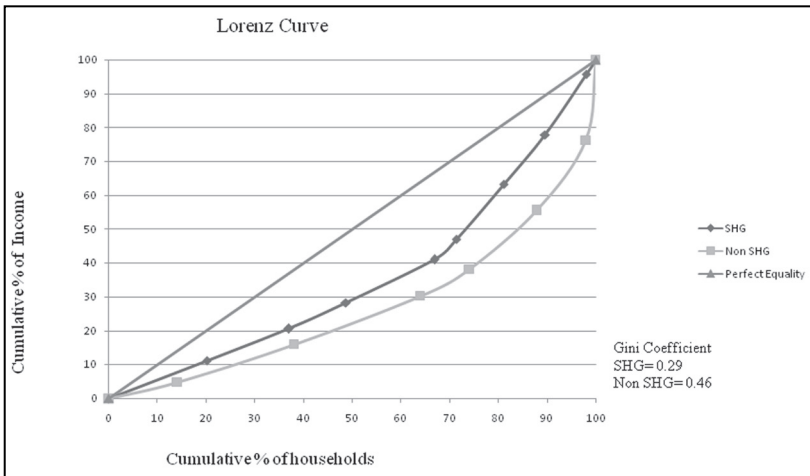
Households	Head Count Ratio(H)	Intensity of Poverty(I)	Gini coefficient (G)	Measure of Relative Deprivation (P)
SHG Total	0.82	0.33	0.29	0.43
Non-SHG	1.00	0.57	0.46	0.77

It is obvious from the above table that SHG households are in better position compared to Non SHG households in respect of all measures of poverty. Though 18 % SHG households in total sample are succeeded to cross the poverty line during our survey period but none of the Non-SHG households succeeded to overcome the poverty line. Again, there is a huge gap in intensity of poverty among SHG and non SHG households. While poverty gap ratio for the SHG household is 0.33, it is as high as 0.57 for the Non-SHG households. We get the same fact in case the value of Gini coefficient ‘G’ also. Again, P as a function of H, I and G is considerably higher for Non-SHG households reflecting higher relative deprivation among them. Thus we can conclude that Self Help Group activities have positive impact in reducing poverty.

Measure of Income Inequality and Lorenz Curve

Income Inequality refers to the extent to which income is distributed in an uneven manner among a population. We have already mentioned the values of Gini coefficient for every distribution of income. We have seen that the value of Gini coefficient is higher in case of Non SHG household’s family income compared to SHG household’s income. Now to visualize the income inequality of SHG & Non SHG households we have drawn Lorenz Curve. Lorenz Curve is nothing but the visual representation of the income inequality of a nation graphically.

Diagram 1: Lorenz Curve for Annual Family Income of SHG & Non-SHG households



From the above diagrams 1, we see that Lorenz curves for SHGs are closer to the perfect equality curve compared to Non SHG. Here, bottoms 20% of income of SHG households in total sample are shared by around 38 % population. If we double the income limit, then we see that bottom 40% of incomes are shared by around 67% of households. On the other hand, bottom 20% and bottom 40% of incomes of Non SHG households in total sample are shared by around 48% & 76% of the population respectively. Top 20% of incomes are enjoyed by only around 9% and 1% SHG & Non SHG households respectively. Hence, we can conclude that SHG activities have succeeded to bring better distribution of household income compared to Non SHG households.

Some Major Findings

If we consider the poverty line according to Rangarajan Methodology then we see that 27 SHG households out of 154 (17.53%) are succeeded to cross the poverty line. However, the no of household reduces to zero, if we consider the traditional measure of UNDP.

Whatever methodology may we adopt; none of the non SHG households are able to come out from the poverty trap during our period of survey. We get its reflection in head count ratio which stands at 1, shown in table-4.

The result of Z test, between annual average family income between SHG and Non-SHG households shows that the calculated value of Z is considerably higher than the table value of $Z= 2.33$ at 1% level of significance. Thus we can say that the average income of the households of SHGs has increased significantly as a result of working of the SHGs

As far as the Intensity of poverty is concerned non SHG households suffer worst. The value of Intensity of poverty Index reaches to 0.57 for non SHG households and it stands at 0.33 for SHG household which is quite low compared to non SHG households.

In case of measure of inequality of distribution of income, the values of Gini coefficients of SHG & Non SHG household differ much. The values are 0.29 & 0.46 for SHG & Non SHG households respectively. Hence, we can conclude that SHG activities have succeeded to bring better distribution of household income compared to Non SHG households.

However, the value of relative deprivation index (P) as a function of H, I and G is considerably higher for Non-SHG households reflecting higher relative deprivation among them compared to SHG households.

Conclusion

Thus we see that SHG Households are in better position than the non SHG households though they belongs to more or less in same socio economic background. Thus Microfinance is expected to play a significant role in poverty alleviation and rural development particularly the rural women. So, we recommend for bringing all the BPL and marginally APL households under the safety umbrella of the SHGs. However, as far as the SHG households are

concerned the study concluded that the reduction of poverty and inequality is still in process at the moderate level in our study area. The reason is that in most cases there is no infrastructural facility or any other kind of support to the SHGs to start a viable enterprise. Most of the beneficiaries were encouraged to go for individual works specially buying a cow or goats. Again, among the SHGs the rate of success differs. While some groups are doing well and have got the project loan, subsidy etc. some groups are lagging far behind. Specially, performance of the SC/ST or Minority groups is comparatively lower. Thus, measures should be taken on a priority basis to improve the quality of the groups in low performance areas and proper balance allocation of resources should be done. Group activities should also be promoted by officials. Training workshops must be organised. If the SHGs come up with a finished product; there should be infrastructural support for its marketing.

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Inclusive Growth in India and Harmonious Development in China in Ensuring Sustainable Rural Livelihoods

Vaishali Singh*

Nations across the entire world continue to face crisis of sustainability of growth and the issue of decent and productive livelihoods has sort of become topical. While education and health as human capital build individual potential and enhance capabilities, they have to be sold in a labour market for any tangible benefit to accrue to the individual. Ultimately it is the income generated through gainful employment or livelihood that matters.

As with the high rates of growth witnessed in the developing nations, employment coefficients have not moved in a desired way. This is primarily because of the specific situation prevalent in emerging economies such as India and China, where the employment problem does not necessarily manifest itself as open unemployment, but as underemployment, vulnerable employment or low quality of employment. A very large number of the working population in both India and China is engaged in agriculture and the informal service sector where productivity and earnings are low and there is a high degree of job vulnerability. It is in this context that the developing nations are now striving towards shared growth/inclusive growth/harmonious development.

In addition to the social justice considerations, sustainable rural livelihoods in large emerging economies of India and China is also a critical objective because of structural and demographical

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considerations. The labor force is going to increase manifold in the coming years creating enormous pressure on the economy to create more jobs. Jesus Felipe and Rana Hasan predict a momentous increase in the labor force of developing Asia in the next two decades. According to their estimate “*during the next decades, developing Asia’s labor force will increase from about 1.7 billion people in 2005 to almost 2.2 billion in 2030.*”¹ At the same time, the widening income and wealth inequalities also demand employment generation to be meaningful for the upward social and economic mobility of the new entrants to the labor force. Therefore, structural transformations in the labor market coupled with human development concerns necessitate that due importance is given to the productive aspect of employment.

Pre-reform labour system in India and China

In the post-1949 command economy of China, labor markets did not exist. Highly centralized and government-controlled employment system existed in both rural and urban areas. Labour was allocated and wages were administered by the central government.

The pre-reform labour system in China has been rightly characterized as being heavily influenced by the Soviet model. In other words, “*it was the plan, and not market wages, that governed labour supply and demand.*”² In fact, surplus labour was forced on the urban enterprises. The *hukou* (residence registration) system effectively prevented any competition of labor from rural areas while at the same time thwarting potential urbanization problems. As a social institution, the Chinese ‘work-unit’ or *danwei* provided security to the employees. All these features of China’s pre-reform economic system restricted the creation of a labour market, particularly in urban China. Gordon White rightly argues that of all aspects of planning in China, *‘the allocation of labour resources*

¹Jesus Felipe and Rana Hasan, *Labor Markets in Asia: Issues and Perspectives* (Basingstoke, UK: Palgrave Macmillan, 2006).

²John Knight and Lina Song, *Towards a Labour Market*, (Oxford: Oxford University Press, 2005): 17

is by far the furthest from the market mechanism.’³ In the words of Knight and Song, “the labour system scored badly in terms of the mobility, flexibility, incentives, and efficiency of labour.”⁴ However, despite the inefficient use of labour, the pre-reform system of public employment ensured that open unemployment was avoided. The system provided a job for everyone. This also enabled the state to achieve its egalitarian objectives.

Quite similarly, post-independent India also had state as the major employer, often labeled as the ‘model employer’. This was in line with the social engineering role of the state in long-term planning and development. In order to achieve the overarching goal of social justice, the rights to work, to education and to assistance in the event of unemployment and illness were set forth under the Directive Principles of State Policy. Though non-enforceable through courts, these principles served as important guiding principles for policy-makers. The policy of Import Substituting Industrialization and the expansion of bureaucracy further accentuated state’s involvement in the labor market. Even where the private sector failed to provide protection, the public sector would step in. In principle, private sector was tied under the regulations of the state to provide quality employment. The policy-makers also realized that a large proportion of unemployment in India was of a disguised nature due to the pre-dominance of subsistence agriculture. The Indian Federation of Labor, therefore, urged for concentrating on the agricultural sector for the benefit of the vast masses of population dependent on agriculture.⁵ Labor policy came to be directed ‘towards encouraging formal and long-term employment relationships and contracts and providing access

³Gordon White, “Evolving relations between state and worker in the reform of China’s urban industrial economy,” in Stephan Feuchtwang, Athar Hussain, and Thierry Pairault (eds), *Transforming China’s Economy in the Eighties*, Vol. II, (Boulder CO.: Westview Press, 1988):14

⁴John Knight and Lina Song, *op.cit.* p. 41

⁵George Rosen, Chapter 4, “Planned Development and the Search for Self-reliance,” in C. Steven LaRue (ed.) *The India Handbook*, (Chicago and London: Fitzroy Dearborn Publishers, 1997): 63

to social security.⁶ Subsequent national plans took note of the problem of employment but there was little progress. According to the estimates by the Planning Commission in 1992, 'the number of unemployed rose to 14.5 million by 1988 and further to 17 million by 1991-92.'⁷ Thus, by the time India initiated the process of liberalization in 1991, growing unemployment had already become a serious concern. T. S. Papola notes that despite rapid industrial growth, 'India remained a predominantly nonindustrial country in terms of employment.'⁸ More than 60 per cent of the labor force was concentrated in the agricultural sector of the economy.

The Market Transition and the Changing Nature of Employment

Critical changes in the labour system of China came with the Third Plenum of the Eleventh Central Committee in December 1978. In 1978, for instance, per capita income in rural areas was only 34 percent that in urban area. Moreover, poverty in the rural sector was far more prevalent than in the urban sector. More than 75 percent of rural households were living below the poverty line in 1980 compared to 8 percent of their urban counterparts.⁹ Rural sector was the first to undergo the transformation, and successfully enough to bring in more progressive and profound changes in other sectors of the economy. Two major steps in this direction were the metamorphosis of the commune system and the partial decollectivization of the agricultural production. The farm sector was given more 'breathing space' by a sharp rise in the farm prices. Due encouragement was given to diversification of production, specialization and division of labour to unleash the hidden potential of the rural sector in raising profits and contributing to growth and productivity.

⁶Jesus Felipe and Rana Hasan, *Labor Markets in Asia: Issues and Perspectives* (Basingstoke, UK: Palgrave Macmillan, 2006):241

⁷Government of India. *Planning Commission, Eighth Five Year Plan, 1992-1997*, (1992): 26

⁸T.S. Papola, "The Question of Unemployment," in Bimal Jalan (ed.) *The Indian Economy: Problems and Prospects*. (New Delhi and New York: Viking, 1992):306-10

⁹John R. Logan, *Urban China in Transition*, Blackwell Publication Limited, London, (2008), p.208

These policies produced the desired effect. Agricultural growth surged in the early 1980s and provided economic surplus for the subsequent rural industrialization from mid-1980s. Township and Village Enterprises (TVEs) mushroomed during this time ‘meeting a pent-up demand for consumer goods and taking advantage of a pool of cheap rural labor’.¹⁰ Apart from generating employment and raising rural incomes, TVEs generated economic surplus which was used in welfare activities such as education, healthcare, infrastructure development and helping/empowering poor families. Article 17 of the TVEs programme clearly called for investment of after tax profits in agriculture and rural social undertakings. These enterprises were successful also because of the unique decentralization system in China that links local official’s promotion to local area performance. In fact, there is now ample evidence of a strong correlation between development of TVEs and the level of development of the area. Local government adopted a host of preferential policies to promote rural industrialization. Sectors such as food processing were provided tax concessions. TVEs have since been privatized and reduced in scope but their success story can still serve as an example for nations such as India to emulate from in the sphere of rural development. Rural non-farm livelihoods can certainly be increased in India along the lines of TVEs.

Rapid TVE Growth in China

	No. of TVE firms (millions)		No. of TVE workers (millions)	
	Total	Industry	Total	Industry
1978	1.52	0.79	28.26	17.34
1985	12.22	4.93	69.79	41.37
1990	18.50	7.22	92.65	55.52

Source: *Zhongguo xiangzhen qiye nianjian 1993* [China Yearbook of Township-Village Enterprises 1993] (Beijing: Nongye chubanshe, 1993)

¹⁰R. Brooks, and R. Tao, “China’s Labour Market Performance and Challenges,” IMF Working Paper WP/03/210. (2003).

The introduction of labor contract system within the state enterprises was perhaps the most significant reform measure in the labor system of China. The contractual responsibility system that was formalized in 1986 had far-reaching consequences for China's new labor market, one which changed the entire edifice of the pre-reform labor relations from permanent and universal employment structure to a more open, rational and flexible labor system. The reforms awakened the entrepreneurial spirits of individuals and groups and the 1980s saw a mushrooming of private enterprises of all sorts and types in both the urban and rural areas. Inter-regional labour mobility was another major corollary of the new flexibility in labour relations. There was a huge influx of young and largely rural population in the coastal cities and towns that promised more and better avenues for employment. In the mid-1980s, a 'floating' population – estimated at over 30 million people – entered the large coastal cities.¹¹ According to the decree 'The State Council Circular on the Problem of Peasants' Settlement in Market Towns' issued in 1984, peasants were permitted to transfer their *hukou* to market towns so long as they managed to find employment, maintain a stable residence and take care of their own food rations.¹²

As Lei Guang opines,

*"Since 1978, when China launched its first set of reforms in the countryside, its rural areas have undergone several distinctive phases of change that have transformed their social, economic, and political landscape. Chinese villagers, under conditions not entirely of their own making, have divided land, built rural industries, migrated en masse to the cities, and returned to stake out a private realm of entrepreneurship in a dogged attempt to improve their livelihood against great odds."*¹³

¹¹F. Christiansen, "Market Transition" in China: The Case of the Jiangsu Labor Market, 1978–1990," *Modern China*, 18 No. 1, (1992):74.

¹²L. Wong and Wai-po Huen, "Reforming the Household Registration System – A Preliminary Glimpse of the Blue Chop Household Registration System in Shanghai and Shenzhen," *International Migration Review*, 32 No. 4, (1998).

¹³Lei Guang, "Rural China in Transformation", *China Review International*, Vol.11 No.1, (Spring 2004).

In India, while the process of liberalization was launched in 1990s, the shift had already been taking place since the 1980s with private sector beginning to play a role in the economy. As in China, the concept of secure employment was abandoned in favour of outsourcing and contract employment. While, unlike China, the Indian policy-makers have openly acknowledged the problem of unemployment or the lack of productive employment among the Indian labor-force, the concern has not moved beyond planning level. The various five year plans have focused on sectoral development including agriculture activities, yet the state of rural employment has remained dismal.

The eleventh plan with a focus on ‘inclusive’ growth further acknowledged that past growth has not generated a ‘sufficient volume of good quality employment.’¹⁴ Therefore, the plan states –*“generation of productive and gainful employment, with decent working conditions, on a sufficient scale to absorb our growing labour force must form a critical element in the strategy for achieving inclusive growth.”*¹⁵ Two key areas have been identified for bringing about inclusion- one is to increase income and productivity to deal with the rising problem of working poor and second is to improve the employability of the masses through skill development and training programs. However as pointed out by the well-known economic expert Shri Ruddar Datt –‘while the Plan envisages a target for greater and rapid economic development of the country yet the plan continues to be investment oriented rather than employment centric. On the contrary, it fails to accomplish the objectives of assured income and employment to the people. It lays greater emphasis on contract farming rather than addressing to the problems of small farmers.’¹⁶

Policy Intent: Inclusive Growth and Harmonious Development

There has been a turnaround in the policy focus of the leadership

¹⁴Government of India. *Planning Commission Eighth Five Year Plan, Vol. 1, Chapter 6 “Employment Perspective”* (1992):63

¹⁵*Ibid.*

¹⁶Ruddar Datt, “Eleventh Five Year Plan and Inclusive Growth”, March 2008

in both India and China to look beyond economic growth. The Eleventh Plan (2007-2012) labelled the new development strategy as achieving faster and more inclusive growth.

“The central vision of the Eleventh Plan is to build on our strengths to trigger a development process which ensures broad-based improvement in the quality of life of the people, especially the poor, SCs/STs, other backward castes (OBCs), minorities and women.....the target is not just faster growth but also inclusive growth, that is, a growth process which yields broad-based benefits and ensures equality of opportunity for all.”¹⁷

In China, the policy idea of establishing a ‘Socialist Harmonious Society’ (Shehuizhuyi de Hexie Shehui) epitomizes this turnaround from unbridled economic growth towards a sustainable path of development and creation of new forms of inclusive social development. The Hu Jintao administration has been pressing on this socio-economic vision since 2004 to bring about overall social stability and harmony. It is a well-thought-out notion advanced by the leadership with the twin purpose of appealing to the Chinese tradition (alluding to the Confucius concept of great harmony or datong) and addressing the massive social challenges. The concept was formally endorsed at the 17th CCP Congress in late 2007.

“Currently it is important to balance the interests between different social groups, to avoid conflicts and to make sure people live a safe and happy life in a politically stable country. It will be a long-term, systematic project, and the whole Party and the government..... take up their responsibilities in leading the construction of a harmonious society for the smooth transition of the Chinese society in the next decades.....To build a harmonious society, we have to be more capable of managing social affairs, coordinating different interests and dealing with contradictions among the people. A harmonious society will feature democracy, the rule of law, equity, justice, sincerity, amity and vitality, he said. Such a society will give full scope to people’s

¹⁷ *Government of India. Planning Commission, Eleventh Five Year Plan, 2007-2012.*

talent and creativity, enable all the people to share the social wealth brought by reform and development, and forge an ever closer relationship between the people and government. These things will result in lasting stability and unity.”¹⁸

Harmonious Development and Rural Development in China

In 2006, Chinese government uncovered its ‘New Rural Policy’ where the message is ‘back to the villages’ and creation of a ‘New Socialist Countryside’ which basically focuses less on indiscriminate growth and more on redistribution of resources. Drawing on the New Socialist Countryside vision, the Chinese Government has come up with a number of initiatives to reinvigorate the rural sector.

Policy Loans – With an emphasis on agricultural development, the Chinese government provides policy loans to the priority areas in agriculture sector. A number of loans have been provided by the Rural Finance Institutions (RFIs) for various agricultural activities such as

- a. Large scale production of vegetables
- b. Production of aquatic products
- c. Agricultural processing
- d. Rural off-farm production, and;
- e. Procurement and storage of harvested grains

Village Development Committees – To fulfil the objective of empowerment of rural population, ‘Village Development Committees’ have been formed in the rural areas. A remarkable feature of the initiative has been creation of gender symmetry in rural areas as 30 percent of the members have to be women. These committees frame plans in close collaboration with the Ministry of Rural Development.

Rural Credit Co-operatives (RCCs) – These have been established in poor and remote areas in China. Over 50 percent

¹⁸*Building harmonious society crucial for China’s progress: Hu, People’s Daily, June 27, 2005*

of loans are provided within the poor and backward regions. The RCCs hold about 80 percent of rural deposits and loans and have played an indispensable role in rural development by channeling rural savings into the industrialization of China's villages. The objective of the RCCs is meant to be twofold, supporting local industrialization as well as playing a central part in the national government's strategy for improving people's livelihood in rural China.¹⁹

Skill Acquisition and Technological Development – There have been efforts to build the skill-base of villagers. Women have been specifically trained in new skills such as artisan jobs, repair of hand-pumps etc.

Creation of Rural Assets – Institutional structures have been created to manage better the national resource base. There has been construction of check-dams, irrigation canals, water harvesting structures and other agricultural storage facilities. All these efforts have resulted in availability of more water for drinking and irrigation, higher agricultural productivity, increase in rural incomes and a greater reliance on droughts.

Rural Informatization – ICT transformation in rural China is an umbrella programme which consists of three major projects. The National Cultural Information Resource Sharing Project (Cultural Sharing Project) started in April 2002. The project aims to utilize modern information technology 'to create a shared repository of digital Chinese cultural resources and disseminate them to the whole nation through tools such as the Internet, satellite networks, mobile storage facilities, mirror sites, compact discs, and cable/digital television networks'.²⁰ Public access points have been created which are equipped with either a networked computer or IPTV or mobile storage plus a film projector and serve as an agent of

¹⁹Lynette H. Ong. *Prosper or Perish: Credit and Fiscal Systems in Rural China*. Ithaca, NY: Cornell University Press, 2012.

²⁰Liangzhi Yu and Binbin Yu, "The Top-Down Approach to Providing ICT Access to Rural Communities in China: Opportunities for Community Informatics" *John Hopkins University Press, Library Trends*, Vol.62, No1, (Summer 2013).

community based ICT provision. Electronic reading rooms for the rural public also form a part of the project. As of 2011, 1 national center, 33 provincial centers, and 2,840 county centers have already been established under the project (Social Culture Division of the Ministry of Culture, 2012).²¹

The Nationwide Modern Distance Education of Rural Cadres Project (Distance Education Project) was launched in 2003 as a pilot project by the Organization Department of the Central Committee of the Communist Party of China (CCCPC) to explore ways of delivering quality educational and information resources to rural cadres using modern information and communication technologies. With the 2007 directive of the CCCPC, *Proposal for Implementing Nationwide Modern Distance Education of Rural Cadres*, the project was rolled out on national scale. The project entails setting up of Distance Education access points in villages for dissemination of resource information regarding various plans and programmes of the government and the party. The access points are intended to ‘function as a training site for rural cadres, an activity site for rural organizations, a pilot site for rural informatization, an economic site helping peasants increase their income, a learning site for migrant workers to gain vocational skills, and an entertainment site for enriching the leisure time of villagers.’²²

In 2009, the Ministry of Industry and Information Technology (MII), sought to regulate the establishment of rural information service stations and promulgated *The Basic Regulations for the Construction and Services of Rural Comprehensive Information Service Stations*. The overarching goal of the programme is to bridge the digital divide between rural and urban areas. It has been mandated that the station should meet five basic criteria of having a stable venue, a collection of ICT equipment, an information officer, a set of management regulations, and a long-term development mechanism.

²¹*Ibid.*

²² General Office of the Central Committee of the CPC. (2007). *Proposal for implementing Nationwide Modern Distance Education of Rural Cadres*. , http://www.gov.cn/jrzq/2007-09/02/content_734720.htm.

Inclusive Growth and Rural Development in India

In India, the inclusive growth agenda is sought to be implemented through a number of old and new schemes in the rural sector.

Integrated Rural Development Programme (IRDP) – The programme was first introduced in 1978 and comprises the most comprehensive plan to raise the living standards of the rural populace. The programme seeks to generate productive employment through providing bank credit and training. Some of the schemes include training of Rural Youths for Self–Employment (TRYSE), Development of Women and Children in Rural Areas (DWCRA) and Supply of Improved Tool Kits to Rural Artisans (SITRA).

Wage Employment Programmes – The objective of providing wage employment is manifold. It not only assists the farmers during lean agricultural season and natural calamities, it also helps in improving the rural infrastructure. These include the National Rural Employment Programme (NREP), and Rural Landless Employment Guarantee Programme (RLEGP).

Food for Work Programme – The programme began in 2000 in eight notified drought-affected states of India to boost food production in India in order to meet the country's critical challenge of over-population.

Rural Housing – The programme is intended to provide free housing to poor rural families. The targeted groups include the SCs, STs and BPL families. The Samagra Awas Yojana (SAY) was taken up in 25 blocks to ensure convergence of housing, provision of safe drinking water, sanitation and common drainage facilities.

National Social Assistance Programme (NSAP) – Initially, the NSAP had three Components- National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS), and National Maternity Benefit Scheme (NMBS). The NMBS was however transferred to the Ministry of Family Welfare. Two new pension

schemes were introduced in 2009 - Indira Gandhi National Widow Pension Scheme (IGNWPS) and Indira Gandhi National Disability Pension Scheme (IGNDPS). To ensure food security for the rural population, Annapurna scheme was also introduced and later transferred to the state plan.

Aajeevika - National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in June 2011. The aim is to create efficient and effective institutional platforms of the rural poor to increase household income through sustainable livelihood enhancements and improved access to financial services. Under the scheme, the poor would be facilitated to achieve increased access to their rights, entitlements and public services, diversified risk and better social indicators of empowerment.

Besides, there are schemes such as Bharat Nirman, Pradhan Mantri Gram Sadak Yojana, Mahatma Gandhi National Rural Employment Guarantee Act-2005, Provision of Urban Amenities in Rural Areas (PURA), National Rural Mission (NRuM), Deen Dayal Upadhyaya Gramin Kaushal Yojana (DDU-GKY) also cover the landscape of rural development initiatives.

The Challenges:

While the intentions behind the policy framework to include the hitherto excluded groups seems perfect, exactly how far this fetish with inclusiveness is going to genuinely benefit the vulnerable population remains to be seen. Rural-urban disparity in income is a common reality in both emerging economies. The average farm size is declining in both countries and while chemical and energy inputs to agriculture (such as fertilizers, pesticides, electricity and diesel) get more expensive, there is limited access to credit for small farmers to cover those costs. The spread and quality of education in rural areas is limited and the future generations of the rural families are less equipped to capitalize on the opportunities that globalization and market reforms have opened up.

In the new entrepreneurial economy, the pursuit of sustainable rural livelihoods is being challenged by two main factors/phenomenon.

1) Informalization/casualization of labour

The market transition has led to a huge rise in flexible, non-standard employment. Such an employment is characterized by low earnings, dismal working conditions, and complete absence of social security. In a labour-surplus economy, casual workers are simply left to the vagaries of the market forces.

High inflationary pressures and the quest to enter the mainstream economy drives the rural population to come to the urban areas in search of decent and productive jobs. However, the labour market has undergone informalization and the thrust on contracting and sub-contracting of work has not only increased under-employment but has forced workers to seek alternative employment, albeit at low wages and low level of social protection. From 1991 to 2000, India witnessed 'jobless growth' as a result of the neo-liberal orientation that called for imports of labour-saving technology.²³ As Himanshu sums up:

*"The acceleration of GDP growth from an average of six per cent to eight per cent after 2005 has not been accompanied by any corresponding generation of decent employment... [and]....with over 80 per cent of all new jobs created being in casual work, overwhelmingly in construction, there are serious questions about the ability of the growth process to offer sustained employment as the cornerstone of inclusive growth."*²⁴

In China, the informalisation of labour gathered pace in the 1990s with the labor contract law and the massive layoffs of SOE workers that followed the large-scale restructuring of state sector enterprises. This, coupled with the rise in migrant workers led to a

²³Pravin Sinha, "Representing Labour in India," *Development in Practice*, Vol. 14, No. 1/2 (Feb., 2004):130

²⁴Himanshu, "Towards new poverty lines for India," *Economic and Political Weekly*, Vol. 45 No.1 (2011): 38-48

substantial increase in informal work, a trend that still continues. As an add-on, the rise in private sector employment and quite recently the shift from manufacturing to services sector has also pushed informalization of labour. According to the Summary Report on China's Nongmingong Problem 2006, the informal workers in China are the 120 million-odd *nongmingong* (peasant-workers) and the 80 million locally employed persons who lack the official urban resident status and take up the 'hardest, dirtiest, and lowest-paid work shunned by urban workers.'²⁵ If self-employment and contract-based employment is counted as informal employment, according to a report by NBS, as much as 60 per cent of migrant workers were in the informal sector in 2009. An overwhelming majority of informal workers in China comes from the migrant community as compared to the local workers. In India, on the other hand, there is not much difference among the migrants and the locals when it comes to working informally.

Size and Component of Informal Employment in Urban China

Year	Migrant Workers	Local Workers	All Workers
2001	87.3	13.4	30.2
2005	86.5	30.6	37.5
2010	60.7	25.8	29.7

Source: Calculations by Cai Fang, Du Yang and Qu Yue based on China Urban Labour Survey (CULS) Data

2) The problem of Working Poor

In emerging economies of India and China, unemployment per se is not the problem. Unemployment rate in China and India in 2010 stood at 2.9 and 3.5 per cent of the total labour force respectively. Seemingly, these low rates of unemployment might correspond to the concept of full employment. However, in case of India and China, the only inference that can be drawn is that the majority of the population cannot afford to be openly unemployed.

²⁵“Summary Report on China's Nongmingong Problem” (“Zhongguo nongmingong wenti yanjiu zongbaogao,” 2006

People find jobs but not a productive one. Therefore, their work does not help in raising the standard of living. These workers are the working poor.

In the last decade, the problem of working poor has been especially acute for young Chinese graduates from the countryside seeking employment in big cities. Lian Si, quite famously refers to China's 'Ant Tribe' or the millions of graduates who live on the edge of poverty in China's biggest cities precisely due to a lack of productive jobs. They have been labeled 'Ant Tribe' both because of their industrious nature and their meager, abominable living conditions. This social group has already surpassed 3 million and is increasing with an addition of 0.2-0.3 million persons per year.²⁶ In 2004, the average earnings of *nongmingong* (peasant-workers) working in cities stood at 9,360 yuan a year while the national average earning reported by labor statistical yearbook was 16,519 yuan.²⁷

According to the India Labour and Employment Report 2014 by the Institute of Human Development, '*a quarter of the workforce is under the official Tendulkar poverty line of Rs. 27.20 a day in rural areas and Rs. 33.33 a day in urban areas.*'²⁸ The report also underlined the fact that a low income from employment is the most significant factor behind poverty in India. The incidence of poverty was found to be highest among the informal/casual workers. In other words, within the informal sector, it is the non-salaried casual labourer usually coming from rural areas that struggles to survive with incomes that are below the poverty line.

Conclusion

The domain of rural development has become extremely crucial for sustainable development. India and China as emerging

²⁶Xiaosong Zhang, "China's "Ant Tribe" Present Social Survival Situation and Personal Financial Advice," *Asian Social Science*; Vol. 9, No. 2. (2013).

²⁷Xiaosong Zhang, "China's "Ant Tribe" Present Social Survival Situation and Personal Financial Advice," *Asian Social Science*; Vol. 9, No. 2. (2013).

²⁸Rukmini S, "Poverty higher among employed than unemployed: report," *The Hindu*, December 19, 2013.

economies of Asia and by virtue of their sheer size make up for a fruitful comparative study. The Chinese approach to rural development has been people-centric and bottom-up while India's progress in rural development has remained mired in corruption, lack of political will, bureaucratic bottlenecks and a top-down approach. Unlike India, China has had a rich experience of rural development innovations. It is therefore important to take a cue from China's successes particularly in rural industrialization through promotion of village enterprises and the model of rural development that puts people at the forefront of action. The intent of Inclusive Growth/Harmonious Development is indeed noble and a myriad of policy initiatives have been undertaken. However, the path towards a knowledge economy that is being charted by both India and China brings them together in facing similar challenges. It remains to be seen whether the recent fascination with inclusiveness brings any tangible benefits for the rural masses.

District Level Study of India on Gender Differentials in Educational Outcomes

1. Introduction

The SDG-4 (Sustainable Development Goals to be attained by 2030) is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The Millennium Development Goal-2 (MDG-2015) was 'Achieving universal primary education' with the target to ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary education. The MDG Goal-3 was 'Promote Gender Equality and Empower Women' targeting to eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education, no later than 2015. The present scenario in the context of India shows a different picture than what is expected to fulfill the MDGs. Though India has undergone significant educational expansions in recent years, there exist various types of casteism, communalism, racism and provincialism even after the sixty six years of independence, which are reflected in educational outcomes in India. As a result there exists a striking educational inequality in India in terms of caste, tribe, and gender across regions and religions.

2. Rationale for the Study

The latest Indian census shows that total literacy rate has increased from 64.83 percent (2001) to 74.08 percent (%) (2011). Total literacy rate is highest in Kerala (93.91) and lowest in Bihar (63.82); male literacy rate is highest in Lakshadweep (96.11) and lowest in Bihar (73.39), whereas female literacy rate is highest in Kerala (91.08) and lowest in Rajasthan (52.66). According

to recent report (2011-12) of District Information System for Education(DISE), Gross Enrollment Ratio (GER) in primary schools is quite good (118.6) but enrollment rate for scheduled caste (20.1) , schedule tribe (11.4) and other backward caste (42.8) in primary schools shows a dismal picture. From the above discussion it can be concluded that there exists a strong inequality in India's education sector by caste and region. Indian population is divided into various groups and sub-groups and there are various caste and creeds. The geographical diversity creates some different regional characteristics. The pattern of educational inequality which prevails in the country is not uniform in nature, hence an attempt has been made in the present study to analyze the pattern and extend of educational inequality in India. The objective of the paper is to study and analyze the pattern of gender based educational inequalities in India.

3. Data and Methodology

3.1 Data

The study is based on two secondary data sources viz. Indian National Census (2011) and District Information System on education (DISE, 2011-12). Both the data sets provide information on education for 644 districts of India. Census provides data on literacy rate by place of residence and sex, work participation rate (by sex), SC and ST population and urbanization. DISE provides data on gross enrollment ratio, enrollment rate (SC, ST, and OBC), girls to boys' enrollment ratio and percent of schools having girl's toilet.

3.2 Methodology

District is the unit of analyses. For gender based inequality, Coefficient of inequality (CE) is used. CE for a district is calculated using the following formula:

$$CE = \frac{\text{Male literacy rate} - \text{Female literacy rate}}{\text{Total literacy rate}} \dots \dots (1)$$
 (Tilak, 1983) CE is calculated separately for total, rural, urban populations. The value for the coefficient of inequality (CE) lies between zero to one (positive and negative both). A

positive value denotes inequality against female, zero denotes there is no inequality. Depending on the value of the coefficient the districts are classified into several categories like very low, low, medium, high and very high. Inequality in work participation is also calculated using the same formula.

4. Results and Discussion

The present study shows that there exist gender differentials and societal inequalities of educational outcomes in India. Adult literacy rate (ALR) (7 year+ literacy rate according to Indian Census) and Enrollment Rate (ER) in primary school are the two outcome variable for analyses in the present study. Variation in ALR outcomes shows gender based inequalities whereas variation in ER captures the social inequalities. The coefficient of inequality (CE) is positive and unfavorable for female in almost all the districts except few districts in North-Eastern India (e.g. Jaintia Hills district in Meghalaya state). The coefficient of inequality for literacy is moderate for almost 43% of all the districts (637) in India. It is very high in 54 districts and high in 160 districts. In other words, almost one third of the districts of India have high or very high values for gender based measurement of inequality i.e. coefficients of inequality in literacy. There is a significant rural-urban differential in educational attainment across the country which has emerged from the analysis. Further assessment reveals that among the rural areas of the 626 districts of India, almost half (44.9%) of the districts show either high or very high coefficient of inequality for literacy whereas the same for urban areas is merely 2.4%. This analysis distinctively shows the major contributors of the inequality coefficient are from rural sector. Medium coefficient of inequality prevails almost equally in rural (256 districts) and urban (254 districts) areas. The value for the coefficient of inequality is low for majority of the districts (51% or 326) when only the urban areas are considered whereas in rural area (67 districts) low inequality is a rare event. From the analyses it can be concluded that there is a significant rural-urban differential in educational outcomes in India. There is higher gender inequality of literacy in rural areas

compared to the urban areas. Women in rural India are in a worse off condition than their counterpart in Urban India. Inequality is low and moderate in southern, eastern and north-eastern states and the districts where inequality is high and very high are mainly clustered in northern, central and western states. Inequality is very low in some districts from north-eastern states and a few southern states (a few districts of Kerala and Puducherry).

Further analysis indicates the variation in enrollment rates across caste and regions. The result confirms existence of inequality in educational outcomes across social groups. Enrollment in primary classes is very low for tribal population. It comes out from the analyses that primary enrollment for tribal population is very low (less than 10%) in 270 districts. Very low enrollment for schedule caste population and other backward caste population are found in 139 and 86 districts respectively. Interestingly, along with very low enrolment among ST population, some districts (51) show really high enrollment rate (more than 80%) for tribal population. These two contradictory findings lead to the conclusion that there may exist an intra-caste inequality in tribal population as well. Tribal populations in the districts of north-eastern states are in a better position compared to the tribal population in the districts of central and northern India. Among the social groups, the study suggests that other backward caste (OBC) population is comparatively at a better position than the other two social groups. Tribal population is in worst condition in terms of educational outcomes. To sum up, it can be concluded that there exists a strong gender based inequality and social inequality in educational outcomes in India. There also exists a rural-urban differential in gender based educational outcomes and inter caste and intra caste social inequality in educational outcomes. The two groups who are lagging behind most are rural women and tribal population.

The gender difference in literacy rate is high for almost one third of the districts of India and medium in half of the districts (Table 3). The scenario is different for urban and rural areas of the

districts. Among the rural areas of the 634 districts, the gender difference is higher for almost 306 districts i.e. nearly 48% of the districts whereas only 4% of the districts consisting urban areas show a higher value for the same indicator. Urban areas of the districts show comparatively lower gender difference in literacy rate. When considered the gender difference in literacy in urban areas, almost 56% (358) of the districts show medium difference and 40% (250) low difference.

To establish the effects of different social and infrastructural variables on the inequality of education outcome we use the multiple regression model using the coefficient of inequality (CE) as a dependent variable and total work force, ratio of girls to boys' enrolment, percent urban population, percent of school with girls' toilet, gross enrolment ratio and percent girls as predictor variables. The multiple regression result for the coefficient of inequality (CE) on total work force, ratio of girls to boys' enrolment, percent urban population, percent of school with girls' toilet, gross enrolment ratio and percent girls shows that ratio of girls to boys enrolment variable affects the CE when the variables are unstandardized. One unit increase in ratio of girls to boys' enrolment increases CE by 0.24 units. Though the other variables like total workforce, percent urban population and percent girls are significant variables but their effects are negligible (0, -0.03 and -0.017). After standardization of the variables, the most significant variables are percent urban population followed by percent girls, total workforce and ratio of girls to boys' enrolment. The one standard deviation change in percent urban population will change the CE by 0.42 s.d. and in opposite direction. The regression result shows that the effects of the total workforce and ratio of girls to boys' enrolment on CE are positive after controlling for the other variables in the model. It further shows that with increase in urban population and percent girls the coefficient of inequality will decrease after accounting for total workforce and ratio of girls to boys' enrolment. The variables percent of school with girls' toilet and GER are not significant in the model.

5. Conclusion

The analysis indicates strong gender based differentials in educational attainment as well as regional, urban-rural differential and caste based differential in educational attainment in the districts of India. Rural sector is more likely to experience low level of educational attainment than their urban counterpart; marginalized social groups like ST and SC population face the same fate of lower educational attainment particularly in the northern and central regions of the country. The North-Eastern region shows a lower value for the inequality coefficient for educational attainment indicating a better condition of the ST population in that region. This finding indicates that there may exist an intra-caste inequality in tribal population. From the analysis it emerges that the ST population, women and rural population are lagging behind in attaining the desirable levels of education. Rural women are worst affected and are at the receiving end of the inequality in educational attainment.

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Table 1: Districts with highest and lowest differences in educational outcomes (Coefficient of Inequality CE and Difference in enrolment rate

Name of the Districts		
	Minimum Value	Maximum Value
CE_TOTAL	Jaintia Hills	Mewat
CE_RURAL	Jaintia Hills	Jhajjar
CE_URBAN	Anjaw	Pratapgarh
DIF_T	Jaintia Hills	Mewat
DIF_R	Ribhoi	Raarhig
DIF_U	Mon	Wokha

Table 2: Distribution of districts in India according to coefficient of inequality value

Coefficient of Inequality						
	Total		Rural		Urban	
Categories	Number	Percent	Number	Percent	Number	Percent
Very Low	21	3.3	16	2.5	41	6.4
Low	125	19.6	67	10.5	326	51
Medium	277	43.3	256	40.1	254	39.7
High	160	25	180	28.2	11	1.7
Very High	54	8.5	107	16.7	4	0.7
Total	637	100	626	100	636	100

Table 3: Percent distribution of Districts of India according to absolute differences in literacy rates.

	Total		Rural		Urban	
	Number	Percent	Number	Percent	Number	Percent
Low	93	14.6	64	10	250	39.1
Medium	317	49.6	264	41.3	358	56
High	212	33.2	276	43.2	25	3.9
Very High	15	2.3	30	4.7	-	-
Total	637	100	634	100	633	100

Table 4: Regression Results (with CE as dependent variable)

	Standardized Coefficients	t value	Sig. level (p-value)
Constant		6.886	0
Difference in workforce participation	0.192***	5.273	0
Ratio of girls to boys enrolment	0.145**	2.303	0.022
Percent Urban Population	-0.424***	-11.195	0
Percent of Schools with Girls' Toilet	0.011	0.284	0.776
GER	0.003	0.07	0.944
Percent of Girls School	-0.273***	-4.344	0

*p<0.10, **p<0.05, ***p<0.01

Women Education and Kanyashree Prakalpa in West Bengal

Dr. Susanta Mondal*

Abstract

Education of women is an important aspect for boosting the social and economic development of the country. Modern sociologists have identified strong linkages between women empowerment and the economic prosperity of the country. The underlying assumption behind it is to bring social development across variety of sectors, increasing economic productivity, political participation, health and sanitation, delayed marriage and making effective investment for future generation. Above all, the girls have their rights to get equal opportunity in every sphere of human endeavor. In their policy document the government states that the gender parity between boys and girls has been well achieved at the primary level. However when we move to the higher echelons of education, girls systematically fall behind the boys. This turnabout is seen to occur at the age of 13-18. At this background, the government of West Bengal has launched the Kanyashree Prakalpa in 2013. The objective of the policy is to retain the girls at their schools and prevent early marriages. Financial packages and other incentives are provided to the families for this. A social movement or pressure is necessary to make this policy a reality. Government commitment and social consciousness together would determine the fate of the policy.

Keyword: *Women education, Child marriage, Kanyashree Prakalpa.*

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Introduction:

Education has recognized to be one of the best means for achieving self-sustained economic growth and development. It is one of the main driving forces for enhancing development in different aspects of life like health, hygiene, population control, employment status etc. Development of women means to share the social platform equally with them which they deserve. Therefore women's education is necessary for achieving social development on the one hand and social justice on the other. In their policy document the government states that the gender parity between boys and girls has been well achieved at the primary level. However when we move to the higher echelons of education, girls systematically fall behind the boys. This turnabout is seen to occur at the age of 13-18. More alarming is the spate of child marriage that is revealed by the District Level Health Survey (DLSH) reports. The proportion is alarmingly high in West Bengal (31.6%) that is far above some of the states such as Kerala (2.8%), Punjab (3.9%), and Haryana (5.9%) (DLSH 4, 2012-13). Even in non-slum areas in Kolkata about a quarter of the girls are married before reaching adulthood (Govt. of WB, 2013).

It is a well known phenomenon that a body cannot thrive if half of its structure is in paralysis. In the same vein women are regarded as the 'better half of the human society'. Without their development no society can prosper. Modern sociologists have identified strong linkages between women empowerment and the economic prosperity of the country. Leaving aside such illuminated logic, the girls have their rights to get equal opportunity in every sphere of human endeavor. Keeping this stark background, the government of West Bengal has launched the Kanyashree Prakalpa in 2013. The word literally means the beauty of a girl. This beauty does not exist in the physical qualities but in the achievement of features that are immensely humane in nature. Education obviously adds to the radiance of a girl. The objective of the policy is to retain the girls at their schools and prevent early marriages. Financial packages and other incentives are provided to the families for this.

The policy is acclaimed by the United Kingdom's Department for International Development and UNICEF (The Hindu, 2014).

Section II provides a brief analysis regarding Gender inequality in education in India and West Bengal. Section III analyses the background behind the introduction of Kanyashree Prakalpa by the West Bengal Government. Another important analysis regarding relation between child marriage and Kanyashree Prakalpa has been discussed in section IV. Next in section V, actual no of girl beneficiaries and Governments's target has been analysed. Section VI concludes the discussion.

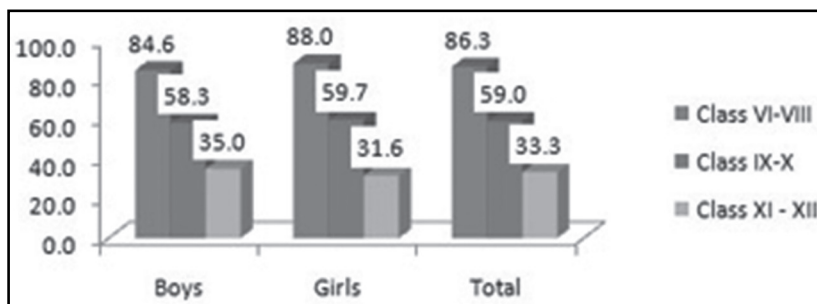
II Gender Inequality in education

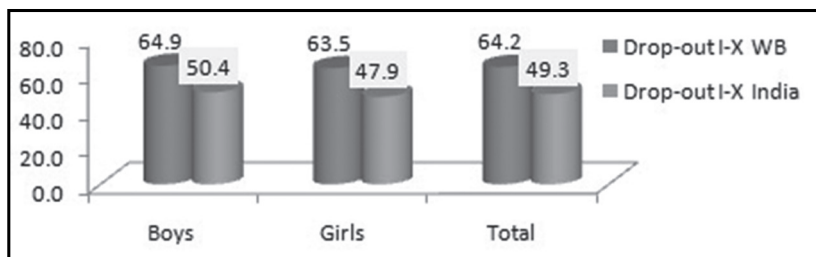
After the independence, India started the task of transforming the elitist system of education of the colonial period into a mass based education, focusing on the principle of equity and social justice. This effort has witnessed several significant policy changes resulting in remarkable progress as reflected in the achievement of near universal enrollment of children in schools. One of the significant achievements in this effort was the amendment of the constitution, making education a Fundamental Right and incorporation of Right to Education act in 2009 in the Indian Parliament. The country has also started the effort of making secondary education universal and ensuring equitable access to education for all (Govinda, 2016). These measures have boosted higher expectations for the future. Though the pace of social change in West Bengal has accelerated in recent years, the problem of gender inequality still remains in once Renaissance enlightened Bengal. The state has failed to stabilize a movement for the development and up liftment of women, in spite of various political, social, economic and cultural movements. Education for all (EFA) campaign brought some fruit in the nineties, at least in reducing the gender gap. It was reduced to 17 percent in the 2001 census and 11 percent in 2011 census. After achieving considerable improvement in primary enrollment, focus has now shifted to expanded enrolment for future demand at secondary and higher levels. This includes the

financial and qualitative implications of expanding secondary education systems and the need for second-chance alternatives to formal schooling. In fact secondary education was quietly neglected, “... Squeezed between primary education, the objective of much attention, and higher education, which has never really lost its supporters” (Lewin, K. and F. Caillods, 2007). Achievement of girl’s and women’s education has generally been recorded in terms of increase in enrollment, promotion and completion at both primary and secondary levels. But these statistics don’t reveal the disadvantages in relation to girl’s educational opportunity. The lives of girls are moulded by multiple disadvantages, formed by social norms, poverty, socio-economic status, cultural attitudes and expectations, ethnicity and geographical location. Inequalities in access to secondary education are especially prominent for girls from low-income and impoverished families, those living in isolated geographical areas and those who are pressured into dropping out by family obligations, early marriage, domestic work, discrimination, violence, non-ownership of assets and disability (UNESCO, 2012).

The Selected Educational Statistics (2010-11) Reports published by MOHRD, Government of India shows that for the state of West Bengal, the Gross Enrollment Ratio (GER) gradually decrease for high school (IX-X) and higher secondary (XI-XII) which means that more children, including girls are leaving schools in the adolescent age group.

GER (2010-11) West Bengal: Selected Educational Statistics





Source: Child Development Department and Women Development & Social Welfare Department, Government of west Bengal

This leads to a high drop-out rate. The drop-out rate between Class I-X was 63.5% for girls and 64.9% for boys which are relatively higher in comparison to all India average: The ASER 2012 shows that while only 4.2% girls are out of school in the age group of 11-14 the percentage goes up considerably (14%) for the age group 15-16 years which shows that the girls become more vulnerable in this age group.

III Background of Kanyashree prakalpa:

In order to change the status of girls, belonging to lower income group in West Bengal, State government has introduced the Kanyashreeprakalpa in 2013. It is a direct cash transfer scheme for underprivileged girls who are often forced to leave schools even without completing elementary education. It has attempted not just to promote gender equality in education, but to empower girls and women through and beyond education. Programme designers have moved beyond conventional approaches, recognizing the valuable contributions that all actors can play in the empowerment of girls and women. With this the Government is trying to break the circuits of educational failure, poverty, economic and social exclusion.

Kanyashree Prakalpa is a conditional direct cash transfer scheme, with the aim of improving the status and well being of the girl child in West Bengal belonging to lower income groups. There are two categories under this scheme: K-1 and K-2. K-1 assures an annual scholarship of Rs. 500/ with the eligibility criteria that

the girl should be between 13-18 years (enrolled in class VIII to XII) and studies in a Government or a Government undertaking school. Besides, the girl should be unmarried belonging to a family with an annual income of less than or equal to Rs. 120000/ per annum. On the other hand, K-2 is applicable to those girls who are enrolled in an institution of Education or training or an institution of Higher Education with the other eligibility criteria as in K-1. As per this scheme each incumbent will receive Rs. 25000/ as a onetime grant. The main reason behind the introduction of the kanyashree Prakalpa is twofold- one is the prevention of girl's dropout from school and the other is the reduction of girl child marriage. The presumption is that K-1 will meet some recurring expenses of education which will prevent the girls of poor families to discontinue the study at early stage of education. Again K-2 will motivate the girls to pursue higher education after completion of school education by meeting the recurring expenses at college level. So a girl who comes under the purview of Kanyashree Prakalpa can continue her study up to college/university level without facing any financial obstacles. It will encourage the parents of economically weaker section to motivate their girls to attend the school/college and this will automatically prevent them from getting their daughter's early marriage. As the annual income of more than 90 percent of the people in West Bengal comes under the purview of this scheme, a majority portion of poor family girls would come under the umbrella of Kanyashree (Das, 2014).

IV Child Marriage and Kanyashree Prakalpa:

Child marriage is one of the most prevalent forms of sexual abuse and exploitation especially for girls. It serves as a means of perpetuating power imbalance between men and women, both in the home and outside (Ghosh and Kar, 2010). Several factors are responsible for the persistence of the phenomenon: gender norms and expectations, traditional practices around marriage, safety concerns and family honour, poverty, limited education and livelihood opportunities and weak implementation of the law. Patriarchal value also plays a significant role in child marriage.

Girls are regarded as a 'property' moving from the father's to the groom's household and their role as housewives is the only future conceived for girls by their family (UNICEF, 2012). Women's position is at the junction between production and reproduction, between economic activity and care of human beings and therefore between economic development and human development. Though they are the significant contributors in both spheres, but discriminations against them are also pervasive. The discrimination reflects in education, employment, work place, family and socio-political sphere. The child marriage system is also a reflection of discrimination against women (Lal, 2015). Several factors are responsible for child marriage. In a patriarchal society like India, parents are not expected to use the income of their daughters. Therefore, in many cases, they are unwilling to encourage their daughter to get higher education or to do something special in the educational field. Even educated daughters are not encouraged to work. They are also clearly stated that in the near future groom's family will decide whether she will work or not. On the other hand, in a family of boy and girl, boys get first priority in educational matters. Whereas Sons are expected to earn money and support their family, take care of parents in old age, to provide dowries for sister's marriage and upholds the status of the family as a whole, girls are considered as 'Amanat' or 'Dharohar' (Drury, 1993). As they will go to their husband's houses after marriage, so it's a waste of the money to educate them. Rather it seems better to them to save money for daughter's marriage. Other determinants of educational attainments include family income or wealth, parental education, empowerment and education of mother, family size, caste affiliations, and place of residence.

Health is another important aspect that directly influences women's education. In West Bengal, 65% women of less than 18 years of age have got early marriage. Consequently, some unhealthy practices like female foeticide, early motherhood, ill health due to malnutrition, conceive of baby several times either for religious reasons or for the urge of preferred child (boy / girl) becomes some

common feature. Again, preventable diseases and unequal access to health care also affect rural women in West Bengal. Incidents of domestic violence against women, harassment and suicide due to dowry, rape, kidnapping etc., are some common feature. As a result sex ratio goes against women. This unequal sex ratio also has a marked impact on educational attainment (Pramanik, 2014).

V Beneficiaries from Kanyashree Prakalpa:

Kanyashree Prakalpa is expected to bring immense improvement in education, health and empowerment of girl child and larger society in the state. As per Planning Commission of India (June 2014), 20 percent of population are living below the poverty line and annual income of more than 90 percent families are lower than the income which is stipulated (Rs. 120000/ per annum) by the Kanyashree Prakalpa (Das, 2014). As most of the parents of these families are struggling to fulfill their daily needs, they are unwilling to continue their girls' education. Most often girls discontinue her study and drop out from school because earning money is the prime importance to them. So a large number of girls would come under the purview of this scheme and able to continue their study by utilizing the scholarship. . The state government allocated Rs 287 Crore for the Kanyashree programme for the year 2013-2014. Women and Child Development Minister of West Bengal, Shashi Panja declared that about 15.52 lakh students would come under the first kind of benefit (K-1) by March 2014 and 1.3 lakh students under the second benefit (K-2) by that time. She also added that till January, 2014, 8.3 lakh girl students have received annual stipend of Rs.500, while around 48,000 girls who turned 18 were provided one-time grant of Rs 25,000 (India Today online, Feb 13, 2014). From Table 1 we see that West Bengal Government has targeted to provide K-1 type of benefit to 21.2 lakh and K-2 type of benefit to 3.69 lakh girl students.

Table 1: Target for DPMUs till 31st March 2014 –Annual scholarship (K-1) and One time Grant (K-2)

District Name	Approx. Projected Population of 18 years old girls (0.95%)	% of Married Girls DLHS 3	Approx. No of Expected un-married Girls	Enrollment VIII-XII (2012-13)	K-1 80% of Total Enrollment	K-2 (70% of Un-married Girls)
Darjiling	17499	22.7	13527	21285	17028	9469
Jalpaiguri	36762	17.1	30476	134744	107795	21333
Koch Bihar	26816	46.4	14374	103199	82559	10062
Uttar Dinajpur	28508	38.2	17618	89996	71997	12333
Dakshin Dinajpur	15874	48.7	8143	58293	46634	5700
Maldah	37981	55.1	17053	135697	108558	11937
Murshidabad	67473	61.6	25910	228779	183023	18137
Birbhum	33273	57.2	14241	94767	75814	9968
Bardhaman	73375	38.9	44832	202370	161896	31382
Nadia	49101	40.4	29264	175776	140621	20485
North 24 Parganas	95787	27.1	69829	273605	218884	48880
Hoogly	52444	26.7	38441	157268	125814	26909

Bankura	34165	49.7	17185	99594	79675	12029
Purulia	27816	51.9	13379	78625	62900	9366
Howrah	45996	30.7	31875	129440	103552	22312
Kolkata	42623	19.1	34482	102571	82057	24138
South 24 Par- ganas	77455	39.9	46551	224373	179498	32585
Paschim Medini- pur	56461	45.8	30602	178129	142503	21421
Purba Medini- pur	48395	38.9	29570	158959	127167	20699
Total	867803	N.A	527351	2647470	2117976	369146

Source: Child Development Department and Women Development & Social Welfare Department, Government of west Bengal.

VI Conclusion:

Education plays a pivotal role in the socio-economic development of a country by creating skilled, responsible and resourceful citizen. While elementary education helps to create the foundation of any country, higher education helps to make human intelligent, efficient, and more rational. It also helps the up gradation of the marginalized sections, especially women in society. It is well documented that there is a gender gap in the enrolment of boy and girl students in our country as well as in West Bengal. Government of India has taken various plans and policies to reduce the gender gap at higher education level, but those are not sufficient to cope up with the problems of gender inequality. Government should undertake, if required, positive discrimination in favour of female and introduce infrastructure to bring more women to the arena of education. Gender and social legislation related courses should be incorporated in the study material to spread social awareness on various aspects like gender equality in education, women empowerment, child marriage etc. Moreover,

mother's higher education is associated with children's acquisition of knowledge and literacy skills as well, as Brigham Young once quoted "You educate a man; you educate a man. You educate a woman; you educate a generation." West Bengal Government's Kanyashree prakalpa is a modest attempt towards achieving that goal, by giving financial support towards fostering girl's education. But it should be remembered that Plans and policy formulation is not a last thing, its implementation is very much necessary. A strong social movement or pressure is necessary to make this possibility a reality and to have a meaningful dent in discontinuation of female study. Government commitment and social consciousness together would determine the fate of the policy.

Notes:

1. "Report of the expert group to review the methodology for measurement of poverty", Government of India, Planning Commission, June, 2014. This report used the methodology of Tendulkar and Population as on 1st March 2012 for estimating number of persons below poverty line. (2011 Census population extrapolated)

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Health Status of Women of Tribal and Non-Tribal Rural Societies of Bankura District, West Bengal, India

Dr Somnath Mukherjee*

Introduction

Status of women is one of the significant indicators of overall development of a society. The United Nations (1975) has defined the status of women as – “Conjunction of position a women occupies as a worker, student, wife, mother ... of the power and prestige attached to these positions, and of the right and duties she is expected to exercise” (United Nations 1975). In general women empowerment can be investigated especially by four major indicators and these are educational status, decision making power, employment status, and health condition. In this paper status of women society of two absolutely different societal classes i.e. Non-scheduled with low economic sufficiency and Scheduled sections has been investigated by understanding the nutritional condition on comparative ground with the help of Body Mass Index (BMI).

It cannot be denied that many good initiatives are being taken, both by Central and State Governments of our country for the betterment of women. Yet in some areas, results have not reached to the desired level. I am here highlighting the factors responsible for it. For judging the health status of women-society of two different societal-classes, the method BMI is selected here as it is commonest and easiest method through the measurement of height and weight.

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Objectives

The specific objectives of the study are as follows –

1. To understand on comparative ground the nutritional condition of women society between Non-scheduled with relatively low economic sufficiency and Scheduled section by Body Mass Index (BMI).
2. To investigate the reasons behind the nutritional deficiency particularly among women of so called civil society.
3. To peep into and scan the relationship between health and economic sufficiency and
4. To recommend suggestions for Policy makers on the raised issues.

Study Area

A small village Dubrajpur under Simlupal Community Development Block of Bankura district has been selected to carry out the study. The latitudinal and longitudinal coordinate of the village under study is 22° 57' North and 87° 06' East. Total geographical area of the village is 330.14 Hectares. In this village the first author is acted as a teacher and during her tenure of service, being a teacher of geography she observed that villagers especially the women of Non-scheduled society, having lower economic sufficiency suffered from various health related matters. The author also observed that women from Scheduled society are comparatively lived healthy life than their counterpart. It may also be thought that generally women of this category have maintained their health by their traditional measures, and if problem arises they may not come to nearest health centers. In this way ill-health condition may not be counted or registered to understand the real picture. So the author have decided to investigate health condition of both the societal classes to surmise the actual truth.

Database and Methodology

The present study is mainly based on primary survey. To investigate the body masses, heights and weights of the selected women have been collected purposefully by door to door survey

of twenty households including ten households of Non-scheduled, having low economic condition and ten households of Scheduled society, combines Scheduled Castes and Scheduled Tribes. It is noted that during survey the author are taken into account the season of investigation. The survey is done during the months from April to July to have better and actual results and to avoid the winter season as in this season measurement of weight may vary due to extra weights of the woolen cloths.

Why BMI? BMI is selected for judging heath condition because it is one of the reliable, commonest and well accepted methods and easy to measure.

What is BMI? BMI is a measure of weight relative to height and is commonly used to classify underweight, overweight, normal weight and obesity of adult men and women. It is defined the weight in kilogram divided by the square of the height in meters. The calculation of BMI is done with the help of a website called www.everydaycalculation.com.

Body Mass Index (BMI) can be computed by using the following formula –

$$\text{Body Mass Index or BMI (kg/m}^2\text{)} = \text{Weight (kg)}/\text{height (m}^2\text{)}$$

Further, status of nutrition is evaluated by using internationally accepted BMI guidelines given by World Health Organization (WHO) and the cut-off points of BMI are –

Internationally Accepted (WHO) BMI cut-off points

1. Under Nutrition : BMI < 18.5
2. Normal : 18.5 ≤ BMI < 25.0
3. Overweight : BMI ≥ 25.0

(Bose and Chakraborty 2005)

It is to inform that “BMI < 18.5 has been used as the cutoff point for assessment of CED (chronic energy deficiency)” (Mondal, et al. 2005).

Results and Discussion

Relative Health Condition of Women Society of Non-Scheduled But Low Economic Sufficiency and Scheduled Class

The nutritional status of women reveals the socio-economic condition of a particular section of a society. In this regard, a village level anthropometric study has been done to determine the nutritional status of women of two absolutely different societal classes i.e. Non-scheduled with low economic sufficiency and Scheduled sections with the help of Body Mass Index (BMI). In this context, Bose and Chakraborty (2005) in their contribution 'Anthropometric Characteristics and nutritional status based on body mass index of adult Bathudis: a tribal population of Keonjhar District, Orissa, India' wrote the significance of the application of BMI. According to them the use of Body Mass Index (BMI) is "inexpensive, non-invasive and suitable for large scale surveys" (Bose and Chakraborty 2005). On a Similar note, Varadarajan and Prasad (2009) wrote – "... it does not show the difference between fat and muscle, it is more closely associated with measure of body fat composition than weight and height relations. But, the calculation of BMI gives an idea about the condition of the human body in relation to specified BMI ranges" (Varadarajan and Prasad 2009).

After analyzing both Table 2 and Figure 1, it is revealed that, 70 per cent women of Non-scheduled class are found underweight condition and rest of the 30 per cent women is registered normal BMI. In comparison, 80 Per cent normal range of BMI is observed among women of Scheduled society which includes both SCs and STs. Besides, among them out of the total cases 20 Per cent women have registered unexpectedly overweight. This disparity regarding BMI is found due to the differences in overall financial condition. Non-scheduled families under survey have very limited and low fertile agricultural land. This insufficient production of crops leads to non-fulfillment of their basic requirements of food throughout the year. Further, cent percent of the head of the families have no permanent jobs in secondary or tertiary sectors. Besides, they also

don't have any family business of such kinds which could make a balance in family income and strengthen economic sufficiency. Due to such low financial condition, they are unable to avail necessary nutritious foods entrench with vitamins, minerals, fats, proteins, etc. It is seen that, in their daily meals most common food is only rice or puffed rice with potatoes. Occasionally they will consume fish, milk, eggs, etc. Moreover, maximum households have larger family size which again restricts these people to afford sufficient amount of foods or calorie intakes.

On the contrary, in case of Scheduled section, 80 Per cent families have permanent government jobs. Rests of the families have no such jobs but they have sufficient amount of agricultural land and production to maintain a good healthy life. Greater economic sufficiency helps them to afford nutritious foods and make them physically healthy. So the women of these backward class families are naturally registered normal BMI.

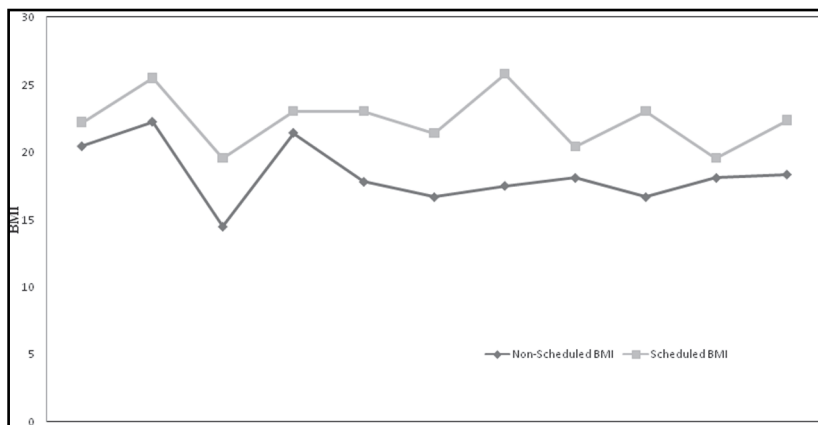
Table 2: BMI Results of Women between Non-Scheduled/ General and Scheduled

House-holds	Non-Scheduled	House-holds	Scheduled (SC & ST)
	BMI values		BMI values
1	20.41 Normal	11	22.22 ST Normal
2	22.22 Normal	12	25.51 SC Overweight
3	14.47 Underweight	13	19.56 ST Normal
4	21.40 Normal	14	23.05 SC Normal
5	17.78 Underweight	15	23.05 SC Normal
6	16.65 Underweight	16	21.40 SC Normal
7	17.48 Underweight	17	25.81 SC Overweight
8	18.07 Underweight	18	20.41 SC Normal
9	16.65 Underweight	19	23.05 SC Normal
10	18.07 Underweight	20	19.56 ST Normal
Mean	18.32 Under nutrition	Mean	22.36 Normal

Source: Compiled by the author

The Body Mass Index or simply BMI status of two selected societal classes has been furnished here by comparative line graph (Fig 1).

Figure 1: Differences in Nutritional Condition of Women between Non-Scheduled & Scheduled Societies



Differences In The View Point Of Age Of Marriage Between Two Societal Classes

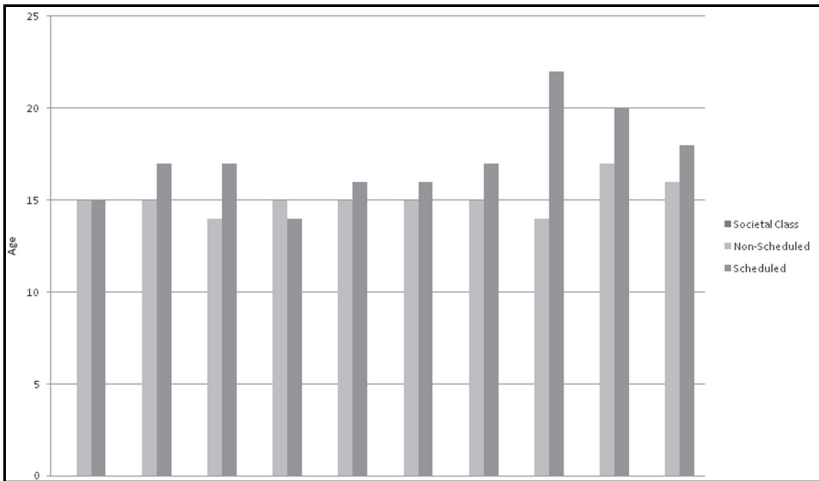
Facts: The age group of women of both general and backward classes varies from 40 to 50 years. But the view point of age of marriage a great disparity is found between two classes. In case of genera females 80 Per cent got married below the age of 15 and other 20Per cent are in between 15 to 20 yrs. But in case of backward class 70 Per cent got married 15-20 yrs. and 10 Per cent is after 20 (Table 3), (Fig 2).

Table 3 of comparison of age of marriage

Societal Class	Age of Marriage										Average
Non-Scheduled	15	15	14	15	15	15	15	14	17	16	15.1
Scheduled	15	17	17	14	16	16	17	22	20	18	17.2

Source: Compiled by the author

Figure 2 : Difference of Age among Women of Non-Scheduled & Scheduled Societies



Educational Attainment Among the Selected Target Sections

Facts: From the view point of educational attainment, there is a great disparity between two societal sections. Women belong to Non-scheduled or General are too much away from education. 50 Per cent of them are totally illiterate, where as in backward classes only 10 Per cent is illiterate. 50Per cent of SC/ST females got education up to class-V, where as 30 Per cent general females got it. Not a single general woman is found Madhyamik passed, where as only 01 of backward classes noticed Madhyamik was passed (Table 4).

Table 4: Female Educational Attainment of selected 20 Households

Educational Attainment			
Households	Non-Scheduled	Households	Scheduled
1	Illiterate	11	Class-IV
2	Class-IV	12	Class-V
3	Illiterate	13	Class-V
4	Illiterate	14	Illiterate
5	Class-VIII	15	Class-VIII

6	Illiterate	16	Class-IV
7	Illiterate	17	Class-VIII
8	Class-IV	18	Class-IV
9	Class-V	19	Secondary (Class-X)
10	Class-VIII	20	Class-VIII

Source: Door to door survey

Type of Houses

Facts: Type of house is also counted as one of the important parameters to judge the economic sufficiency of a household. Obviously better house reflects better economic condition of that household. Among the selected twenty households, Scheduled households have comparatively better residential status than the Non-scheduled. Cent percent general families are living in kaccha houses. They have not used any modern amenities due to low economic condition. 50 Per cent of them are deprived of electric facilities. On the contrary, 70 Per cent of backward families are living in pucca houses. They all have electric facilities and other modern amenities to live. Although, 30 Per cent of them are living in kaccha houses but those are at good condition in comparison with the kaccha houses of their counterpart. It is also noticed that, under Indira Awas Yozona, rest of the 30 per cent will be soon shifted to pucca houses (Table 5).

Table 5: House pattern among Selected 20 Households

House Types			
Households	Non-Scheduled	Households	Scheduled
1	Kaccha House	11	Kaccha House
2	Kaccha House	12	Kaccha House
3	Kaccha House	13	Pucca House
4	Kaccha House	14	Pucca House
5	Kaccha House	15	Pucca House

6	Kaccha House	16	Pucca House
7	Kaccha House	17	Pucca House
8	Kaccha House	18	Pucca House
9	Kaccha House	19	Pucca House
10	Kaccha House	20	Kaccha House

Source: Door to door survey.

Conclusion

From the above discussion, a conclusion can be drawn that women of Non-scheduled section as well as their families are deprived of basic needs of life and they are economically backward than so called identified socially backward classes. Backward classes generally receive different grants and financial benefits time to time from governments. On the other hand, even after poor economic condition, being a Non-scheduled section, in natural terms doesn't get such facilities. This leads to even worse condition to the poorest of the poor. Thus, immediate nutritional intervention plans and programs need to be implemented among the women of Non-scheduled section. Poor economic condition, societal despise, failure of governmental schemes etc. are the major reasons behind such severe health status among these particular women society. As under nutrition has numerous underlying causes, future study should be aimed at identifying the probable causes of such high under nutritional rate among women of Non-scheduled section of villages like Dubrajpur of Bankura district in India.

In consideration with the nutritional deficiency of the affected women society of the Non-scheduled section of Dubrajpur village, the paper seeks to draw attention of the Govt. planners and policy makers by introducing following measures to combat the situation

- i. Plans should be based on ground reality and to avail this one has to employ proper sample survey.
- ii. Different economic facilities are given to the backward classes without considering the financial condition of the

families. Being non-schedule classes, they are deprived of getting such facilities. So, different economic norms should be based on considering the financial condition of families, not only considering the socially-backwardness

- iii. Govt. should give attention to the families who are Non-scheduled but are deprived of better economic sufficiency.
- iv. Govt. can provide some economic services to the affected women of General class like building the Self Help Groups, inclusion in the NREGA etc.
- v. Women society, having low nutritional deficiency should be taken care of from Govt. and Non-Govt. sources like National Rural Health Mission etc.
- vi. Education in real terms could bring in the fruits of development of the affected societal classes. Education can only obsolete the gap between a rich and a poor and in turn all the societal problems. It can only be source to empower women society in real sense.

In fine, it is referred that with this paper both the author would like to highlight that from proper planning perspective, people should not be judged on their societal class but on their real economic sufficiency. Beside this, planning for Scheduled people should be made on the basis of their norms, ethos, culture, and requirement. More importantly, enrichment of women society from all perspectives and classes should be the basic prioritization of planning and management for overall development of the nation.

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Financial Inclusion: Taking Banking Services to the Common Man

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Inclusive growth has been the main objective of Eleventh Plan which is now being implemented. Inclusive growth means including all sections of the population in Committee was appointed by the Govt. of India in 2006 to recommend a strategy to achieve higher financial inclusion in the country. The Committee defines financial inclusion as follows:

“Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.”

Financial services refer to a whole range of services offered by the financial intermediaries who act as the intermediaries between the surplus spending units and the deficit spending units. Banks, insurance companies, mutual funds, and non bank finance companies are examples of such financial intermediaries. The financial services offered by these financial intermediaries are deposits, loans, insurance, payment facilities etc. By providing these services to vulnerable groups and weaker sections the aim is to help them come out of poverty. As banks are the gateway to the most basic forms of financial services, banking inclusion / exclusion is often used as analogous to financial inclusion / exclusion.

Extent of Financial Inclusion

Let us consider the extent of financial inclusion in India taking

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only the Banking sector. In a recent study Mandira Sarma (2007) has evolved the concept of index of financial inclusion. This index is based on three aspects of financial inclusion / penetration of the banking system, its availability to users and its actual usage. Penetration is measured by the number of bank accounts per 100 population, availability is measured by the number of bank branches per thousand population and usage is measured by the size of bank credit and deposit relative to the GDP.

In India there are three types of banking agencies – scheduled commercial banks in public and private sectors, regional rural banks and cooperative banks. Among them data on public sector commercial banks are easily available from the RBI and most studies use them. S. S. Sangwan (2008) in his study has considered state-wise deposits and credit accounts of commercial banks as in March 2006. This study reveals variation of financial inclusion among the states. The study shows that percent age of adult population having savings bank account is 63 for all India. Among the regions, it is the lowest, 42% in North Eastern Region and highest, 86% in the Northern Region. The coefficient of variation is 55% across the states.

The States / Union Territories with financial inclusion less than the all India average in ascending order are Manipur (20), Nagaland (24), Chhatisgarh (34), Mizoram (35), Bihar (36), Orissa (39), Madhya Pradesh (42), Assam (43), Tripura (43), Meghalaya (46), Arunachal Pradesh (47), Jharkhand (50), Rajasthan (50), West Bengal (54), Sikkim (60), and Uttar Pradesh (62). While Chandigarh, Goa, Delhi, Punjab, Pondichaery, Uttaranchal, Daman and due, Kerala, Haryana and Himachal Pradesh have financial inclusion of more than 20% above the all India average, the other states mainly from southern and western Region have moderate financial inclusion equal to national average or up to 20% higher.

The above analysis has been done on the basis of saving deposit accounts per hundred adults. If instead we take the credit accounts

per hundred adults the figure is only 16 percent for all India. It is also the lowest at 8% in the North Eastern Region and highest at 29% in the Southern Region. The coefficient of variation is 240% across states. It is also found that there is no visible positive association between inclusion in terms of savings and credit accounts. For example in terms of savings account Chandigarh ranks 1 but in terms of credit account its rank is 28. Again the rank of Goa in terms of savings account is 2 but its rank in terms of credit account is 30 and so on. It is also seen that states with lower per capita income have more inclusion in terms of credit accounts, which may be due to more financing under central and state government's subsidy schemes.

Indirectly financial inclusion of low income people in terms of credit accounts has taken place through various government sponsored credit schemes like SFDA / MFDA in early 1970's IRDP since 1978 to 1999 and Swarnajayanti Gram Swarajgar Yojana (SGSY) since 1999. The Kisan Credit Card are the latest schemes to link low income people with banks. One common weakness of these credit schemes has been the absence of saving / current account in general and taking a loan from banks has been one lifetime event for majority of such borrowers. It is doubtful whether such one time credit contract with banks can really be termed as financial inclusion as it does not lead to an economic inclusion on sustainable basis.

Reasons for Financial Exclusion

There are a variety of reasons for financial exclusion. The states / regions with low level of financial inclusion indicates that the first major constraint may be the geographical or physical access when clients are required to visit a branch. In remote, hilly and sparsely populated areas with poor infrastructure, physical access itself acts as a deterrent. Average distance of a bank branch from household and cost involved in terms of fare and time to reach a branch / ATM is an important determinant of financial inclusion. From the demand side, lack of awareness, low incomes / assets, social

exclusion, illiteracy act as barriers. Banks have minimum account – balance requirements or fees that may be out of reach of many potential users. Low level of income with more than 25 percent families below the poverty line may still remain a barrier. From the supply side, distance from branch, branch timings, cumbersome documentation and procedures, unsuitable products, language, staff attitudes are common reasons for exclusion.

All these result in higher transaction cost apart from procedural hassles on the other hand the ease of availability of informal credit sources makes these popular even though they are costlier. The requirements of independent documentary proof of identity and address can be a very important barrier in having a bank account especially for migrants and slum dwellers.

Who are excluded?

The financially excluded sections largely comprise marginal farmers, landless labourers, oral lessees, migrant labourers, self employed and unorganized sector enterprises, urban slum dwellers, ethnic minorities and socially excluded groups, women and senior citizens, educationally and economically deprived groups. While there are pockets of large excluded population in all parts of the country, the North –Eastern and central regions contain most of the financially excluded population. NSSO data reveal that non institutional sources are still dominant in rural India.

Measures for Financial Inclusion

Several measures have been adopted in recent years to increase financial inclusion.

- ❖ RBI in its 2005-2006 credit policy issued guidelines to make available ‘no frills’ account with nil or very minimum balance and charges.
- ❖ All printed bank materials have to be made available in regional languages.
- ❖ KYC procedures have been simplified for low – income persons.

- ❖ RBI advised all commercial banks to make available general purpose credit card up to Rs. 25,000 in the nature of revolving credit facility at their rural and semi urban branches.
- ❖ An Internal Group set up by RBI on micro finance (Khan Committee) recommended to permit banks to use micro finance institutions as business facilitators and correspondent to enable banks to increase their outreach and ensure greater financial inclusion. Accordingly since January 2006 banks can provide full range of banking services through micro finance institutions. Previously MFIs could only provide credit but not open bank accounts.
- ❖ The Credit Information Bureau Act. 2006 will eventually establish a credit bureau that makes available credit histories of individuals and small businesses. This would lower risk for banks in extending credit further.
- ❖ In the budget speech in February 2007 the Finance Minister of the Government of India announced setting up of two funds of Rs. 500 crore each viz. Financial Inclusion Fund with NABARD and Financial Inclusion Technology Fund.
- ❖ Two recommendations of the Committee on Financial Inclusion have been accepted by the Government. They are: (i) to advise commercial banks including RRBs to add at least 250 rural household accounts every year at each of their rural and semi-urban branches; and (ii) to allow individuals such as retired bank officers, ex-servicemen etc to be appointed as business facilitator or business correspondent or credit counselor.

Role of Information Technology (IT)

In the present day context, IT solutions for providing doorstep facilities hold the key to enlarging financial inclusion. Pilot projects have been initiated using smart cards for opening bank accounts with biometric identification. Link to mobile or hand held

connectivity devices ensures that the transactions are recorded in the bank's books on real time basis. Some state Governments are routing social security payments as also payments under NREGS's through such smart cards. The same delivery channel can be used to provide other financial services like low cost remittances and insurance. The use of IT also enables banks to handle the enormous increase in the volume of transactions for millions of households for processing, credit scoring, credit record and follow up. IT can reduce cost and time in processing of applications, maintaining and reconciliation of accounts and enable banks to use their staff at branches for making the critical minimum effort in sustaining relationship especially with new account holders.

In rural areas customers cannot be expected to come to branches in view of opportunity cost and time and hence banks will have to reach out through a variety of devices such as weekly banking, mobile banking, satellite offices, rural ATMs and use of post offices. In urban and even in rural areas where mobile phones have penetrated, banks could use mobile technology for facilitating banking transactions. There are more than one crore mobile users today. The number of mobile phones currently is more than the number of borrowers from the banking system. Mobile phones can be used to transfer funds real time from and to bank accounts and to make remittances and payments at very funds real time from and to bank accounts and to make remittances and payments at very funds real time from and to bank accounts and to make remittances and payments at very low cost. Once the data base and track record are established, a multitude of financial services can be offered including savings remittance, receipt of salaries, pensions and payments for utilities, loan, insurance and mutual fund products., Here the branches can render more business and variety of products to existing clientele as also source new customers within the area of operation.

Financial inclusion offers a huge potential for business in terms of resources and assets and banks therefore need to take aggressive

steps to use technology, business processes and personnel to be able to exploit this potential in innovative and creative ways. In a branch banking model, local community based organizations or respected persons could be used to deal with the information asymmetry problem by leveraging the knowledge about customers available with such entities / persons to reduce credit risk and transaction cost. Even if post offices and postmen are not used for actual delivery of services, they can be used for the invaluable information and data they possess for direct marketing. There are a number of such organizations and delivery channels – including retired bankers and school teachers – who can be used for such credit enhancements in the form of reliable information.

State Governments such as in Andhra Pradesh are actively looking at making pension payments as also disbursements under NREGS through use of smart cards linked to bank accounts. The same card could be used for social security programmes as also banking transactions and can act as a unique identifier card. All relevant details relating to the person can be stored on the card with biometric identification. Experiments are underway for low cost ATMs with biometric identification for withdrawal of cash that could enable a low cost and therefore more sustainable way of financial penetration while ensuring safeguards against foul play.

RBI has set up an advisory group on IT solutions for financial inclusion and it is hoped that collaborative effort among banks, governments and post offices will be facilitated by the deliberations of this group.

SHG Approach and Financial Inclusion

As an innovative credit channel, the self help group (SHG) approach was introduced in 1982 to link poor people with bank credit. Under this programme, about 40 million rural families have been linked with banks up to March 2007. The distinguishing feature of this approach as compared to other sponsored credit schemes is the learning of management of own money by the poor before availing bank loan. Moreover, the SHG approach does not

involve any subsidy. Hence it is sustainable with its own strength. A number of studies have found that SHG approach reduce the transaction cost for bank and loan availing cost of borrowers. In financing SHGs, the requirement of collateral by banks has been replaced by peer group pressure and hence this approach has enabled social and economic inclusion of women by waiving the requirement of collateral. It is estimated that the outreach of the SHG programme is the maximum in southern states which account for 52 percent of the total SHGs in India and it may be one of the reasons for higher financial inclusion in terms of saving as well as credit accounts in this region.

SHGs with dominance of women (86%) and the poor sections of the population are linked with bank through one or another facilitator. The banking education is the philosophy of SHG approach and hence it is apt to the objectives of financial inclusion. However, all the members may not be having the individual saving accounts due to lack of awareness about benefits of bank account and the constraints like illiteracy, higher cost in accessing the branch, no surplus to pay initial deposits. The central and state governments can contribute in minimizing some of these constraints by providing initial matching grant for opening saving account and technological support to access through public phones and increasing number of rural ATMs in government establishments like post offices, schools and hospitals.

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Does Female Employment Pattern In Rural India Re-Inforce Gender Inequalities ? A Study Of NSS Data

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Abstract

Our paper explores the latest Employment-Unemployment Survey (EUS) data published by National Sample Survey Office (NSSO) to study the pattern of female work and to ascertain the reasons of decline in female labour force participation. We have investigated whether there is an increased movement of female workers into un-remunerative, subsistence work which is difficult to measure as per the guidelines of NSSO. The scenario of rural India for the year 2011-12 has been studied, using unit level data of the 68th Round. A regional analysis has been attempted to see the pattern of employment (paid-work or unpaid-work) for women workers from different socio-economic classes. Logistic regression framework has been used to denote that relegation of women to unpaid work is a major issue. Regions, present a varied picture but the double burden of disadvantage and inequality prevails on women workers.

Keywords: Gender, Employment, Rural, Land-Ownership, Female Labour Force Participation.

JEL Classification: J16, J21

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Introduction

Social inequality occurs when resources in a given society are distributed unevenly, typically through norms of allocation, that engender specific patterns along lines of socially defined categories of persons. Economic inequality, usually described on the basis of the unequal distribution of income or wealth, is a frequently studied type of social inequality. While many societies worldwide hold that their resources are distributed on the basis of merit, research shows that the distribution of resources often follows delineations that distinguish different social categories of persons on the basis of other socially defined characteristics. For example, social inequality is linked to racial inequality, gender inequality, and ethnic inequality.

Unequal treatment and opportunities between categories is usually the result of some categories being considered superior to others. This inequality can manifest through discriminatory practices in providing employment opportunities to the disadvantaged classes. These sorts of discriminatory practices stem from prejudice and stereotyping, which occurs when people form assumptions about the tendencies and characteristics of certain social categories, often rooted in assumptions about biology, cognitive capabilities, or even inherent moral failings.

The history of gender relationships mentions that there are two levels at which women and men interact with each other: firstly, there are large-scale more impersonal gender relations which operate at the market level and secondly, there are the more intimate gendered relationships at the personal level or at the household level. At the large scale level women as a social group need to be compared to men as a social group and concerns are with the general patterns in how the two groups are positioned in relation to each other within society. The usual framework employed to understand gender relations is the common sociological framework of social stratification and the associated inequalities. 'Social Stratification' refers to the different layers within a society, the

hierarchies organised around different groups. The major forms of stratification occur around class, caste, ethnicity and gender. Our study attempts to present an empirical picture of inequalities within the framework of such overlapping stratification. Women's position has historically been and continues to be disadvantageous. A lot of research has been done on gender inequalities which mention that women typically have worse jobs, get less pay and are likely to be more poor (Holmes, 2008). Continuities in inequalities were focussed on, initially, but this has given way to recent concern with complexity and diversity. Researchers are now trying to understand how change in gendered employment patterns connect to change in social organisation more widely.

Empirical research in the area of gender inequalities in employment clearly demonstrates that major continuities of inequality still confront women in the labour market. They remain significantly lower paid than men. Through the 1980s and 1990s much research was framed by the question of continuity in aspects of gender inequalities. Recent research however, reveals a shift of emphasis towards issues of diversity, complexity and contextual specificities in the reshaping of gender relations within the hierarchies of class, caste, social and religious groups. With this background as a referral point, our study attempts to investigate if the employment pattern of women workers, as exhibited in rural India, re-inforces the already existing gender inequality. Our main research objective is to find a causal relationship between the composition of female employment and the social hierarchies woven around gender. The novelty of this study is that we have tried to look beyond the binary of female participation and have focussed on the relationships being created in the process of female employment.

Literature

The literature on female labour supply or participation can be reviewed in terms of both Theoretical predictions and Empirical findings. Labourforce or Workforce participation is usually regarded

as an issue of labour supply, highlighting the decision to participate in paid labour market activities or to remain inactive (Chaudhary, Verick, 2014). Using employment data from the quinquennial rounds of the NSSO, a number of papers/reports have examined the employment situation in India (Dev 2002, Ghose 2004, Masood and Ahmad 2009, Srivastava and Srivastava 2010, Majumder 2011, Mehrotra et al 2012, Shaw 2013). A major conclusion from these studies is the fact that there has been a marked slowdown in employment growth in the post reform period and that this slowdown is more marked for female employment, both in urban as well as rural areas. Labour Force Participation Rates (LFPR) and Work Force Participation Rates (WFPR) for females in India lags considerably behind the 'norm' for developing countries. There is also a yawning gap in LFPR and WFPR among women residing in urban and rural areas. All of these studies provide an insight into a neglected area – the female labour supply process in India.

In the basic static labour supply model, labour markets are assumed to be competitive (which may not always be true in developing countries like India) and labour supply decisions depend on the relative strength of the income and substitution effects. The expected wage of a woman worker is the opportunity cost of her time, once she is in paid employment. A higher wage has a substitution effect and also a countervailing income effect (if it outweighs the substitution effect). On the other hand, increased unearned income (for example, by the spouse or through social transfers) will only exercise an income effect on women's labour supply decisions, resulting in a potential withdrawal from the labour market (Mammen and Paxson, 2000).

Beyond the basic labour supply model, the 'collective' household models and the 'unitary' household models also explain the labour supply behaviour of households and its implications for women's participation in economic activities. The 'collective' household labour supply model, is explicitly based on individual preferences and control over resources influences the bargaining

within the household (Chiappori,1992). This model implies that women's increased control over household resources may increase their welfare by enhancing their bargaining power. But empirical evidence on 'collective model' in developing countries have hinted that women receive fewer productive resources within the households and therefore have less bargaining power (Mammen and Paxson, 2000). So, we have done an empirical analysis using micro level NSSO Employment data, structured on the standard 'unitary' model where the household is considered as the decision-making unit {the model assumes that there exists a single utility function for the household and it does not take into account the underlying preferences of the household members. Pooled household income plays a role in the decision-making process, while its distribution across household members does not matter (Becker, 1965)}.

Data and Methods

Unit level records for the 68th Round (2011-12) have been used in this study. Sample set considered in this paper is working age women in rural areas, i.e women in the age group 15-59 years. The Employment-Unemployment Surveys of NSSO are primary indicators of labourforce and workforce at National and State levels. These are used for planning, policy formulation, decision support and as input for further statistical exercises by various government organisations, academicians, researchers and scholars. The main objective of these surveys, conducted at periodic interval is to get estimates of level parameters of various employment and unemployment characteristics at National and State level. NSS surveys on employment and unemployment with large sample size of households have been conducted quinquennially from the 27th Round (October' 1972- September'1973) onwards. The latest, i.e, the 68th Round (July'2011-June'2012) is the ninethquinquennial round in the series.

NSSO employs three different methods of determining the activity status of the persons. The first method identifies the Usual Principal Activity Status (called 'Usual Principal Status', UPS) of

a person by using a reference period of 365 days preceding the date of survey. A person is considered as being in the Work Force if he/she is gainfully employed for a major part of the preceding 365 days. The second method considers a reference period of one week and the third method considers each day of the week. The analysis in this paper is based mainly on Usual Principal Status (UPS) data. NSSO surveys implicitly recognise the fact that UPS data provide information on a wider range of employment-related characteristics of persons. However, one drawback of this data is that it may not always be completely accurate as the recall period for the respondents is too long.

A total of 12,737 First Stage Units (7,469 villages and 5,268 urban blocks) were surveyed by NSSO in the 68th round (2011-12) at the all-India level for canvassing the Employment and Unemployment Schedule; Schedule 10 (based on which we have structured the model). The number of households surveyed was 1,01,724 (59,700 in rural areas and 42,024 in urban areas) and number of persons surveyed was 4,56,999 (2,80,763 in rural areas and 1,76,236 in urban areas). This makes NSSO EUS data among the world's largest dataset. For considering pattern of employment of Female Workers (in the age group of 15-59 years) in the Usual Principal Activity Status we have arranged the data in the following manner :

(a) Paid Work (P1): $Upa11+Upa12+Upa31+Upa41+Upa51$

Worked in h. h. enterprise (self-employed): own-account worker- $Upa11$, Employer- $Upa12$, Worked as regular salaried/wage employee- $Upa31$, Worked as casual wage labour: in public works- $Upa41$, In other types of work- $Upa51$.

(b) Unpaid Work(P2): $Upa21+Upa92+Upa93$

Worked as helper in h.h enterprise (unpaid family worker)- $Upa-21$, Attended domestic duties only- $Upa92$, Attended domestic duties and was also engaged in free collection of goods(vegetables, roots, firewood, cattle-feed, etc.), sewing, tailoring, weaving, etc.

for household use-Upa-93

(c) Unemployed(P3): Upa81

Did not work but was seeking and/or available for work-Upa81

(d) Out of Labour Force(P4) : Upa91

Attended educational institution-Upa91

UPA 94,95,97 have not been taken into consideration as they do not enable us to define work participation as gainful employment

So the dataset which we explored consists of 1,63,505 individuals. Over this data set Multinomial Logistic Regression (MLR) is applied for describing and testing hypothesis about relationships between a categorical dependant variable and one or more categorical or continuous explanatory variables. We have specifically chosen MLR to answer the research question for two specific reasons. First, MLR provides an effective and reliable way to obtain the estimated probability of belonging to a specific population (e.g paid-work, i.e principal activity status 11+12+31+41+51) and the estimate of the individuals' characteristic on their employment status. Second, MPR is a procedure by which estimates of the net effects of a set of explanatory variables on the dependant can be obtained (Morgan&Teachman 1998).

Analysis and Discussion

As mentioned before, the usual framework employed to understand gender relations is the common framework of social stratification and the associated inequalities. 'Social Stratification' refers to the different layers within a society, the hierarchies organised around different groups. The major forms of stratification occur around class, caste, religion and gender. To represent these forms of stratification we have considered socio-economic and socio-religious variables which determine the participation of female workers in paid or unpaid work. The effect of class has been proxied by the land-ownership classes of households in rural areas. Figure 1 clearly shows how participation in unpaid work increases for

female workers as the land-ownership of the household increases. The wealth index of the household is not creating an egalitarian situation for the female workers.

Figure 1: Percentage Share of Paid Work, Unpaid Work among Women workers belonging to different land-ownership classes

Source: Computed from NSS 68th Round Data

A regional analysis has been done to study the variations present. For this purpose we have divided the data into the following regional dummies and have covered the states as mentioned in the Table 1.

Table 1: Regions and States

Region	States
North	Haryana, Himachal-Pradesh, Jammu- Kashmir, Punjab
	Rajasthan, Chandigarh and Delhi.
South	Andhra-Pradesh, Karnataka, Kerala, Tamil-Nadu,
	Lakshadweep and Puducherry
East	Orissa, West-Bengal, Andaman&Nicobar Islands.
West	Goa, Gujarat, Maharashtra, Dadra&Nagar Haveli,
	Daman& Diu
Central	Bihar, Madhya-Pradesh, Uttar-Pradesh, Chhattisgarh,
	Jharkhand and Uttarakhand
North-East	Arunachal-Pradesh, Assam, Manipur, Meghalaya,
	Mizoram, Nagaland, Sikkim and Tripura

Source: NSS 68th Round, 2011-12.

Regression Results (Table 2) show that North and Central India present a similar scenario where it is seen that there is a lower probability of women workers being engaged in paid and unpaid work, as the land-ownership size of their household increases. There is an increasing incidence of unpaid work only from the largest land-owning class. There is also a lower probability of women workers seeking work (unemployed) as the land-ownership

size increases, which proves that women withdraw from the labour force if they belong to affluent land-owning households and then they are involved in unpaidwork which maybe in their own farms or firms.

Table 2: Regional Results Of Multinomial Logistic Regression Of Women Workers(15-59yrs) Belonging To Landless, Marginal, Small And Large Landownership Classes In Rural Areas

North	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal L-O	(-)0.10(0.02)***	(-)0.23(0.02)***	(-)0.31(0.07)***
Small L-O	(-)0.15(0.02)***	(-)0.05(0.02)**	(-)0.53(0.10)***
LargeL-O	(-)0.33(0.03)***	0.10(0.03)***	(-)0.67(0.14)***
Intercept	0.15***	0.08(0.00)***	(-)2.84(0.02)***
N	8,904	8,867	334
South	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal L-O	0.46(0.01)***	(-)0.08(0.02)***	0.58(0.05)***
Small L-O	0.44(0.02)***	0.14(0.03)***	0.10(0.10)
LargeL-O	0.39(0.03)***	0.36(0.03)***	0.12(0.12)
Intercept	0.04(0.00)***	0.06(0.00)***	(-)2.99(0.02)***
N	12,630	8,647	593
East	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal L-O	0.28(0.02)***	0.22(0.02)***	0.52(0.07)***
Small L-O	0.21(0.03)***	0.44(0.03)***	0.46(0.07)***
LargeL-O	0.19(0.05)***	0.40(0.05)***	0.72(0.14)***
Intercept	0.10(0.00)***	0.03(0.00)***	(-)2.97(0.02)***
N	6,481	6,430	393
West	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal L-O	0.37(0.02)***	0.06(0.03)	(-)1.01(0.15)***
Small L-O	0.18(0.03)***	0.20(0.03)***	(-)1.10(0.19)***

LargeL-O	0.19(0.04)***	0.49(0.03)***	(-1.04(0.22)***
Intercept	0.09(0.00)***	0.04(0.00)***	(-2.85(0.02)***
N	6,523	5,775	90
Central	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal	(-)0.31(0.01)***	(-)0.17(0.01)***	(-)0.83(0.06)***
Small	(-)0.42(0.02)***	(-)0.02(0.02)	(-)1.00(0.09)***
Large	(-)0.50(0.03)***	0.20(0.02)***	(-)1.26(0.14)***
Intercept	0.23(0.00)***	0.08(0.00)***	(-)2.70(0.02)***
N	13,490	16,205	407
North-East	Women Workers (15-59 Years)		
Land Categories	Paid Work	Unpaid Work	Unemployed
Marginal L-O	(-)0.10(0.02)***	(-)0.24(0.02)***	0.79(0.06)***
Small L-O	(-)0.18(0.02)***	(-)0.14(0.02)***	0.84(0.05)***
LargeL-O	(-)0.08(0.03)***	(-)0.28(0.03)***	0.99(0.07)***
Intercept	0.14(0.00)***	0.10(0.00)***	(-)3.12(0.02)***
N	8,863	7,843	904

*Note: Landless households are reference category for all classes; *** implies significance at 1%, ** implies significance at 5%, * implies significance at 10% level. The figures given in the parenthesis are the robust standard errors. Source: NSSO 68th Round, 2011-12.*

South and East present a similar scenario as it is seen that there is a higher probability of women workers taking part in paid as well as unpaid work as the size of the land-ownership increases. So female labour force participation rate is quite high. In spite of women working more, there is a greater incidence of unemployment or 'seeking work but not working currently'. This is a very puzzling and disturbing trend and maybe related to issues of measurement or response problem. It also denotes distress driven employment for women workers.

Western India presents the most desirable scenario as the probability of participation in paid work is high for women workers from all land-ownership classes. Simultaneously, there is a decreasing

incidence of unemployment. Ofcourse, an increasing probability of participating in unpaid work is not the best of circumstances for women workers, as such work is non-remunerative and hence spells drudgery. So work participation is quite high among women workers in western India.

The North-East presents curious results, showing that there is a lower probability of women workers being engaged in paid or unpaid work. At the same time there is an increasing incidence of unemployment. Such a situation can arise if the opportunities of female employment are diminishing in the area. It implies that although women are seeking work but they are unable to find employment, hence the decline in work participation for women from all the land-owning classes.

The extent of female participation in the labour market is determined in India by a nexus of class/caste heirarchy and norms of patriarchal ideology. In an hierarchical society based on patrilineal-patrilocal families, the location of the family in the caste/class hierarchy would determine the level and forms of female work participation (Bardhan, 1985). This observation led us to the second stratification concept, and that is the behaviour of female work-participation of the different socio-religious groups in India. These groups have been constructed on the basis of NSSO classification, which gives us the position of the household in the socio-religious ladder. Figure 2 shows the pattern of employment emerging from the different socio-religious groups.

Only among Muslims there is a prevalence of increased participation in unpaid work. This proves that the heirarchies of caste/creed and religion do not perpetuate the inequalities in gendered relations of employment.

Figure 2: Percentage Share of Paid Work, Unpaid Work among Women workers belonging to different socio-religious groups

Source: Same as Figure 1

Interaction of the socio-religious and socio-economic variables has enabled us to make certain conclusions about the behaviour of female labour supply. It has provided an insight into the employment aspects of women workers belonging to various land ownership classes of the different socio-religious groups.

The regression results show that there is an unambiguous increase in unpaid work by women workers, for a majority of the land-owning households of the different socio-religious groups and a decline in paid work. There is a simultaneous increase in the incidence of unemployment, i.e they are seeking work. So there is a double burden of unpaid work for women workers. On the one hand they are more into non-remunerative, monotonous kind of work and on the other hand they are not getting work even when seeking. This is an indication of distress driven work and a very disturbing situation for women workers. Measure of wealthiness of their household is in no way determining a beneficial pattern of employment for them. Land does not release labour. As results are same for land-ownership classes as well as interaction terms of land-ownership classes of socio-religious groups so we can conclude that socio-economic and socio-religious disadvantages are the same for women workers. Regional pattern of female employment depicts disparity, but the double-burden of unpaid work persists and hence the perpetuation of inequality.

**Table 3: Results of Multinomial Logistic Regression
of Women Workers(15-59yrs)**

Land Classes Of Socio-Rel Grps	Paid Work	Unpaid Work	Unemployed
Hindu-Others			
Landless (Reference)			
Marginal	(-)0.08(0.05)	0.00(0.05)	0.61(0.23)***
Small	(-)0.21(0.05)***	0.15(0.05)***	0.34(0.23)
Large	(-)0.25(0.05)***	0.36(0.05)***	0.21(0.23)

Hindu-SCs			
Landless (Reference)			
Marginal	(-)0.05(0.05)	(-)0.10(0.05)*	0.60(0.23)***
Small	(-)0.13(0.06)**	0.10(0.06)	0.49(0.25)*
Large	(-)0.24(0.07)***	0.06(0.07)	0.45(0.29)
Hindu-STs			
Landless (Reference)			
Marginal	0.21(0.06)***	0.06(0.06)	0.90(0.24)***
Small	(-)0.08(0.06)	0.17(0.06)***	0.33(0.25)
Large	9-)0.13(0.07)*	0.35(0.07)***	(-)0.43(0.36)
Muslims			
Landless (Reference)			
Marginal	(-)0.32(0.05)***	(-)0.02(0.05)	0.62(0.23)***
Small	(-)0.52(0.06)***	(-)0.00(0.06)	0.33(0.25)
Large	(-)0.38(0.07)***	0.13(0.07)*	0.42(0.29)
Other Relgns			
Landless (Reference)			
Marginal	(-)0.28(0.05)***	(-)0.029(0.06)***	0.75(0.24)***
Small	(-)0.28(0.05)***	(-)0.08(0.06)	1.20(0.23)***
Large	(-)0.30(0.06)***	(-)0.10(0.06)	1.26(0.24)***
Intercept	0.29(0.05)***	0.00(0.05)	(-)3.49(0.22)***

*Ref. implies reference category; *** implies significance at 1%, ** implies significance at 5% , * implies significance at 10% level. The figures given in the parenthesis are the robust standard errors. Source: NSSO 68th Round, 20011-12.*

Conclusion

The overlap of class, caste and religion show that there is a multidimensionality in the participatory process in employment. The importance of economic class maybeoverwhelming for men but it is not the case with women. The kind of work that women perform plays a stronger role in determining their extent of participation in the labour market. Relegation of women to unpaid work is a major issue which needs to be looked into. Regional

differences in the female labour force participation are large. The low participation in the North and Central seems to reflect strong cultural and religious factors and less the socioeconomic status concerns which are stronger in the more developed and educated South and West. Social and cultural factors remain the principal driving factors of keeping women outside the labour force. The overall picture that emerges is one of greater disadvantage for women workers in general and those belonging to rural areas. The multidimensional nature of the interlinkages makes it impossible to have a blanket one-size-fits-all approach towards women's work. It is essential to identify and isolate the complexities and diversities to meaningfully understand the world of women's work and to delineate the relations emerging thereof. This study has tried to make such an attempt using secondary data.

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Issues in Rural Livelihood - Value chain networks as emerging ecosystem in rural livelihoods

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Abstract

Globalisation has given rise to a new era of international competition that is best understood by looking at the global organisation of industries and the ways in which countries rise and fall within these industries (Gereffi, 2011). The driving forces of the globalisation of value chains are several, including increased competition, technological progress, especially information and communications technologies (ICTs) development, improved transport facilities, and availability of a large base of low cost suppliers in areas of the world that experience rapid growth, in particular China and India.

Emerging market economies are low-income, rapid-growth countries using economic liberalization as their primary engine of growth (Hoskisson et al., 2000). Rural India is undergoing unprecedented transformations, which have profound impact on the livelihoods of the rural poor. Understanding the nature of this transition in rural livelihoods is critical in order to design and participate in meaningful efforts to promote livelihoods and food security for rural households.

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With consumers being increasingly aware and concerned about quality of food, its source and safety, the concept of value and supply chain becomes more prominent and pertinent. With producers trying to adjust to changes in consumer demands, value chain forms base of any such attempts. Value addition in agriculture can be the largest untapped potential to bring about inclusive growth in the economy. With its forward and backward linkages, value chains can be the source of rural transformation.

The objective of this paper is to orchestrate a brief theoretical frame work for integrating Global Value Chains, demographic dividends in India and social capital and social network analysis relevant to understand and improve local food value chain system. All these elements collectively address possible way forward to improve rural livelihood of farming ecosystem and ways by which can act as instrument of economic growth in bringing rural transformation.

Introduction

With India being forecasted as the fastest growing economy in 2016 , the nation is expecting to see higher growth in economic parameters translate into improved human development indicators. The story of economic growth in India has however been entwined with the story of labour migration and of migrants, who leave the increasingly impoverished villages with a decadent farm economy in search of better lives (Lakshmana 2013).

Economic growth in developing countries—leading to a more protein-based diet—coupled with the overall growth of the global population to 10 billion by the end of the century will require a near doubling of food production. This will be a big challenge for the world’s food producers who must deliver against the ill winds of climate change, soil degradation, and competition for land and water resources also needed for urbanization. World food producers are Millions of small farming businesses, often third or fourth-generation family farms, with few national and even fewer international corporate players. These farming business are small in scale compared with the global input suppliers (e.g., seed, fertilizer,

machinery) and have concentrated sector-oriented customers. The consolidation in the supply chain that has occurred over the past 30 years has not played out at the producer level (Deloitte, 2013).

This increase in migration comes from the net decreasing income of farming households and thereby more and more families moving away from agriculture. According to NSSO data, the average annual income of the median farmer net of production costs from cultivation is less than Rs 20,000 in 17 states. This includes produce that farmers did not sell (presumably used for self-consumption) valued at local market prices. With this scale of agricultural income, we are left with 95.8 million cultivators for whom farming is their main occupation. That is less than 8 per cent of the population. (The figures were 103 million in 2001 and 110 million in 1991.) This roughly works out to 1,970 odd farmers leaving agriculture a day.

Globalisation has given rise to a new era of international competition that is best understood by looking at the global organisation of industries and the ways in which countries rise and fall within these industries (Gereffi, 2011). Using core concepts like “governance” and “upgrading,” Globalization of Value Chains (GVC) highlight the ways in which new patterns of international trade, production, and employment shape prospects for development and competitiveness. GVC analysis documents the international expansion and geographic fragmentation of contemporary production networks and focuses primarily on the issues of industry (re)organisation, coordination, governance, and power in the chain (Gereffi and Lee, 2012). The driving forces of the globalisation of value chains are several, including increased competition, technological progress, especially information and communications technologies (ICTs) development, improved transport facilities, and availability of a large base of low cost suppliers in areas of the world that experience rapid growth, in particular China and India. In response to these forces and the combined effect of market liberalisation and de-regulation, firms

have radically changed their business strategies.

Problem statement

Agricultural extension in India is in transition. After several years of neglect, public sector extension has been witnessing renewed interest and policy attention during the last few years. It is under pressure to reform its purpose as well as the way it is managed and is also being encouraged to work closely with extension providers from the private and voluntary sector. While the need for strengthening extension services and expanding its mandate is fairly recognized, the on-going reform process is yet to make a significant impact on improving extension's contribution to agricultural development. Development of agriculture continues to remain critical for India's economic growth and poverty reduction. Indian agriculture faces several challenges and agricultural extension services can and should contribute to addressing these challenges. However, to do this effectively, extension needs to address some of the challenges it faces currently and should reinvent its role and mission (Sulaiman, 2000).

Traditional Indian communities being male dominated, women have been suppressed till recently. While the average literacy rate in rural areas is around 50-65%, it is as low as 20-25% among women in backward areas. Education of girls was felt to be unnecessary in the past and this has seriously affected their quality of life. Illiteracy has also suppressed their development due to lack of communication with the outside world. They are slow in adopting new practices, which are essential with the changing times. Apart from lack of communication, social taboo has also hindered their progress. The rich landlords did not want any infrastructure development, which would benefit the poor assuming that they would not get cheap labour to work on their farms. The local moneylenders did not want alternate financial institutions to provide cheaper credit needed by the poor. The traditional healers canvassed against modern medicine under the influence of religion and divine power. Thus, the poor continued to live voiceless under the vicious cycle

of poverty.

Emerging market economies are low-income, rapid-growth countries using economic liberalization as their primary engine of growth (Hoskisson et al., 2000). Today's large emerging markets such as China, India and Brazil are expected to be the growth markets in the forthcoming decades (Wilson & Purushothaman, 2003). Rural India is undergoing unprecedented transformations, which have profound impact on the livelihoods of the rural poor by influencing the nature of their work, work related relationships, new opportunities, nature of rural-urban connect and household vulnerability. Understanding the nature of this transition in rural livelihoods is critical in order to design and participate in meaningful efforts to promote livelihoods and food security for rural households.

Agriculture has been the dominant sector of labour concentration. Since 1991, the shares of the manufacturing and service sectors have grown faster with regard to GDP and much slower with regard to employment, as working methods became more capital-intensive. According to various estimates, productivity during the period from 2004 to 2010 grew 34 per cent. India's economic growth was thus more due to productivity than employment. In the wake of the limited creation of additional jobs, workers – especially youth – found themselves without jobs. The prevailing situation forced them either to opt for unskilled or casual work in the informal sector or to enrol for further studies. Many who could not afford to go for further education opted for self-employment with extremely low returns. The large number of self-employed or, for that matter, casual workers is an instance of self-exploitation since such workers are without any effective protection. In order to take full advantage of the 'demographic dividend', it is imperative for India to transform its labour force into an asset. As of now, only 5 per cent of the workforce have undergone any kind of vocational training, but even many of those are not employable, since the skills acquired have limited market

application (Chandrasekhar et al. 2006). Furthermore, India's education system is primarily of a generalist nature and is not connected to the labour market. According to NASSCOM, almost 40 per cent of the skilled workforce is not employable because the acquired education and training are of substandard quality.

India is amongst the youngest nations in the world and even in next 15 years, half of India's population will be below the age of 30. According to the official data, India's labour force, which was 475 million in 2006, is expected to be around 526 million in 2011 and will reach 653 million in 2031. It is noteworthy that the growth rate of labour force will continue to be higher than that of the population until 2021. According to the Indian Labour Report, 300 million youth would enter the labour force by 2025 and 25% of the world's new workers in the next decade will be Indian because 10 lakh new Indians will join the labour force every month.

The National Youth Policy of India defines a 'youth' as a person in the age group 15 to 35 years of age. The UN, on the other hand, defines a youth as somebody between 15 to 24 years of age. According to the 2011 Census, youth account for 20 per cent of the total population. However, 84.5 million young people in India live below the poverty line, which is the highest rate worldwide, at 44.2 per cent of the total youth population. There are 44 million Indian youth who are undernourished, which constitutes 23 per cent of the youth population of India. The work participation rate (WPR) among young people (15–24 years of age) is higher than the overall WPR (all ages) but it has been lower than the WPR of all adults (15+ age) and senior adults (25+ age). This pattern has been observed in the past two decades across locations (rural-urban) and gender (male-female). The WPR among young people during the past two decades indicates that it has been declining. It declined 9 percentage points, from 55.5 per cent in 1983 to 46.0 per cent in 2004–2005. The decline in WPR during this period was sharper among male youth (11.4 percentage points) in general and

rural male youth (12.4 percentage points) in particular, whereas the decline in the WPR of female youth was very minimal. The WPR of urban female youth remained almost constant between 1983 and 2004–2005. The decline in WPR was higher among rural youth compared to their urban counterparts (Sinha, 2013).

Considering the fact that India has rising young population we need to strategize as in where the rising number of young brains will be absorbed in future. Probably our ability to make agriculture, the primary occupation of rural families profitable will translate into reduced distress amongst the rural youth. India has largest chunk of its population in young age group. It will be advantageous only if we provide them gainful employment.

Value chain analysis from agri-business perspective

With consumers being increasingly aware and concerned about quality of food, its source and safety, the concept of value and supply chain becomes more prominent and pertinent. With producers trying to adjust to changes in consumer demands, value chain forms base of any such attempts. Value addition in agriculture can be the largest untapped potential to bring about inclusive growth in the economy. With its forward and backward linkages, value chains can be the source of rural transformation. The food value chain is the network of stakeholders involved in growing, processing, and selling the food that consumers eat—from farm to table. Collaboration among the various stakeholders along the food value chain is more important than ever. The interdependencies between stakeholders are no longer mainly between the functions most closely linked along the chain but can encompass stakeholders anywhere in the network. Because of the global food supply chain and a number of high-profile global food recalls, food safety and traceability have become a major concern.

Reardon and Minten (2011) discussed rural–urban supply chains—and the transformation of them—are crucial to the food security of urban Indians, which numbered about 79 million (around 18 percent of the population) in 1961, approximately 350

million in 2010 (greater than the population of the United States), and an estimated 590 million by 2030 (40 percent of the Indian population and greater than the current entire European Union) (India, Ministry of Home Affairs) (Srivaramakrishnana 2005). The food supply chain is also crucial to the incomes of hundreds of millions of those employed in rural and urban areas as farmers, wholesalers, truckers, processors, and retailers participating in these supply chains.

There have been four principal changes in India's rural–urban food supply chain over the past several decades (Pray and Nagarajan, 2011). First, the food supply chain's volume has tripled in the past three decades: urban food expenditures have tripled (in real terms) over the past 35 years, to US\$45 billion by 2006 (based on a series of representative national household surveys from the National Sample Surveys [NSSs]). The trend is an urbanizing of the Indian food market: In 1971, urban food expenditures made up about one-quarter of total national food expenditures in 1971, whereas by 2006, this had become more than one-third. This increase has been nearly completely supplied by domestic production, as India exports and imports a very small share of its food economy and exports more food than it imports (now and 35 years ago). Second, the food supply chain's composition has diversified over the past three decades. The share of cereal consumption in the urban food basket has declined from 36 percent in 1972 to 23 percent in 2006. In the same period, the share of cereals in rural areas declined from 56 to 32 percent (Indiastat). Just weighting by urban and rural population (thus abstracting from income differences), Reardon and Minten (2011) find that roughly 29 percent of India's food economy was in cereals in 2006, versus roughly 52 percent in 1972. Yet the food security debate tends to focus narrowly on grain. Nongrain food (dairy, pulses, fruits, vegetables, meat, and fish) are 71 percent of India's food consumption and are important sources of calories, protein, and vitamins. These foods share centre stage with grains for food security.

Third, the government's direct role in the marketing of grain output doubled over the three decades, from 12 percent of grain output in the 1970s to 24 percent in the early 2000s (Reardon and Minten 2011). However, the government's role in food marketing as a share of the overall food economy is very small and has stayed nearly constant over the three decades—at 6 percent in the early 1970s to 7 percent by the mid-2000s (Reardon and Minten (2011). The government, as a direct player, is a very minor actor in the Indian food economy. Although the government has transformed the grain economy by increasing the market share of the parastatal at the margin—from 12 to 24 percent—the grain economy and the overall food economy are overwhelmingly operated by the private sector (mainly traditional private players, mandi traders, private mills, village brokers, traditional retailers), but increasingly also modern private sector (agribusiness and large food processing companies, supermarkets). Fourth, the private part of India's food economy, which constitutes 93 percent of the food economy, has been structurally transforming rapidly especially over the past decade.

The agribusiness sector's complex value chain spans input companies, farmers, traders, food companies and retailers. In India, there are multiple intermediaries involved at each stage, each intermediary charging a commission, thereby reducing the net income of the farmer. And the informational asymmetry amongst small and marginal farmers adds to their distress. At the input side, farmers don't know the kind of seeds suitable to their respective agro-climatic conditions and soil requirements, thereby ending up trusting the local seed supplier and often buying wrong or fake seeds and sometimes even expired ones. On the output side, they are being exploited due to their poor bargaining power. The local agents who go to the villages to collect the produce, follow unscrupulous price discovery mechanisms, giving much less to farmers than what they deserve. They take advantage of the urgent cash requirement of farmers and follow weighing and grading malpractices. When buying grains, there is no use of moisture

meters and the grain quality is judged by its look and feel and thus it's easier to deceive the farmer. The final price the farmer gets is thus reduced. When growing perishables, he is even more dependent on the local traders, who often deny taking the whole produce at prevalent market price and the farmer has to agree to price and payment terms being given.

India is one of the largest exporters of agriculture produce and food products but the supply chain is still highly unorganized at village levels. Institutional buyers have still been dependent on local traders for procurement. This stems from the distribution of landholdings in India, with 85% of them being small and marginal. The transaction cost of organized institutions to deal with the majorly small and marginal farmers is high and thus they prefer dealing with aggregators or local agents instead.

There are a few success stories however which show us how the entire value chain can be integrated, for the mutual benefit of all players, ranging from the farmer to the consumer. While the ITC eChoupal (Indian for Profit Company) is an example of how corporates can reduce their costs by procuring directly from farmers while being transparent and responsible corporate citizen. The Amul (Indian private cooperative) story demonstrate how millions of farmers can organize themselves into a cooperative, set up a well-integrated value chain and turn themselves into one of the favorite milk brands of the nation. Many not-for-profit organizations are trying to aggregate the farmers together into Farmer Producer Organizations (FPO), investing to improve the social capital of fellow farmers and facilitate to scale up their farm operations. Though there is limited outcome observed as compared to the efforts which have been invested. It is envisaged that dearth of appropriate theorization of social innovation and pre-existence of dominant market driven business model could be possible reason for failure in integrating local value chain networks, ecosystem actors and food production, social capital formation.

Social Network Analysis for improved Value Chain Network

Social networks in rural India can help improve coordination of action, which is of great importance for reducing opportunistic behavior by individuals. Opportunistic behavior often occurs when the benefits of non-compliance with rules or norms outweigh its costs. This is often the case in many farming communities in the developing world where some individuals choose not to contribute to local projects. Such decisions often result in the failure of these projects, as there sometimes are no efficient mechanisms for sanctioning those who do not contribute to local projects (Ostrom, 1994). However, in local communities with well-functioning social networks and local institutions, the evidence shows that opportunistic behavior can be reduced if not completely eliminated. Repeated interaction, here manifested by associations and other local institutions, tend to reduce opportunistic behavior (Williamson, 1995). When individuals meet and do business on a regular basis, the interaction enhances trust and reduces uncertainty, as well as provides a forum for ostracism toward opportunism, as members learn about the behavior of other members. This creates an environment more likely to lead to solutions to common property problems. According to Aumann, it is easier to reach solutions to long term collective action problems when (i) there is a common understanding of the incentive problems facing the individuals involved, (ii) knowledge of other ways to structure their relationship, and (iii) a better knowledge of the individuals involved (Aumann, 1976). Olson argues that “unless the number of individuals is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or groups interest” (Olson, 1965:2). In other words, it is likely that the management of common property will fail if it is not carried out on a relatively small scale.

Sorensen (2000) discussed the theoretical stream of relevance for developing country value chain research is social network theory. The social network approach views companies as embedded in a

complex of horizontal, vertical and business support relationships with other companies and other organizations supporting inputs and services (such as advisory services, credit facilitators and transportation companies). According to network theory, relationships are not only shaped by economic considerations; other concepts like trust, reputation and power also have a key impact on the structure and duration of inter-company relationships (Uzzi 1997). Since the 1990s, social capital theory has become an important branch within the network approach. Network relations may enhance the “social capital” of a company, by making it feasible to get easier access to information, technical know-how and financial support (Coleman 1990; Burt 1997) and by encouraging knowledge transfer between network partners, thereby reducing transaction costs and improving access to markets (Gulati, 1998). In the last decade a lot of literature has emerged in the field of regional clusters, where intra-cluster vertical and horizontal relationships may support efficiency and effectiveness of business networks.

Farmers are deeply affected by uncertain conditions related to the weather, pests and markets. For example, seasonal rainfall variability, one of the most damaging climatic factors in the developing world, tends to be greater in areas of lesser mean annual rainfall which often characterizes these rural areas (Stewart, 1991:18). Farmers in the developing world are also more prone to problems of limited capital, adverse policies and poor adaptation and use of new technology (Picciotto & Grover, 1996). In response to the high multitude of risk factors in agriculture, farmers have developed risk management skills. Social capital in the form of local level farmer associations, networks or cooperatives can provide the institutional environment necessary for the scattering of risks. An example of this is the open field system of agriculture. Although almost non-existent in the industrialized world, the open field system of agriculture is still common in some developing world countries (Eggertson, 1990). In the open field system the family unit is typically the decision-maker. Each household cultivates a

number of scattered and unfenced strips. When the harvest is over, it is common for the open field to be used as a common grazing area managed by the farming association or cooperative (Eggertson, 1990). Local level farmer associations, networks, or cooperatives can help provide the institutional set-up for diversification of strips and reduce the transaction costs associated with implementing and monitoring the arrangement. In the absence of high levels of social networks and organizations, it is very likely that transaction costs within the farming associations and cooperatives will rise due to a general lack of trust among the members, which eventually can result in a breakdown of the arrangement.

A family will make the decision to send a migrant if the expected benefits are reasonably high and the opportunity cost is low (Lauby & Stark, 1987: 29). Strong social networks play an important role in lowering the opportunity cost of migration and in providing information that will make it easier for the family to decide if the benefits of migration are high enough to justify the monetary cost. According to Taylor, “the importance of migration networks derives from its ability to provide labor market information where such information is scarce and costly, where the labor market is characterized by a high degree of risk, and where the penalty for failure is large” (Taylor, 1986: 167). Also, the effectiveness of labor market information is often related to the trustworthiness of the source. Kinship networks are a more trusted source of information than migrant recruitment agencies (Fawcett, 1989: 678). Networks, however, do not only provide valuable information, they also link the migrants to potential employers (Boyd, 1989). A study by Banerjee showed that 86 percent of the migrants in the study sample had relatives or co-villagers living in Delhi upon their arrival, and in virtually all cases they received some kind of help (Banerjee, 1982: 186). A survey of squatter settlements in Delhi found that as much as 60 percent of the workers in the sample worked in the same occupational categories as their relatives or co-villagers (Banerjee, 1982:195). The migrants tended to rely more on relatives than co-villagers for help when both types of networks

were present. Banerjee uses this fact as an indication that kinship ties are stronger than village ties. However, there did not seem to be any difference in the quality of assistance offered by relatives or co-villagers. Earlier empirical research on using social network analysis to better understand effective and sustainable food value chain on the rural perspective had limited attempts, and this required attention to apply innovative theory to gather evidence of diffusion of knowledge exist within farming community.

Conclusion

In India inclusive growth has been a focus area of the 11th five year plan and the 12th plan also. The economic survey of 2012-2013 with regard to demographic dividend emphasizes that a good job is the best form of inclusion. India's challenge is to create conditions for faster growth of productive jobs outside of agriculture, especially in the organized manufacturing and in services, even while improving productivity in agriculture.

For agriculture, we need to find out ways in which the existing social capital of fellow farmers can be organized to create larger social as well as economic impacts. Corporates as well as farmers' networks can be an integrated part of the agricultural value chain and efforts can be made for collective planning and coordinated execution for mutual benefits. Corporate farm produce buyers for example can work with Farmer Producer Organizations (FPO) directly and better assure regular supply, which for many of them supply is more important than prices to steer local to global value chain operations. Farmers in return may receive justified price for the farm produce and remain independent out of the exploitative vicious cycle of local agent's network. Advanced technology adaptation, collective decision making among farming households and skill building may improve farmers' social capital strength and risk mitigation. Farmers' group behaviour ensure a sustainable effort to start planning their crop cycles, considering their families' food requirements and the business acumen of partner companies; all of these will avoid exploitative contract farming agreements. More

efforts in terms of empirical research based operation plan and financial inclusion required to be essential attributes for enhancing community driven initiatives.

In 1974, Arrow observed that “among the properties of many societies whose economic development is backward is a lack of mutual trust” (Arrow, 1974:26). This paper reviewed how social networks, local organizations and farmers’ participation can have an effect on common property management, risk management, agricultural productivity, marketing of agricultural products, and vertical relations. Thus, it is imperative to propose in future there remains potential necessity to apply innovative scientific methods to better understand structure of rural social capital and social network formation that orchestrate farm to market based business value chain.

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Public Distribution System in Jungle Mahal of West Bengal Under National Food Security Act 2013 and Rajya Khadya Suraskhya Yojana 2015: A Critical Analysis

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Introduction:

Public Distribution System (PDS) is an Indian food security system. Established by the Government of India under Ministry of Consumer Affairs, Food, and Public Distribution and managed jointly with state governments in India, it distributes subsidized food and non-food items to India's poor. Major commodities distributed include staple food grains, such as wheat, rice, sugar, and kerosene, through a network of Fair Price Shops (FPS) established in several states across the country. Food Corporation of India, a Government-owned corporation, distributes food grains to FPS throughout the country, which are managed by state governments. As of date there are about 4.99 lakh Fair Price Shops (FPS) across India.

In terms of both coverage and public expenditure, it is considered to be the most important food security network. However the food grains supplied by the ration shops are not enough to meet the consumption needs of the poor or are of inferior quality. The average level of consumption of PDS grains in India is only 1 kg per person / month. The PDS has been criticized for its failure to serve the poorer sections of the population effectively. The targeted PDS is costly and gives rise to much corruption in the process of

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extricating the poor from those who are less needy.

With a network of more than 400,000 Fair Price Shops (FPS), the Public Distribution System (PDS) in India is perhaps the largest distribution machinery of its type in the world. PDS is said to distribute each year commodities worth more than Rs. 15,000 crore to about 16 crore families. This huge network can play a more meaningful role if only the system is able to translate into micro level a macro level self-sufficiency by ensuring availability of food grains for the poor households.

Access of the poor to food is a priority objective for two reasons: Firstly, though the growth of food grain production in 1989-99 was lower than the increase in population during the same decade, procurement of grains was indeed going up, which is suggestive of a decline in people's consumption or in the purchasing power of the poor. This may have happened because of structural imbalances in the economy: rising capital intensity, lack of land reforms, failure of poverty alleviation programmes, growing disparity between towns and villages, and the like. To this may be added production problems in less endowed regions, which have led to a dangerous situation of huge pile-up inside Food Corporation of India's (FCI) godowns and widespread incidence of hunger outside. It is just as important to correct these policy imbalances as to increase food production. Secondly, if consumption of the poor does not increase there would be serious demand constraints on agriculture and could make the growth target of 4.5% per annum unachievable.

Huge as it may seem on paper, all is not well with the Public Distribution System. A large subsidy each year keeps the system going. A close look at the amount of subsidy would show that the level of food subsidies as a proportion of total Government expenditure has gone up from about 2.5 percent or below at the beginning of the 1990s to about 3 percent towards the end of the decade. One of the issues in the PDS operation has been how to contain the food subsidy within reasonable levels.

Both the central and state governments shared the responsibility of regulating the PDS. While the central government is responsible for procurement, storage, transportation, and bulk allocation of food grains, states governments hold the responsibility for distributing the same to the consumers through the established network of Fair Price Shops (FPSs). State governments are also responsible for operational responsibilities including allocation and identification of families below poverty line, issue of ration cards, supervision and monitoring the functioning of FPSs.

Under PDS scheme, each family below the poverty line is eligible for 35 kg of rice or wheat every month, while a household above the poverty line is entitled to 15 kg of food grain on a monthly basis.

Several schemes have augmented the number of people aided by PDS, but the number is still extremely low. Poor supervision of FPS and lack of accountability have spurred a number of middlemen who consume a good proportion of the stock meant for the poor. There is also no clarity as to which families should be included in the BPL list and which excluded. This results in the genuinely poor being excluded whilst the ineligible get several cards.

The stock assigned to a single family cannot be bought in instalments. This is one of the biggest barriers to the efficient functioning of PDS in India. Many BPL families are not able to acquire ration cards either because they are seasonal migrant workers or because they live in unauthorized colonies. A lot of families also mortgage their ration cards for money.

On this background the National Food Security has been introduced. The National Food Security Act, 2013 (also Right to Food Act) is an Act of the Parliament of India which aims to provide subsidized food grains to approximately two thirds of India's 1.2 billion people. It was signed into law on 12 September 2013, retroactive to 5 July 2013.

Along with the National Food Security Act, 2013 (NFSA)

Government of West Bengal have also started Rajya Khadya Suraskhya Yojana (RKSJ) and both of them have come into effect from 27.01.2016 in the State of West Bengal in order to ensure food security to the needy persons. About 7.70 Crore population have been covered under these two programmes. Beneficiaries have been classified as Antyodaya Anna Yojana, Priority Household and RKSJ I and RKSJ II with various entitlements.

National Food Security Act 2013

It is an Act to provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity and for matters connected therewith or incidental thereto.

Salient features of National Food Security Act 2013:

Coverage and entitlement under Targeted Public Distribution System (TPDS): Up to 75% of the rural population and 50% of the urban population will be covered under TPDS, with uniform entitlement of 5 kg per person per month. However, since Antyodaya Anna Yojana (AAY) households constitute poorest of the poor, and are presently entitled to 35 kg per household per month, entitlement of existing AAY households will be protected at 35 kg per household per month.

State-wise coverage: Corresponding to the all India coverage of 75% and 50% in the rural and urban areas, State-wise coverage will be determined by the Central Government. Planning Commission has determined the State-wise coverage by using the NSS Household Consumption Survey data for 2011-12.

Subsidised prices under TPDS and their revision: Food grains under TPDS will be made available at subsidised prices of Rs. 3/2/1 per kg for rice, wheat and coarse grains for a period of three years from the date of commencement of the Act. Thereafter prices will be suitably linked to Minimum Support Price (MSP).

In case, any State's allocation under the Act is lower than their current allocation, it will be protected up to the level of average off

take under normal TPDS during last three years, at prices to be determined by the Central Government. Existing prices for APL households i.e. Rs. 6.10 per kg for wheat and Rs 8.30 per kg for rice has been determined as issue prices for the additional allocation to protect the average off take during last three years.

Identification of Households: Within the coverage under TPDS determined for each State, the work of identification of eligible households is to be done by States/UTs.

Nutritional Support to women and children: Pregnant women and lactating mothers and children in the age group of 6 months to 14 years will be entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes. Higher nutritional norms have been prescribed for malnourished children up to 6 years of age.

Maternity Benefit: Pregnant women and lactating mothers will also be entitled to receive maternity benefit of not less than Rs. 6,000.

Women Empowerment: Eldest woman of the household of age 18 years or above to be the head of the household for the purpose of issuing of ration cards.

Grievance Redressal Mechanism: Grievance redressal mechanism at the District and State levels. States will have the flexibility to use the existing machinery or set up separate mechanism.

Cost of intra-State transportation & handling of food grains and FPS Dealers' margin: Central Government will provide assistance to States in meeting the expenditure incurred by them on transportation of food grains within the State, its handling and FPS dealers' margin as per norms to be devised for this purpose.

Transparency and Accountability: Provisions have been made for disclosure of records relating to PDS, social audits and setting up of Vigilance Committees in order to ensure transparency and accountability.

Food Security Allowance: Provision for food security allowance to entitled beneficiaries in case of non-supply of entitled food grains or meals.

Penalty: Provision for penalty on public servant or authority, to be imposed by the State Food Commission, in case of failure to comply with the relief recommended by the District Grievance Redressal Officer.

Selection Under National Food Security Act 2013 And Rkxy I And Rkxy II:

The selection of beneficiaries under NFSA has been based on the various indices used in the Socio Economic and Caste Census 2011. Those families who are lagging behind in terms of economic and social aspects have been considered on priority basis for inclusion like:

1. Homeless family
2. Beggar
3. Scavenger
4. Scheduled Tribe
5. Bonded labour

Also, the following indices have been considered for inclusion in the NFSA.

1. One room house and kaccha wall
2. No adult between the age of 16 to 59
3. No male adult between the age of 16 to 59 and head of the family is a female
4. Any one member is a handicapped and no able adult male member
5. Scheduled Tribe/Scheduled Caste family
6. No literate member above the age of 25

7. Landless labour whose source of income is manual labour

Beneficiary Under Nfsa & Rksy:

A: Jungle Mahal

Name Of The District	Nfsa Beneficiary	Rksy Beneficiary	Total Beneficiary	Total Census Population	% Covered
Purulia	19,81,653	6,74,399	26,56,052	29,27,965	90.71
Bankura	21,80,982	4,52,160	26,33,142	35,96,292	73.21
Paschim Medinipur	35,58,813	8,71,592	44,30,405	59,43,300	74.54
Total	59380126	1998151	9719599	12467557	77.95

B: State As A Whole:

Name of The State	NFSA Beneficiary	RKSY Beneficiary	Total Beneficiary	Total Census Population	% Covered
West Bengal	55217581	10021859	65239440	91276115	71.47

C. Entitlements Under NFSA And Rksy:

Category of Ration Card	Entitlements(per month) in KG		Price/Kg in Rs.	
	Rice	Wheat/Atta	Rice	Wheat/Atta
AAY (Family)	15	20	2.00	2.00/2.00
PHH (Head)	02	03	2.00	2.00/3.50
RKSY I (Head)	02	03	2.00	2.00/3.50
RKSY II (Head)	01	01	13.00	9.00/10.50

Jungle Mahal and Public Distribution System:

Jungle Mahals, literally 'jungle estates', was a district formed by British possessions and some independent chiefdoms lying between Birbhum, Bankura, Midnapore and the hilly country of Chota Nagpur in what is now the Indian state of West Bengal. The district was located in the area known as the Jungle Terry, a thickly forested region inhabited by tribal groups such as the Santhal people.

The vagueness of the jurisdiction caused inconvenience. In 1805, Regulation XVIII was passed whereby the areas known as Jungle Mahals was separated from the jurisdiction of the Magistrates of the districts of Burdwan, Birbhum, Bankura and Midnapore and placed under a Magistrate of Jungle Mahals. The district thus formed was composed of 23 parganas and mahals.

By Regulation XIII of 1833, the district of Jungle Mahals was broken up. The estates of Senpahari, Shergarh and Bishnupur were transferred to the district of Burdwan and the remainder constituted the district of Manbhum.

The Jungle Mahal Blocks are Medinipur Sadar, Garbeta -II, Salboni, Jhargram, Binpur -I, Binpur -II, Sankrail, Jamboni, Nayagram, Gopiballavpur -I, Gopiballavpur -II) of Paschim Medinipur district. (11 Blocks)

8 number of blocks (Arsha, Baghmundi, Balarampur, Barabazar, Bundwan, Jhalda -I, Jhalda -II, Manbazar -II) in Purulia district

4 number of blocks (Ranibundh, Simlapal, Raipur and Sarenga) in Bankura district

Statement of the Problem:

Jungle Mahal is one of the most backward area in India. The problems of poverty, unemployment and social evils are in existence in this area. Study has been made on the issues relating to unemployment and other socio-economic conditions but no study has been made so far on the status of Public Distribution System in this area.

Objectives: The study makes a comprehensive study of present status of Public Distribution System in this area. The specific objective of this study is to know the ground reality of the functioning of the Public Distribution System and to know this the answers of the following questions must be taken from the beneficiaries concerned. The questions are as follows:

Whether,

- ❖ Rice, Wheat and Kerosene Oil are distributed at the prescribed scale
- ❖ Rice, Wheat and Kerosene Oil are distributed at the prescribed price
- ❖ The quality of PDS commodities is ok
- ❖ Ration depots display the list of scale, rate and stock
- ❖ Fair Price Shop is situated at a feasible distance
- ❖ The PDS commodities are available regularly
- ❖ The behaviour is of the Fair Price Shop Owner

Universe of the Study:

1. Beneficiaries of various categories like Above Poverty line, Below Poverty Line, Antyodaya Anna Yojana and Annapurna Yojana.
2. All Fair Price Shop Owner
3. Government officials related to this scheme like the District Controllers of Food & Supplies, the Sub-Divisional Controller of Food & Supplies, The Block Development Officers, the Inspectors of Food & Supplies and other Officers of Administration.
4. Local people's representative in the district related to this Public Distribution System.
5. Non-Government Organization situated in this district and related to the Public Distribution System.

Sample:

A Multi-stage stratified random sampling method has been used in this study. The following table will give an idea of the sampling procedure.

Sl. No	Main Category	Sub-Category	Sample Size (Selected at random)
1	Beneficiaries	APL	96 (Two from each FPS, one adult male and one adult female)
		BPL	96 (Two from each FPS, one adult male and one adult female)
		AAY	96 (Two from each FPS, one adult male and one adult female)
		AP	48 (One from each FPS, one adult female)
2	Delivery agent	FPS	48 (Two in each block/Municipality)

Tools for data collection:

The main tool of data collection is the interview schedule which has been used to collect data from beneficiaries, delivery agents, people's representative and the NGOs. All these types of schedules have been pretested and then have been standardized and finalised. The interview schedules contain mostly close-ended questions, though some open-ended questions have also been included.

Are the PDS Commodities are Available at the Prescribed Scale:

The PDS commodities are distributed to the rationees through the Fair Price Shop at a prescribed scale set by the Government. These Fair Price Shops are supposed to deliver the commodities through four weeks during a month from Tuesday to Sunday.

Our survey finds the following results:

Our survey result shows that 81% ration card holder gets their entitlement in full from the Fair Price Shop Owner whereas another 19% ration card holder do not get their entitlement in full.

Analysis of the findings: When asked about the reason for not

getting full entitlement the general answer received from the ration card holder is that they do not know their entitlement properly and added that they receive whatever the ration dealer offers them. But those who really know their entitlement properly get their quota in full. And this scenario is highly linked with the awareness and knowledge of the ration card holder.

Are The Pds Commodities Are Available At The Prescribed Price:

The PDS commodities are distributed to the rationees through the Fair Price Shop at a prescribed price set by the Government.

Our survey finds the following results:

Our survey result shows that 93% ration card holder gets their entitlement in full from the Fair Price Shop Owner whereas another 3% ration card holder do not get their entitlement in full.

Analysis of the findings: When asked about the reason for giving extra price the general answer received from the ration card holder is that they do not know the exact price and added that they pay whatever the ration dealer demands.

The Quality of PDS Commodities:

There is a general perception that quality of rationed commodities are of inferior quality. The quality of rice, wheat, atta and sugar is a burning issue in the Public Distribution System not only in the Jungle Mahal but also throughout the State. Frequent complaints are raised by the customer against the Fair Price Shop owner and allege that superior commodity is replaced by inferior one by them. Survey result shows that these complaints are not baseless. The Department of Food & Supplies also admits this through the findings of their various inspections.

Commodities	Answer Of The Ration Card Holder			
	Very Good	Good	Average	Poor
Rice	7%	23%	43%	27%
Wheat	12%	32%	51%	5%
Atta	5%	25%	47%	23%
Overall	8%	27%	47%	18%

Duties of a Fair Price Shop owner:

As per the guidelines of West Bengal public Distribution System (Maintenance & Control) 2013 each and every Fair Price Shop shall display the notice board, stock board, rate and scale board at a prominent place of his shop so that rationees can get the information on the rate, scale, his entitlement and availability of rationed commodities.

The findings of our survey: Our survey finds that about 67% Fair Price Shop Owners display the relevant information prominently in their shop whereas 33% does not display all the information. It is also seen that information displayed are not complete.

Analysis of the findings: It is the duty on the part of a Fair price Shop owner to make the people aware of the availability of their entitlement and price. But by not making the PDS related information public the ration dealers keep them in the dark and supply fewer amounts than what they are entitled to and there by selling the rest amount in the black market to enjoy extra profit.

The Feasibility of Reaching Fair Price Shop:

The most important question which may be asked to any ration card holder is how much far his ration shop from his home. And the answer in maximum cases is that his ration shop is far from his house and this is one of the main reasons behind their non drawal of rationed commodities regularly.

Findings of our survey:

Our survey shows that 45% ration card holder is of the view that the ration shop is situated at a feasible distance. They can reach the ration shop easily in all the months in a year. But 55% rationees are of the opinion that it is not feasible for them to reach the ration shop in all the months in a year particularly during summer and rainy season. In case of jungle Mahal Blocks it is really difficult for them to collect their PDS commodities from a distant shop due to hilly terrain and it is almost impossible for them during summer and rainy season.

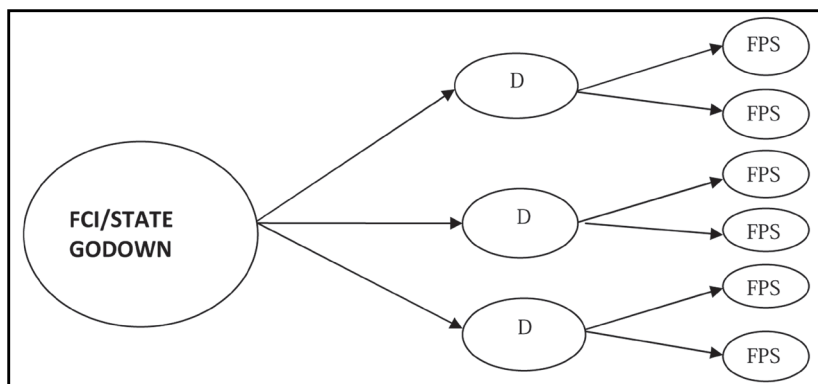
The following chart is going to attempt the average distance covered by the ration card holder in the jungle Mahal area.

Within 1 KM	Between 1 and 1.5 KM	Between 1.5 and 2 KM	Between 2 and 3 KM	Beyond 3 KM
56%	23%	12%	9%	10%

In order to over this problem a number of additional outlets has been opened up to reduce the distance between the ration card holder and the ration shop.

Availability of PDS Commodities, Regularly or Not:

Before going to discuss the above issue the supply chain of the PDS System to be discussed first. The supply chain consist of Food Corporation of India/State godown from where Distributors lift their PDS commodity and delivery the same to the door of the Fair Price Shop Owner. Fair Price Shop owner then distribute the same to the valid ration card holder. The following chart may illustrate the above chain.



PDS commodities are distributed to the consumers four times in a month. Fair Price Shop owner receives the same from the Distributors who in turn lift the same from the FCI/STATE godowns. Distributors lift PDS commodities fortnightly but make Door Step Delivery weekly. M R Distributors and Fair Price Shop owner get their Transport Rebate at source and get a commission

for distribution of the PDS commodities. The total subsidy is borne by the Central and State Government. Due to delay in getting the subsidy part or strike or other reason sometimes PDS commodities are not reached to the consumer in time. That is why we had put a question on this issue in the questionnaire.

Findings of our survey:

Highly Irregular	Answer Of The Ration Card Holder			
	Very Regular	Regular	Average Regular	Highly Irregular
Rice	43%	23%	30%	4%
Wheat	42%	21%	27%	10%
Atta	5%	25%	47%	23%
Overall	30%	23%	35%	24%

The Behaviour of the FPS Owner:

The behaviour of a seller is a very important aspect to make him stand in the competitive market. It really plays an important role to attract the customer to his shop. Proper communication and inter personal relation with the consumer decide the fate of a seller in a big way. It has been proved that due to lack of these factors a seller faces failure although he has all other qualities.

In case of Fair Price Shop owner this principle perhaps plays its role in the opposite direction. If behaviour is good from the part of the owner more and more ration card holder will turn up and lesser and lesser commodity will be available to him to sell it in the open market! Therefore good relationship with the customer means less profit. Here more sell means less profit and vice versa which is unique in the Public Distribution System. Therefore the strategy a Fair price Shop Owner takes is that he not only keeps his shop open irregularly but also behaves with the customer badly in order to keep them away from his shop.

If we look into the data received from our survey we can see that percentage of customer not satisfied with the behaviour of the ration leader is really high.

Improvement of PDS Over Last Two Years:

The public distribution system is widely criticised for being ridden with chronic corruption and failing to deliver benefits in a systematic manner. Using a sample of households in the Jungle Mahal area of West Bengal this article reviews the performance of the PDS in the area and highlights three important points. 1. Distribution of food grains, especially rice, has undergone vast improvements in the past three years. 2. Beneficiaries have been much more cautious than before and 3. Monitoring has been increased substantially.

Also, over the past two years Department of Food & Supplies have introduced application of Information Technology towards lifting and distribution of PDS commodities like SMS system, online report submission and online renewal of licenses. Digital Ration Cards have been provided to the rationees for transparency on the basis of latest Socio Economic and Caste Census database.

Social deprivation in India: A study in Social inequality.

Parnasudha karmodak*

Abstract

The social divide is not new but a part of our Indian Culture. In our Epic “Mahabharata” Eklavya was denied access to quality education because he belongs to a lower social category. The situation has not much changed since then. It is true that the intensity of discrimination has reduced and hence these social groups have improved but it is the improvement of the last boy. In this paper we have tried to show the picture of deprivation across various social categories (SCs and STs) and the general category people with respect to some basic indicators of development using the census data 2001 and 2011

Introduction.

Inequality persists more or less in all the countries. However India suffers from inequalities that are quite unique in its manifestations. The famous Indian Saint Swami Vivekananda said that in the west a person status is settled by his wealth, power or physical attractiveness. In India, status is counted in terms of group or social class to which he or she belongs. India is deeply divided according to societal origin. This division due to being member of a particular social category is very Indian in its nature. A Dalit boy is excluded from an elite educational institute only because he is “less intelligent”. Entangled with gender and economic dimension the problem becomes very complex. Apartheid in U.S.A, South Africa, Australia and other English speaking countries came quite

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close to this. However, even here the India's case is a starring exception. In India the caste system exists for centuries or even millennium. Here people of different caste lives side by side with daily interaction. Yet, an ocean of gap lies between them. Various movements social, political and economic have failed to bridge this gap (Dreze and Sen, 2013). It is this "resilience" of the system that has bewildered intellectuals-both Eastern and Western. Economists and sociologists view this as a sort of stable equilibrium. The nature of such equilibrium then becomes a serious field of investigation. Theorising caste in this way helps us to understand various implications of the system.

One such implication is now manifested into the parameters of Human Development. This covers a wide range of dimensions such as Literacy rate, Child gender ratio, Work Participation Rate (WPR), Percentage of Main and Marginal workers to total workers, etc. across caste and gender. It is due to the mutual effect of different kinds of inequalities that leads to such an unfair social system where disadvantaged group lies in the bottom layer of this system. Though, the intensity of discrimination has reduced due to the spread of education and steps taken by the government but not disappeared. In spite of roughly seven decade of an independent country, the backward classes are still a lingering, hapless section of the entire populace. This is prevalent in the attitudes of the upper classes towards this so called backward group (pichre barg).

Suppose the members of group-A is less productive as believed by all the entrepreneurs, then members of group A will be paid less. This believes regarding the group turns out to be true and they actually becomes less productive. Thus a person's productivity is highly proportionally to the social setting in which he/she lives and works. This result has been beautifully put forward by Karla Hoff and Priyanka Pandey (2005, 2006). They observed that Low caste children solve mazes (an indicator of intelligence and analytic skill) with as much ease as the higher caste children does. But if caste of the children is publicly announced before conducting such test

then lower caste children perform worse.

Let us consider another example. Suppose there are two businessmen C and D, then before signing contract to any of the businessmen we need to look out how productive and efficient the person is. This will be clearly reflected in their educational qualification, their hardworking experience, etc. But the situation is not so much simple it too depends on others who offer contracts with them. Here comes the effect of inequality. The community, class of an individual begins to determine how effective a person is in his work. Depriving the person C as he/she belong to backward class would resist the businessmen in signing contract with him/her. This in return would make him more unproductive as he/she cannot pay anything back to the society (Kaushik Basu, 2010). Such practice of the higher caste educated people in India paves the way for government interventions in the form of reservation practice. The primary objective of the reservation system is to enhance the literacy rate, Standard of living and economical and social status of the backward classes in India. However government is no idealised vacuum. The working of public policy even what are idealistic turns out to be tainted by the imprint of caste. In public schools of West Bengal, high caste teacher tends to neglect the lower caste pupils (Sen Pratichi Report 2, 2009). Also they tend to neglect mid-day meals deeming it to be the purview of lower caste students and their parents. The parents of these students also cannot assert themselves in the day to day working of government schools. A similar treatment of low caste patients in the government hospitals of Rajasthan have been noted by Banerjee and Duflo (2011)

In this paper we have tried to throw light on the picture of deprivation among the backward classes (SCs and STs) and the general category people with respect to some basic indicators of development. First, we try to chart some terrain of theoretical thoughts in regard to social inequalities in India. This theoretical background would prepare us for our empirical study. The paper is divided into three sections. Section 2 gives a brief theoretical

structure. In section 3, the indicators chosen have been discussed. In section 4, India's performance each for SC, ST and general category with respect to the indicators chosen has been provided using Indian census data 2001 and 2011. Section 5 concludes our study.

Theoretical understanding of caste.

There are numerous studies on the structure and prevalence of caste-system in India. (Thorat (2001, 2002, 2004, 2007), Ambedkar (1936, 1987a, 1987b, 1987c)). The Indian caste system is known for its resilience. It was codified thousands of years ago. Since then there were a number of political, social & cultural upheavals in India against the system. Reformers even since the time of Gautama Buddha or may be even earlier having repeatedly stroke against it. Political dynasties rose and fallen, Economic structure radically change with the expansion of a agriculture, trade, rapid urbanization and other. Socially the economy was also unstable and after independence the government even proclaimed laws that banned several caste practices and yet all these have failed to change the caste laws and its parasitic influence on the society.

Strangely enough, the caste moulded itself into all the social forms. The anti-establishment religious movement (Buddhism, Jainism, Vaisnabis, etc.) themselves turned into several caste sects. Even foreign religions like Islam or Christianity themselves moulded into caste patterns when fallen in the Indian soil. The democratic system of modern independent India co-existed or even accumulated caste features. Democracy in India in many areas is not an individual choice but the choice of community or sect or caste to which he/she belongs. The reservation system instead of removing caste discrimination fuelled it. It is the strange resilience of the caste system and mixture with all the massive changes is really a concern.

Ambedkar (1936) was the first to define the parameters of caste system into a simple logical structure. This helped the first serious analytical work on caste by Akerlof (1976). Akerlof innovated a new

idea of “Triad” to understand the “Caste equilibrium”. According to him, triadic relation exist when the interaction between A and B is dependent on the third party C who is not a party to this interaction. For example, if in a caste society a Brahman cannot knowingly hired an outcaste cook (Akerlof 1976). If he does so he will be out casted and the cook to find subsequent employment almost impossible to obtain. Here the transaction between two person—The Brahman and the Cook. In the standard text book economics the equilibrium should be obtained if the welfare of both the Brahman and the cook is maximized. In the caste equilibrium, the final equilibrium depends on the caste laws. Each individual has to take consideration of these laws when making any decision.

The caste taboos are strange. Not only doing against the caste laws makes one vulnerable, but maintaining relationship with somebody who has broken the caste law also is equally bad. Basu (One kind of power 1986) says it beautifully. A person ‘i’ is disloyal if:

1. He does not obey the caste law.
2. He interacts with ‘j’ who has disobeyed the caste laws.

Basu considers a simple economy of finite individuals. Each of them possesses different goods. Each of these goods is essential. This simply means the utility of each individual depends on using some portion of all the goods that the society has procure. If he doesn’t his utility smashes to zero. He has to use the positive amount of each and every good that the society offers.

Thus the cost of disloyalty is severe. It means remaining at a zero utility level for all times to come, except the present. Even without any other stringent punishment, this equilibrium will prevail. Since each individual reason in this way the equilibrium is sustained. No one wants to break the caste law. Akerlof gives three features of the caste equilibrium-----

The equilibrium is not Pareto optimal.

It has distortions due to caste structure. In the absence of caste, all individuals get an equal share of the social product--- the society is egalitarian. It is caste system that brings inequality in the system.

The caste equilibrium satisfies everybody's expectations, given the caste laws. This is a peculiar feature or triad as demonstrated by Basu (1986). Even without direct coercion of any kind, individuals willingly submit to two sub-optimal situations. It is the threat of caste law that makes him to do it.

The stale-mate cannot be broken by any individual. It can only be broken by a group that can themselves up as a separate sub-sector. Yet, there as well off as in equilibrium while trading with caste members on the terms of trade granted to outcaste. The coalition must be large where the trade with the caste economy is necessary. It will also be large where the cost of forming a coalition is high, the threat to equilibrium to such a coalition is small.

Scoville(1996) has further elaborated the economics on a caste equilibrium beyond that of Akerlof (1976). In the Akerlof's model the occupations are hereditary, compulsory and endogamous. Scoville(1996) provides the argument of Coase to show the possible bases for the labour market segmentation. Also it demonstrated how the system can withstand the labour market competition. This model is more complex than Akerlof(1976) or Basu(1986). Here the basic needs of individuals vary according to their caste affiliation. Also each caste can modify the marriage rules to control caste population growth. By these two mechanisms the caste system can sustain for a long time.

The implication of the above theoretical model is clear. Caste system distorts the overall welfare of the society. It reduces everybody's welfare makes the income distribution skewed and embeds inequality. The cost of breaking the caste laws is also very high making it almost impossible for any voluntary action to achieve it. It requires strong action of state initiation to correct this situation. It is this story state that may be reflected in the empirical exercise.

Choice of the indicators.

For the purpose of our study we have considered the following indicators of development- (i) Literacy rate, (ii) Child sex ratio (iii) 0-6 child proportions, (iv) percentage of marginal workers to total workers, (v) percentage of main workers to total workers, (vi) Work participation rate, (vii) Percentage of agricultural labourers to total workers.

A person (aged 7 and above) is considered literate, if he or she can read and write, with understanding, in any language. Education has a great role in the process of development and progress of an economy. With education a person can properly understand the world and communicate with others in the society. Secondly it enhances the employment opportunities of a person. It also helps one in tackling the health problems. Education among females helps to reduce population related problems, child mortality rates, female infanticides, etc. Education also helps in reducing the level of inequalities among castes and gender.

We now consider an important dimension of deprivation- the spate and magnum of sex ratio. Sex ratio is defined as the number of females per 1000 males in a population in the age group 0–6 years in a human population. The sex ratio in the age group 0-6 attempts to bring out the on-going changes in our society in its attitude towards the girl child.

After considering gender-ratio, our next focus is on mortality and fertility. We have considered the 0-6 child proportion. This measures the proportion of the children in the total population. In any society, child proportion is very important. It is indirectly linked to the fertility rate and young dependency ratio (Ram and Shekhar, 2006). In any developed society it is hoped that this should be lower. In its exposition of growth theory, Lucas (2002) opined that the fertility rate is high in underdeveloped backward communities. The chief reason behind this is high fertility is linked with high raw labour that adds to the family's income. However with development the prospect of human capital opens up. This

is a process whereby a raw labour can be tends to a high skill high earning member. However such skill formation is costly. Family's face a Quality-Quantity trade off. A rich family who is eager to take the advantages of skill acquisition of generally prefers a lower level of fertility. A poor family on the other hand remains at the lower end with high fertility and low skill. This is true for a community. If a sizeable portion of a community becomes well-off this should lead to a reduction of the child proportion and hence fertility rate.

Employment is an important aspect of human development. However it is difficult to measure in quality and quantity standardization. In an under-developed economy there are various types of employment with various wage-rates, work hours, working conditions and so on. The easiest and rough measure is WPR- the proportion of workers to total population.

Census data has categorized between two forms of workers-

1. Main Worker: Persons who 'worked' for 6 months or more during the reference year.
2. Marginal Worker: Persons who 'worked' for less than 6 months.

In the paper, we have considered percentage of main and marginal workers to the total

population using the formula
$$\frac{(\text{Total Main}(\text{Marginal})\text{worker})}{(\text{Total worker population})} .$$

Our last variable measures the vulnerability of various social groups. In the recent thinking distinction is made between poverty and vulnerability. Poverty gives a one sort picture. A family may be poor due to temporary or permanent causes. A poor family may have the prospect of moving out of the family in the recent future. For example- if a family has members who are unemployed but seeking jobs this would be the case. Alternatively a not so poor family may become poor. This may due to the detection of chronic, non-curable and costly disease of its main earning

members. Vulnerability is a more permanent measure. It measures the socially and economically weak brunt of deprivation. In Indian rural society, the land-less agricultural labourers are the most deprived section of the populace. The proportion of agricultural labourer in any community gives an indirect hint to the dimension of vulnerability for this community. In our next section we discuss the main results of our analysis.

Empirical Exercise

In the first decade of 21st century i.e. during 2001-2011, population of India in absolute number has changed by 181.96 million persons where increase among male is 90.07 millions and among female it is 90.99millions. This indicates a higher growth rate among female (18.3%) than that of male (17.1%). With this if we compare the overall SCs and STs Population we get that it has grown by 20.85% and 23.7% respectively. In both the cases female growth rate is higher than that of the male.

India's inequality in terms of literacy rate is illustrated in Table 1.1 and Table 1.2 below.

Table 1.1: Literacy rate

	Total population		Scheduled caste		Scheduled Tribe	
	2001	2011	2001	2011	2001	2011
Total	64.8	73	54.7	66.1	47.1	59
Rural	58.7	67.8	51.2	62.8	45	56.9
Urban	79.9	84.1	68.1	76.2	69.1	76.8

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

Table 1.2 Top and bottom 5 states (2011)

State/Union Territory	Literacy rate	State/Union Territory	Literacy rate
Top 5		Bottom 5	
Scheduled Castes			
Daman & Diu #	92.6	Bihar	48.6
Mizoram	92.4	Jharkhand	55.9
Tripura	89.4	Rajasthan	59.7
D & N Haveli #	89.4	Uttar Pradesh	60.9
Kerala	88.7	Andhra Pradesh	62.3
Scheduled Tribes			
Lakshadweep #	91.7	Andhra Pradesh	49.2
Mizoram	91.5	Jammu & Kashmir	50.6
Nagaland	80	Madhya Pradesh	50.6
Sikkim	79.7	Bihar	51.1
Tripura	79.1	Odisha	52.2

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

We can bring out certain facts from Table 1.1 and Table 1.2. From Table 1.1 we observe that literacy rate have improved from 2001-2011 in all the categories (rural, urban and all the caste division). However the social divide still persists. Rural India is well-behind urban India, SCs and STs behind the general. The condition of STs is worst particularly in the rural areas. From Table 1.2 the picture is more clear. Among the top five entries in SCs and STs there is no large state except Kerala (that too in SC). Among the bottom five Bihar and Andhra-Pradesh remains in both SCs and STs. These two are in most deplorable conditions. Other states of the BOMARU categories appear in the bottom five categories. This is the story of literacy even after 60 years of planning and almost 65 years of independence.

Next, we present India's inequality in terms of Child Sex ratio in Table 2.1.

Table 2.1: Child sex ratio comparison

	Total population		Scheduled caste		Scheduled Tribe	
	2001	2011	2001	2011	2001	2011
Total	927	919	938	933	973	957
Rural	934	923	941	936	974	959
Urban	907	905	924	922	951	940

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

Child sex ratio has fallen in all the three cases (SCs, STs and Total population) during 2001-2011. This data unravel the truth of increasing practice of female infanticides even among the high class educated people. Infact this kind of orthodox thinking prevails more among the high caste educated people as compared to the backward classes. The decreasing sex ratio in this age group has a cascading effect on population over a period of time leading to diminishing sex ratio in the country. The imbalance that has set in at this early age group is difficult to be removed and would remain to haunt the population for a long time to come.

Table 2.2 depicts top and bottom 5 states in respect of Child sex ratio each for Scheduled castes and Scheduled Tribe.

Table 2.2 Top and bottom 5 states (2011)

State/Union Territory	Child Sex ratio	State/Union Territory	Child Sex ratio
Top 5		Bottom 5	
Scheduled Castes			
Mizoram	1161	Jammu & Kashmir	861
Goa	982	Haryana	876
Jharkhand	976	Chandigarh #	887
Sikkim	973	Punjab	888
Puducherry #	969	NCT of Delhi #	891
Scheduled Tribes			
Chhattisgarh	993	Lakshadweep #	907
Odisha	980	Jammu & Kashmir	912
Arunachal Pradesh	977	Tamil Nadu	918
D & N Haveli #	977	Rajasthan	921
Jharkhand	976	Daman & Diu #	925

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

The State wise distribution in 2011 reveals that both the rich and poor states come under bottom five category. Rich states such as Haryana, Chandigarh, Punjab and Delhi accounts for four out of five bottom five states in child sex ratio for 2011. For ST the developed state Tamil Nadu enters the picture. The conjecture supports Sen's thesis that poor performance in gender ratio pervade economic record.

Table 3.1 shows caste-wise children distribution of India in the age group of 0-6 years during 2000-2011.

Table 3.1: Child proportion comparison

	Total population		Scheduled caste		Scheduled Tribe	
	2001	2011	2001	2011	2001	2011
Total	15.9	13.6	17.4	14.5	18.5	16
Rural	17	14.6	18	15.2	18.7	16.4
Urban	13.1	11.5	14.8	12.3	15.2	12.8

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

India with 1.21 billion people constitutes as the second most populous country in the world, while children represents 39% of total population of the country. The share of Children (0-6 years) in the total population has showed a decline of 2.3 points in 2011, compared to Census 2001. In case of SCs and STs the decline in the share of children (0-6 years) in total population is 2.9 and 2.5 respectively. In the rural areas declining trend is greater in case of Total population and SCs while for STs declining trend is greater in the urban areas. As per census data 2011, Uttar Pradesh (19.27%) is the state with highest children's population in the country followed by Bihar (10.55 %), Maharashtra (8.15 %), West Bengal (6.81 %) and Madhya Pradesh (6.46%) constitutes 52% of Children's population in the country.

Let us now consider inequality of Indian in terms of work participation rate. However it is not a good indicator of development. This is so because in India a huge amount of workers are employed with no wage in return or with marginal wage in return.

Table 4.1: WPR Comparison.

	Total population		Scheduled caste		Scheduled Tribe	
	2001	2011	2001	2011	2001	2011
Total	39.1	39.8	40.4	40.9	49.1	48.7
Rural	41.7	41.8	42.5	42.4	50.4	50
Urban	32.3	35.3	32.1	35.9	34.6	37.2

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

The work Participation rate (WPR) is 39.1 percent as per 2001 census. While WPR has marginally increased to 39.8 percent in 2011. In case of SCs the picture is almost the same. However WPR has reduced in case of STs. In the urban areas WPR for STs registered significant decrease from 34.6 percent to 37.2 percent during 2001-2011.

When we classify between main and marginal workers SCs and STs situation deteriorates. This has been depicted in table 4.2 below

Table 4.2: Worker's classification comparison

		Total population		Scheduled caste		Scheduled Tribe	
		2001	2011	2001	2011	2001	2011
Percentage of Marginal Workers	Total	22.2	24.8	27	29.3	31.1	35.2
	Rural	26.1	29.5	29.4	32.8	32	36.7
	Urban	9.2	12.4	14.6	16	16.8	17.9
Percentage of Main Workers	Total	77.8	75.2	73	70.7	68.9	64.8
	Rural	73.9	70.5	70.6	67.2	68	63.3
	Urban	90.8	87.6	85.4	84	83.2	82.1

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

A sharp fall in the Percentage of main workers to total population in all the three categories occurs during 2001-2011. However the proportion of the marginal workers has improved. This points out towards non-standard temporary jobs taking over the permanent jobs in liberalized India.

Table 4.3: Percentage of agricultural labourers to total workers

	Total population		Scheduled caste		Scheduled Tribe		
		2001	2011	2001	2011	2001	
Percentage Of Agricultural Labourers To Total Workers	Total	26.5	30	45.6	45.9	36.9	44.5
	Rural	33.1	39.3	52.2	55.2	38.4	47.1
	Urban	4.7	5.5	11	10.5	12.4	13.3

Source: Primary Census Abstract for Total population, Scheduled Castes and Scheduled Tribes, 2011 Office of the Registrar General & Census Commissioner, India

However the proportion of agricultural labourer is higher among the SCs and STs than the general population. Also this proportion is increasing. Among SCs more than half the labour is agricultural labourer. Increasing landlessness, no employment facilities outside the agriculture and the general decline in agriculture have all resulted in this poor scenario.

In considering the relationship between the social stratification and economic dimension we find certain patterns and correlations. Generally speaking the socially deprived classes are also economically deprived, however to bring the relation more stringently we next move on to the analytical perspective.

Conclusion

This social divide is not new but a part of our division. In our epic “Mahabharata” Eklavya was denied access to quality education because he belongs to a lower social category. The situation has not much changed since then. The census data reveals wide deprivation in education, health and livelihood pattern across the various social

categories. It is true that these groups have improved but it is the improvement of a last boy. The cleavage is still deep. Government policies and well directed intervention are necessary to remedy the situation. We hope that in this new century, the vestiges of our old tradition will dissolve. We will move from the well planned spacious dwelling housing of elites existing side by side with the shabby living places for downtrodden prevalent in the lost city of “Mohenjo-Daro” to a country where each can breathe freely. With this hope let our new journey begins.

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Social Network and mass exodus of youth from Rural Bihar

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One of the most visible and sound change that rural area is experiencing at present is 'depeasantation'. Peasantry is losing its importance not just as source of livelihood but way of life also and this is happening all around in developing countries. Youth of rural area are now not able to see their future in agriculture. It is expected that those who are leaving agriculture and allied activities, a large proportion of them may opt for out-migration. Migration can not be understood as symmetric distribution of population over the space. It is not a linear outcome of economic factor but it involves several social and cultural factors also. Besides material and human capital (education, skills, knowledge), social capital is a third, crucial migration resource in (1) enabling and (2) inspiring people to migrate. The study aims to understand the mass exodus of youth from the area and its demographic outcome and try to understand the role of social network in migration process.

1. Introduction

One of the most visible and sound change that rural area is experiencing at present is 'depeasantation'. Peasantry is losing its importance not just as source of livelihood but way of life also and this is happening all around in developing countries (Bryson, 1998). The 70th Round of NSS survey conducted in 2013 shows that an average household of cultivator receives merely Rs.3081 from

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cultivation and Rs.763 from animal husbandry. In India,80.8per cent of land holdings are below 1 hectare and around 64.8per cent of holdings are below 0.4 hectare in 2009-10; clearly income from cultivation became very less for most of the households depending upon agriculture. Such thin income is not even bare minimum to hold the entire family back to agriculture. Lives and livelihoods in the Rural South are becoming increasingly divorced from farming and, therefore, from the land. Patterns and associations of wealth and poverty have become more diffuse and diverse (Rigg, 2006). During the decade 2001-11, the Census results show a fall of about 9 million in cultivators and an increase of about 38 million in agricultural labourers. Total cultivators in rural areas have declined from 40 per cent in 2001 to 33 per cent in 2011. Although, in the same time period, the proportion of agricultural laborers increased in the workforce from 26.7 per cent to 30 per cent in 2011 (Salve, 2014). Clearly, free labour force is being created in rural area. However, non-agricultural sector is also emerging in rural area, but this sector is also facing an increasing casualization of its labour force (World Bank, 2011, Desai 2014). Youth of rural area are now not able to see their future in agriculture (Rigg, 2006). It is expected that those who are leaving agriculture and allied activities, a large proportion of them may opt for out-migration.

Migration can not be understood as symmetric distribution of population over the space, but this process of age and sex selective. It is not a linear outcome of economic factor but it involves several social and cultural factors also. People tend to move to places where the standards of living are better, this alone cannot explain the actual shape of migration patterns. This draws our attention to the role of nation states, geographical proximity, institutions, social networks, and cultural and historical factors in creating new migration patterns. Social networks in the context of migration can be defined as sets of interpersonal ties that connect migrants, former migrants, and nonmigrants in origin and destination areas through bonds of kinship, friendship, and shared community origin (Massey et al 1993). Besides material and human capital

(education, skills, knowledge), social capital is a third, crucial migration resource in (1) enabling and (2) inspiring people to migrate (de Haas, 2010). There is Lee's (1966) argument that migration facilitates the flow of information back from the place of destination to the origin, which facilitates the passage for later migrants. There is evidence that the already settled migrants function as 'bridgeheads', reducing the risks as well as material and psychological costs of subsequent migration (Bocker 1994). Through the assistance of friends and relatives, new migrants may more easily be able to obtain information and receive active assistance in finding employment and a place to live, in arranging residence papers, or in finding a marriage partner. Therefore, the formation of an established migrant community at one particular destination will increase the likelihood of subsequent migration to that particular place. Massey (1989) argued that once the number of network connections in an origin area reaches a critical level, migration becomes self-perpetuating, because it creates the social structure to sustain the process (Appleyard 1992). A developed social network creates the propensity and motivation for others and therefore creates the culture of moving. Therefore migration always takes place in clustered form.

2. Need for the study

Out-migration (for economic or employment related reasons) is a process which always and essentially involves the best labour force available in the household. Young male labour force is more mobile than ever before. As, the return in agriculture became insufficient and non-agriculture is also not offering a decent option for livelihood, poorest are converting into footloose labourers. Advancement in information and communication and more and more integration of space is decreasing ignorance among people about different place. The current generation seems less sceptical about migration. Now people are more likely to use the established route of out-migration and they may more easily discern the new destination. The areas where the migration network is not matured may also start showing higher participation. Therefore, it

is necessary to understand the exodus of youth and out-migration from the area.

3. Objectives

1. To understand the mass exodus of youth from the area and its demographic outcome.
2. To understand the role of social network in migration process.

4. Methodology

Saran Division is one of the nine divisions of Bihar located at the western part of upper Ganga plain of the state. This is the region from where the stream of out-migration originated at the earliest in British Raj. Bhojpuri is the local dialect of the region. The experience of migrants and their left behind family is well registered in Bhojpuri folk songs and other cultural forms (Tiwari 2003). In this area, the route of migration is diversified and circular international labour – migration has also recently established as new destination. Gopalganj is a district of Saran division or old Saran district. Barauli block in Gopalganj district is selected as the area of study. Sex ratio (male/female) which is also very low in the study block (947 male per 1000 female according to census 2001), which is a clear indication of higher male out-migration from the block. There are 71 villages in this block out of which 10 villages are selected according to Probability Proportion to Size (PPS) method. Household is the unit of sample and head of the household is respondent. Circular systematic random sampling method has been adopted for sampling. For fulfilment of first objective, income data of household has been collected and for the fulfilment of second objective, work-force related data have been collected.

5. Results

5.1: Out-migration from area of study: It has been found that often higher rate of migration is captured in the micro level of study. Therefore, a higher rate of out-migration was expected through field survey. Figure 1, show that international migration is

taking place from around 16 percent of household out of 450 and national migration is taking place from 49 percent of household therefore the proportion of household with out-migrant is around 65 percent (and around 59 percent of household is receiving remittances).

Figure 1: out-migration from household for employment related reasons

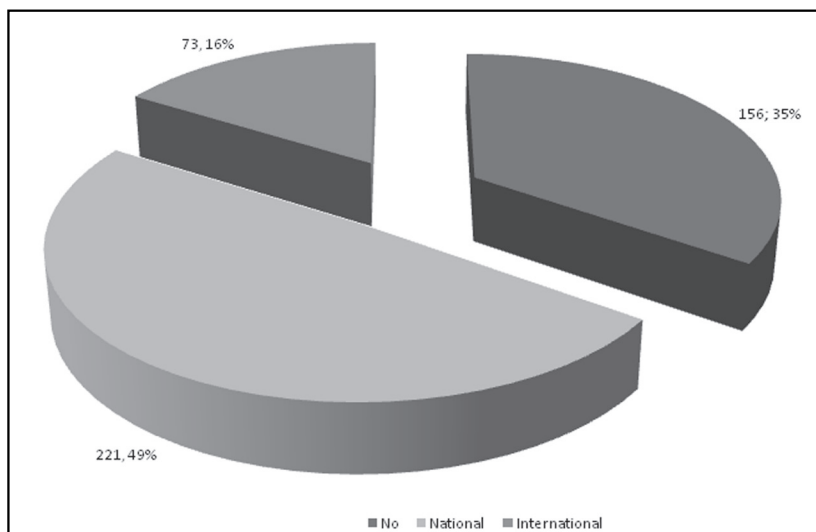


Figure – 2, shows that million plus cities are attracting the major chunk of out-migrants from the area; around 65.2 per cent of the total out-migrants are going the major million plus cities of India, and merely 16.4 per cent of migration is taking place in the other cities of India. A sizable proportion of 18 per cent is going overseas. Those who are migrating in metro cities, majority of them are going Delhi (30.7 per cent), Mumbai (10.1 per cent), Kolkata (8.5 per cent), Surat (8 per cent), Ahmadabad (5 per cent), Jaipur (5 per cent), Pune (4 per cent) and Ludhiyana (4 per cent). These are the major metropolitan cities of Delhi and Mumbai industrial corridor (except Ludhiyana). Among the countries where emigration is mostly taking place from the area is Saudi Arab (61.8 per cent), U.A.E. (21.8 per cent) and Oman (5.5 per cent).

Figure 2: Destination of out-migrant (in per cent)

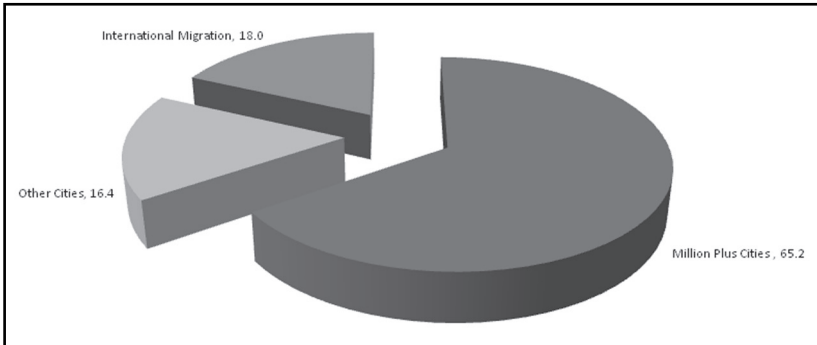


Table 1, shows the socio-economic background of out-migrants from the area of study. Around 80.8 per cent of internal migrant's household is Hindu, while 60 per cent of emigrant's household is affiliated to Muslim religion. Around 74.7 per cent of internal migrant's household comes from OBC category and their proportion is 60 per cent, in case of emigrant's household. The highest proportion of out-migrants and come from small and middle peasantry (more than 0.2 hectare) (40.8 per cent), with even higher proportion in emigrants (45.5 per cent). Again, in case of type of family, the highest proportion of out-migrants comes from the most complex household (3 and above marital units) (37.3 per cent), which shares around 45.5 per cent among emigrants. Around 42.8 per cent of internal migrants and 30.9 per cent of emigrants are below middle pass. Around 60.3 per cent of internal migrants and 45.5 per cent of emigrants belong to the age-group 15 to 29 years. Around 61.6 per cent of internal migrants and 72.7 per cent of emigrants are currently married.

Table 1: Socio-economic background of migrant's household by destination

	National	International	Total
Religion			
Hindu	80.8	40.0	72.9
Muslim	19.2	60.0	27.1
Caste			
SC &ST	9.6	5.5	8.8
OBC	74.7	60.0	71.8
General	15.7	34.5	19.4
Land ownership			
Landless	23.6	23.6	23.6
0.01 to 0.2	36.7	30.9	35.6
0.21 and above	39.7	45.5	40.8
Number of marital units in Household			
1	34.9	25.5	33.1
2	29.7	29.1	29.6
3 and above	35.4	45.5	37.3
Educational status			
Bellow middle	42.8	30.9	40.5
Middle and secondary	41.5	49.1	43.0
Higher secondary and above	15.7	20.0	16.5
Age group			
15-29	60.3	45.5	57.4
30-44	32.8	43.6	34.9
45-59	7.0	10.9	7.7
Marital Status			
Currently married	61.6	72.7	63.7
Single	38.4	27.3	36.3
Total	100	100	100

5.2 Out-migration and demography of the area of study

Figure 3, shows the size of family in the area of study with and without migrant members. The table shows that the size of the family is generally higher in the area of study, with mean size 7.6 members (including out-migrants) and 6.5 (excluding out-migrants), with standard deviation (SD) 3.8 and 3.3 respectively. Merely 7.6 per cent of household have 1 to 3 members, 23.3 per cent of households have 4-5 members, 30.2 per cent of households have 6 to 7 members and rests 38.9 per cent of household is consisted by 8 or more members. As it described, the sheer size of the household is reduced by migration, yet it is big enough; around 46.1 per cent of household contains 1 to 5 members, 23.3 per cent of the household contains 6 to 7 members and rest 30.6 per cent of household contains 8 and more members.

Figure 3: Distribution of household by size (in Per cent age)

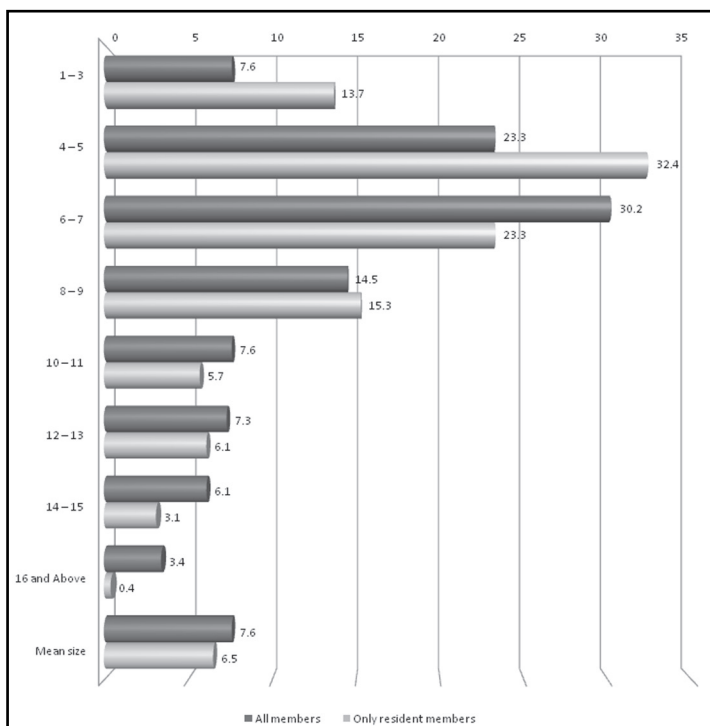


Table 2, shows male out-migration from household by availability of young male members. Around 69.6 per cent of household are having male member of 15-29 years and out-migration or emigration is taking place from 42.7 per cent of household. In 31.3 per cent of household one member of this age-group is available, among them 14.2 per cent are out-migrating and from 17.1 per cent of household, they are staying back. In 22.2 per cent household two youths of this age-group is available, out of this, from around 6.9 per cent of household they are staying back, from 8.9 per cent of household one member is out-migrating and one is staying back and from 6.4 per cent of household both are out-migrating. In 16 per cent of household three or more youth of age-group 15 to 29 is available, out of them in 2.7 per cent of household all are staying back, in 4.7 per cent of household, one is out-migrating and others are staying back, from 6.4 per cent of household two members are out-migrating and from 2.2 per cent of household, three or more members are out-migrating.

Around 48.4 per cent of household are having male member of 30 – 44 years and out-migration or emigration is taking place from 28.4 per cent of household. Around, 37.8 per cent of household has one member from this age group, and from 18.7 per cent of household and staying back from 19.1 per cent of household, in around 7.6 per cent of household, two members of this age-group is available, from 4.9 per cent of household both are out-migrating, from 2.2 per cent one are out-migrating and one is staying back and from 0.4 per cent of household all are staying back. Around 3.1 per cent of household is showing availability of three or more members of this age-group and from 2 per cent of household, more than three are out-migrating. Around 41.1 per cent of household are having male member of 45 – 59 years and out-migration or emigration is taking place from 8.9 per cent of household. In around 39.8 per cent of household, one member is available and out-migration is taking place from 8 per cent of household.

Table – 2: Male out-migration from household by availability of male members (in per cent age of total household)

Age-group	No. of male members	No. of out-migrants in household				
		Zero	One	Two	Three	Total
15-29	One	17.1	14.2	-	-	31.3
	Two	6.9	8.9	6.4	-	22.2
	Three	2.7	4.7	6.4	2.2	16.0
Total	26.7	27.6	12.9	2.2	69.6	
30-44	One	19.1	18.7	-	-	37.8
	Two	0.4	2.2	4.9	-	7.6
	Three	0.4	0	0.7	2.0	3.1
Total	19.8	20.9	5.8	2.0	48.4	
45-59	One	31.8	8.0	-	-	39.8
	Two	0.4	0.7	0	-	1.1
	Three	0.2	0	0	0	0.2
Total	32.2	8.9	0	-	41.1	

Figure 4 shows the sex - ratio in the study area. The figure shows that female is outnumbering male with a huge margin; there is 1224 female/1000 males, but such figure is emerging just because heavy out-migration from the area of study. Once the out-migrants are considered as member of the left behind family, a completely reverse picture is emerging, there is merely 904 female/1000 males in the area. Therefore, migration is making a gigantic difference in the sex structure in the area of study.

Figure 4: shows the sex - ratio in the study area

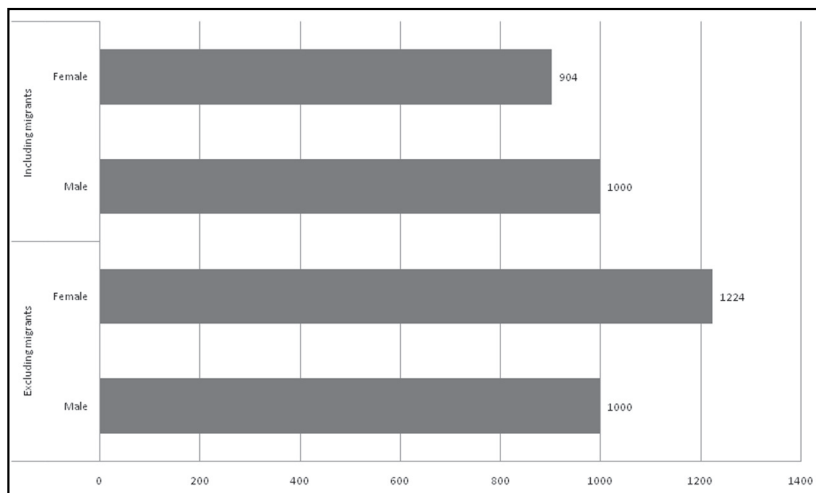


Table 3: shows the distribution of surveyed population in age – group including and excluding migrant members of the household. In case of age distribution of female population, migration has made little or no impact on age distribution but in case of male population, the table shows that migration has made a phenomenal change in the age distribution pattern. In case of female, in while excluding the population of migrants, around 35.8 per cent are in the category of 0-14 years, 28.3 per cent are in the category of 15-29 years, 17.1 per cent are in the category of 30-44 years, 11.2 per cent are in the category of 45-59 years and remaining 7.6 per cent are in the category of 60 years and above. The age distribution of female remains almost same while migrant population is included. In case of male, excluding migrant population, the share of child population (0-14 years) is 42.6 per cent, while youth (15-29 years) is 24.2 per cent, in the age group 30 to 44 years the proportion of population is merely 9.3 per cent, in the age group 45 to 59 years the proportion is almost 11.7 per cent and the proportion of elders (60 and above) is considerably higher (12.3 per cent). After including migrant population, the age distribution shows a balance figure. In the age group 0-14 years around 32.1 per cent of male

are included, around 32.5 per cent comes in the category of 15 to 29 years, in the category of 30 to 44 years 15.7 per cent of male population is included, the age group 45-59 years includes around 10.7 per cent of male population and in the age group of elderly (60 years and above) around 9 per cent of male are included. Overall, child population (0-14) in the area is around 38.8 per cent, which is close to 40.1 per cent recorded in the survey of NFHS – IV.

Table 3: Age- distribution of surveyed population in per cent age

	Sex (excluding migrants)			Sex (including migrants)		
	Male	Female	Total	Male	Female	Total
0-14	42.6	35.8	38.8	32.1	35.6	33.8
15-29	24.2	28.3	26.4	32.5	28.3	30.5
30-44	9.3	17.1	13.6	15.7	17.3	16.4
45-59	11.7	11.2	11.5	10.7	11.2	11
60 and Above	12.3	7.6	9.7	9	7.6	8.3
Total	100	100	100	100	100	100

Figure 5 (A) and 5 (B), shows the age – sex pyramid of the population under study 6 (A) shows the pyramid with migrant and 6 (B) is pyramid without migrant. The graph shows that the base of the population is broader. It is broadest in the category 10-14 years, for the former age-group the base shrank, till the category of 20-24 years, the population share is higher, and it keeps on shrinking for till the end. While comparing it with Graph B the population share goes very down in the age group 20-24 years (3.5 per cent), in the age group 30-34 the share is minimal (1.2 per cent) and the pyramid remains almost flat over the latter age group, with slight increment. It shows the mass exodus of male working age population from the area, making the area typically migration- pron.

Figure 5(A): Age – sex pyramid of the population under study (including migrants)

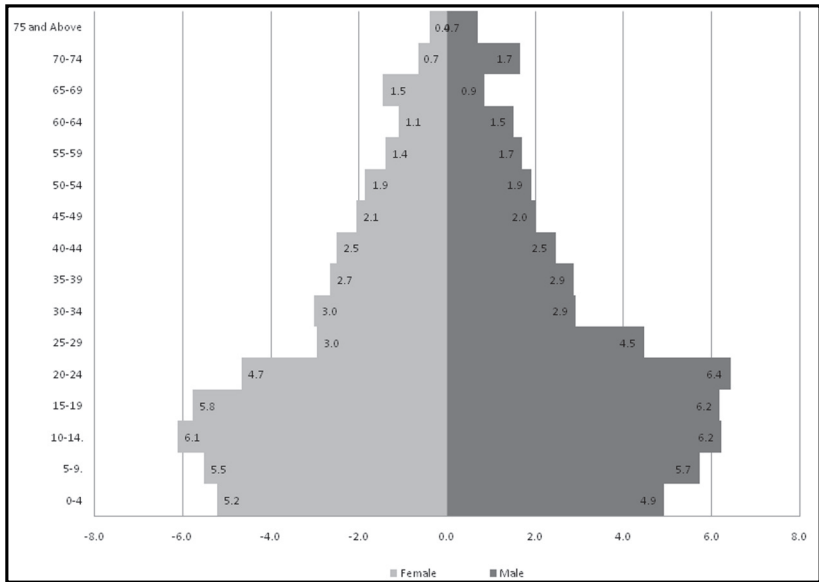
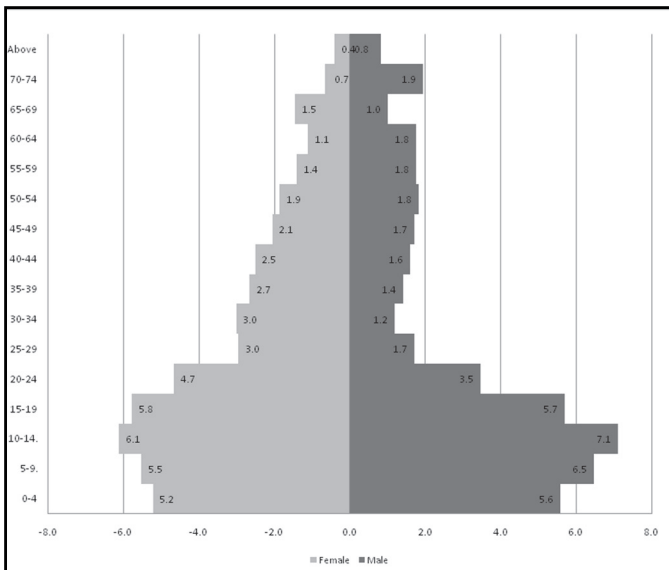


Figure 5 (B): Age – sex pyramid of the population under study (excluding migrants)



5.3 Out-migration and social network

Table 4, shows the source of information that primarily motivated the migrant to make move at their current destination. In case of international migration main sources of information according to respondents were friends (24.5 per cent), agent/broker (22.3 per cent), any other person of village or community (20.2 per cent), relatives (11.7 per cent), travel agencies (10.6 per cent) and board hording/ pamphlet (8.5 per cent). Therefore, family, friends and society is playing a major role in motivation for international migration. In case of migration within national boundary, relatives (35.3 per cent) and other member of village or community (32.2 per cent) and friends (26.6 per cent) are playing the major role, proving that the mutual inter-relationship is the major facilitator of information.

Table 4: Source of information of migration at current destination (in per cent)

Source of information	Destination		
	International	National	All
Board hording/ pamphlet	8.5	0	1.6
Friends	24.5	26.6	26.2
Relatives	11.7	35.3	30.7
Any other person of village/ community	20.2	32.2	29.9
Agent/ Brokers	22.3	0	4.3
Travel Agencies	10.6	0	2.0
Internet	2.1	0	0.4
Others	0	5.8	4.7
All	100	100	100

Table 5, shows the channel through which migration taken place at their current destination. In case of international migration main channels were agent/broker (60.6 per cent) and recruitment agencies (20.2 per cent), some of them got the help from friends or relatives or other person of village/ community (15per cent) and

a few are migrating by self (3.2 per cent). In case of migration within national boundary, main channel is relatives (37.6per cent) and other member of village or community (21.6 per cent) and friends (18per cent), thus social and personal relation becomes important in this case. Around 19.5 per cent of internal migrants are migrating by self.

Table 5: Channel of out-migration by destination (in per cent)

Channel of out-migration	Destination		
	International	National	All
Self	3.2	19.5	16.4
Relatives	4.3	37.6	31.1
Friends	6.4	18.0	15.8
Any other person of village/ community	5.3	21.6	18.4
Agents/ Brokers	60.6	0	11.7
Recruitment Agencies	20.2	0	3.9
Others	0	3.3	2.7
All	100	100	100

Table 6, shows the source of help at current destination. In case of international migration, around 66 per cent of international migrants got help from employers or their representative, and 20.2 per cent of them got help from representative of agent. Some of them got the help from friends (6.4 per cent), any other person of village/ community (5.3 per cent) relatives (4.3 per cent), therefore the social channel is also started working in this process. In case of internal migration member of village or community (19.8 per cent), relatives (16.8 per cent), friends (14.5per cent) and family members (10.4 per cent) are the major facilitator and around 25.9 per cent of migrants are making their arrangement by themselves.

Table 6: Source of help at destination (in per cent)

Helping hand at destination	Destination		
	International	National	All
Agent's Representative	20.2	0	3.9
Employer/Employer's Representatives	66.0	7.6	18.9
Friends	3.2	14.5	12.3
Relatives	4.3	16.8	14.3
Family members	4.3	10.4	9.2
Any other person of village/ community	2.1	19.8	16.4
Self	0	25.9	20.9
Others	0	5.1	4.1
All	100	100	100

Table 7, shows how food has been arranged for out-migrants. In case of international migrants, 69.1 per cent of them got food with charge and 16 per cent got it free, around 9.6 per cent shared it with other migrants. In case of internal migrants, around 22.1 per cent were sharing food arrangement with other, around 15 per cent were getting it with charge and 9.4 per cent were getting it free, around 10.2 per cent got help in making cooking arrangement and around 17.5 per cent received no help in this case.

Table 7: Source of help in arranging food (in per cent)

Type of help for food	Destination		
	International	National	All
Food (free)	16.0	9.4	10.7
Food (with charge)	69.1	15.0	25.4
Food (shared)	9.6	22.1	19.7
Help in cooking arrangement	1.1	10.2	8.4
No help	4.3	17.5	15.0
Not Applicable	0	25.9	20.9
All	100	100	100

Table 8 shows how accommodation has been arranged for migrants. In case of international migrants, 62.8per cent of them got accommodation with charge and 22.3per cent got it free, around 9.6 per cent shared it with others. In case of internal migrants, around 24.1per cent were sharing it with other, around 13.5per cent were getting it with charge and 11.2per cent were getting it free, around 24.1per cent got help in making own arrangement and around 10.2per cent received no help.

Table 8: Source of help in arranging accommodation (in per cent)

Type of help for accommodation	Destination		
	International	National	All
Accommodation (free)	22.3	11.2	13.3
Accommodation (with charge)	62.8	13.5	23.0
Accommodation (shared)	9.6	24.1	21.3
Help in finding accommodation	1.1	15.2	12.5
No help	4.3	10.2	9.0
Not Applicable	0	25.9	20.9
All	100	100	100

Table 9, shows that around 8.5 per cent of international migrants got financial help in initial days while around 12.2 per cent of migrants got in case of internal migration.

Table 9: Financial help in initial days through sources of help (in per cent)

Financial help in initial days	Destination		
	International	National	All
Yes	8.5	12.2	11.5
No	91.5	61.9	67.6
Not applicable	0	25.9	20.9
All	100	100	100

Table 10, shows that, around 95.7 per cent of emigrants got help in finding employment and around 54.8 per cent of internal migrants got this kind of help. Therefore, in case of migration within the national boundary, there is some surety of employment at destination thru their social network, which leads to an easier migration by lessening the risk of unemployment.

Table 10: Employment related help through sources of help (in per cent)

Help in finding employment or made avail	Destination		
	International	National	All
Yes	95.7	54.8	62.7
No	4.3	19.3	16.4
Not Applicable	0	25.9	20.9
All	100	100	100

Conclusion

From the study area, out-migration is taking place from around 65 per cent of the household which is indeed a large proportion compared to NSS estimate for entire Bihar. The main stream of out-migration from the area is towards big cities while international migration is also emerged as an important stream. Around 57 per cent of migrants belong to the age-group of 15 to 29 years while 35 percent of them are from the age-group 30 to 44 years. The mean size of the household was recorded as 6.5 in the survey and according to census 2001 average household size of Gopalganj District is 6.2; larger than the national average. After including the out-migrants as household member the average size reaches up to 7.4 in survey data, thus a major difference comes in the mean size of household. The mass-migration of youth is making a major difference in the age sex structure in the area. In the survey, 1224 female was recorded per 1000 male and proportion of male in age-group 30 to 44 years was just 9.3 per cent of the total male population. In this area, size of household is relatively larger and youth of the joint family (family with higher number

of marital units) are more out-migratory. It indicates to the fact that household with larger size are able to make their youth free, by sharing their work and responsibility. Such distortion found in age and sex structure in the area of study certainly indicates that the household is using its demographic endowment in migration strategy. Around 69.6 per cent of household are having male member of 15-29 years and out-migration or emigration of this group is taking place from 42.7 per cent of household. Around 48.4 per cent of household are having male member of 30 – 44 years and out-migration or emigration of this group is taking place from 28.4 per cent of household. Therefore, availability of young member in the household becomes an important condition for out-migration. Apart from the arrangement within the family, some social arrangement is also required for out-migration. In case of migration within the national boundary 25.9 per cent are out-migrating by self. In case of emigrants, friends, relatives and other members of the villages are playing important role in domination of information. In case of internal migration, friends, relatives and other members of community are not only helping the migrants to settle down but to finds employment also. While, the adjustment of poor in big cities are increasingly getting difficult, social and community relation are playing an important role.

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Muslim Women's in West Bengal and Issue of Son Preference and Gender Discrimination in Education

Imran Philip*

Introduction

Women comprise nearly half of the population of a nation. No nation can progress if half of its population remains deprived. So gender equality is necessary for the development of a nation. Gender equality refers to the equal valuing of the roles of women and men. Gender equality is recognized as a key of development issue because of its intellectual proximity to the goals of universal human rights and social justice. But real situation is that every field in our country like education, employment opportunities, income, health, cultural issues, social issues, economic issues etc, has exists gender inequality. In this present paper I only focus on gender discrimination in education within the Muslim society in west Bengal. I wanted to know the reason behind this gender discrimination and son preference how far responsible for this discrimination.

Thesis Outline

This project is divided into three parts. In the first part I wanted to discuss briefly the status of Muslim women education in west Bengal. Within the Second part I wanted to realize what reason responsible for this discrimination of Muslim women in the field of education in West Bengal. And for the last part I mainly focus to understand son preference how far responsible for this

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discrimination through my field research.

Data and Methodology

I am using my field research, as well as some secondary sources to illustrate this claim. I chose to focus my field research on the method of the personal interview. Personal interview were conducted to find out the reasons behind the discrimination of Muslim women in the field of education and son preference how far responsible for this discrimination.

Literature review:

Additionally, I conducted partial literature review in order to gain background knowledge of this subject. A patriarchal social structure with a strong male preference predominates in many communities, resulting in gender disparities in all human development indicators. Altekari has observed that in ancient times in all patriarchal societies the birth of a girl was generally an unwelcome event whereas everywhere the son was valued more than the daughter. Gomati Arora in her study explored the relationships between various aspects of social structure viz family structure, son preference, caste, socio-economic status, occupation, age at marriage, mobility and fertility behavior. She enlisted the following reasons for son preference- (A) to continue the family lineage: (B) to perform funeral ceremonies (C) to contribute to the family income and (D) to provide support to parents in their old ages. Velkoff, Victoria A shows that if a family has to choose between educating a son or a daughter because of financial restrictions, typically the son will be chosen. Pallav Mukhopadhyay discussed in about Problem of Gender Inequality and Expansion of Education of Women in West Bengal.

King and Mason highlights that woman empowerment is an important policy goal for improving not just the well-being of women themselves but also for its positive impact on the family. Sharma opines that the greatest problems discerned by the Muslim women are that women lack proper knowledge of their faith, and that this is why Muslim men sometimes mistreat their women.

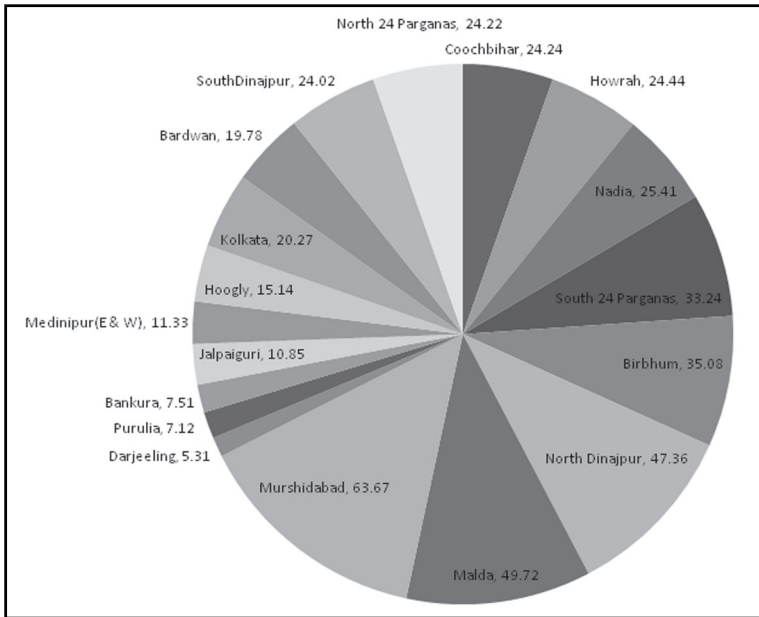
Bharathamma finds that women's perception lack of education, over burdened with dual responsibilities, lack of proper training, family restriction from mobility and lack of sufficient finance is the root constraints of poor women empowerment. According to Mukhopadhyay (2005) Women's economic empowerment is considered to be a key driver of sustainable economic development. An enquiry into women's work has been essential for assessing women's empowerment. In his paper, Hossain attempts to explore the status of Muslim women in West Bengal in a comparative perspective. He emphasised to enquire the pattern of work participation, employment and inclusion of Muslim women in comparison to the women in other religious groups of West Bengal. Mukhopadhyay studied role of education in the empowerment of women in the district of Malda, West Bengal, India. According to her Empowerment through education has emerged as the only way to eradicate the practice of intra-household and social discrimination of girl child and women. Hasan and Menon look at the condition of Muslim women's education in five cities in India: Delhi, Aligarh, Hyderabad, Kolkata and Calicut (Kozhikode). They argue that given the poor condition of Muslim women's education there is a special need for the state to take a pro-active role in this regard in order to promote social justice and empowerment of Muslim women and to remove the barriers that systematically reinforce their marginalization. Jehangir studied based on Murshidabad district, West Bengal. He focused socio-economic and political status of Muslim women after Independence. According to him education is a important factor for raising the status of women. Khan and Mann studied the women's empowerment in Faisalabad district of Pakistan based upon socio-cultural context of study area. The study suggests revolutionary changes in female education that will support gender awareness and self esteem among women. Ashraf and Ahmad says that empowerment of Muslim women is hindered due to traditional, social culture among their religions.

Current Gender Situation in west Bengal

This study aims to investigate the reasons behind the

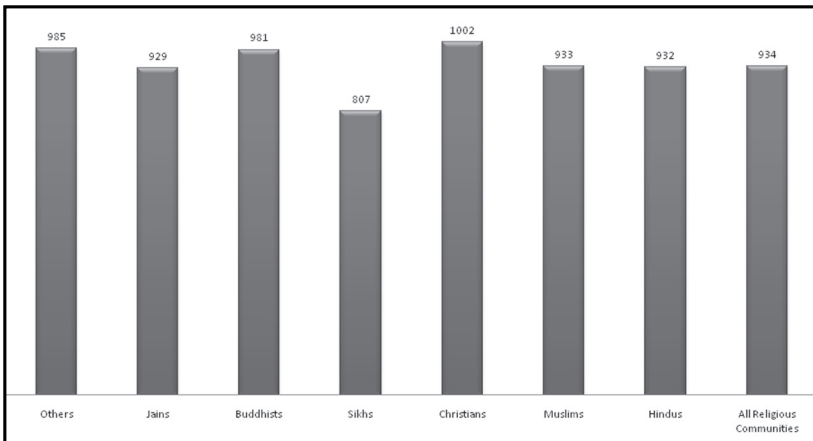
discrimination of Muslim women in the field of education in West Bengal based on population census in 2001, as the results have indicated that Muslims constitute 13.4 per cent of the country and 25.25 per cent of West Bengal's population. if we look at the state of West Bengal, we can see, there are twelve such districts where the Muslims represent about more than twenty percent to the respective district's total population and at the same time as in the districts like North Dinajpur, Malda and Murshidabad their population represents more than fifty percent to the total population of the respective districts (Figure: 1). Indeed, it is the second largest religious minority community in the country. Sex ratio among Muslim population is 933 in West Bengal, which is higher than the national level (Figure: 2), District wise Sex Ratio among the Muslims of West Bengal shows the gender discrimination (Figure: 3). Illiteracy rate of Muslim women is higher and they have not been able to take full advantage in society. There also exists a wide gap between males and females work participation rate (Figure: 4). Besides, a significant proportion of Muslim women are recorded as unskilled in the state. Keeping these points in view the present study analyses the reasons behind the gender discrimination in education within the Muslim society in west Bengal and son preference how far responsible for this discrimination.

Figure: 1. Percentage Distribution of Muslim population in West Bengal Districts



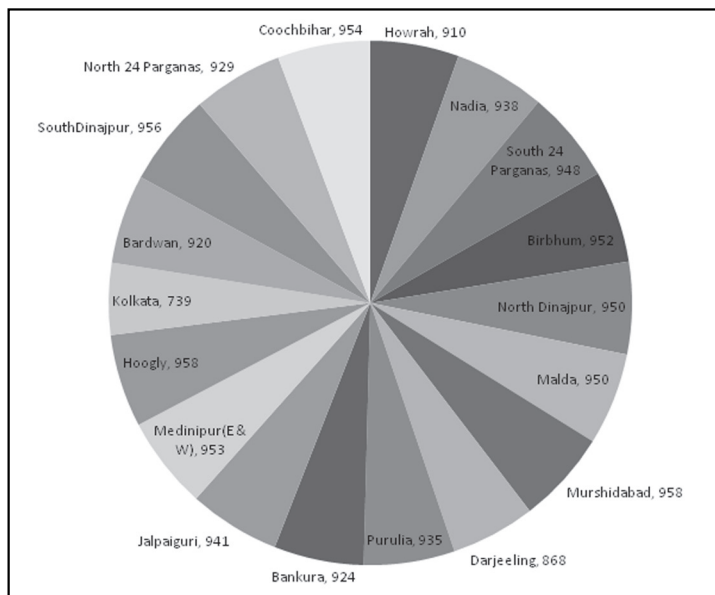
Source: Based on Census Report, 2001, Govt. of India.

Figure: 2. Sex Ratio among various Religious Communities of West Bengal



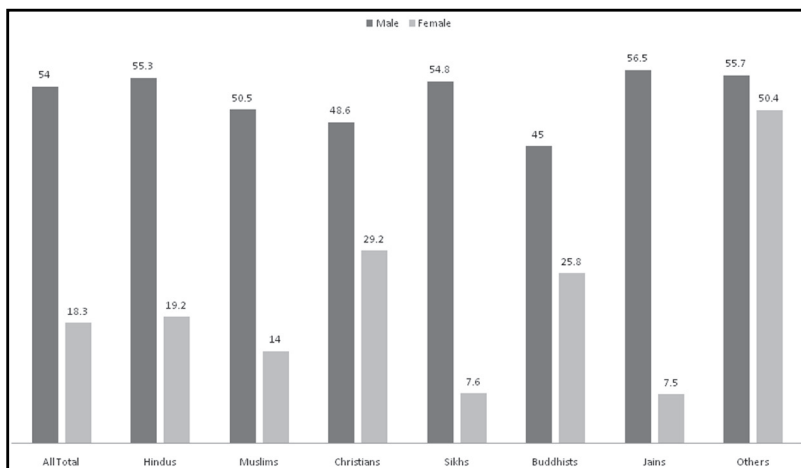
Source: Govt. of India, Census Report, 2001

Figure: 3. District wise Sex Ratio among the Muslims of West Bengal



Source: Based on Census Report, 2001, Govt. of India.

Figure: 4. Work Participant Rate on the basis of Sex among various Religious Communities of West Bengal (In Per cent)



Source: Govt. of India, Census Report, 2001

Lack of Education and Gender Gap in Literacy:

Women empowerment is the key element in development process of third world countries like India. The term ‘empowerment’ denotes the process of increasing the assets and capabilities of individuals or groups to make purposive choices and to transform those into desired actions and outcomes. Empowerment, a multidimensional process comprising political, social, cultural, economic and legal empowerment helps one to gain control of their lives by raising their awareness. And “Education is one of the most important means of empowering women with the knowledge, skills and self-confidence necessary to participate fully in the development process.” Education is important for everyone, but it is especially significant for girls and women. This is true not only because education is an entry point to other opportunities, but also because the educational achievements of women can have ripple effects within the family and across generations and girls’ education is one of the most effective ways to reduce poverty. But the situation of Muslim women in Education is very poor and in the field of education we find gender discrimination within the Muslim society.

According to the 2001 Census, there were over 62.5 million Muslim women in India. The literacy rate among Muslims in 2001 was far below the national average. Muslims are the other religious community returning lower than the national average literacy rate at 59.1 %. The relative position of various religious communities with regard to educational level is similar in 2001, literacy rate of Muslim women was 50.1% compared to 53.7% for all communities and 53.2% for Hindu females.

Table 1: Female Literacy Rates in Various Communities

Communities/ Castes	Total	Rural	Urban
India	53.7	46.1	72.9
Hindus	53.2	45.7	73.9

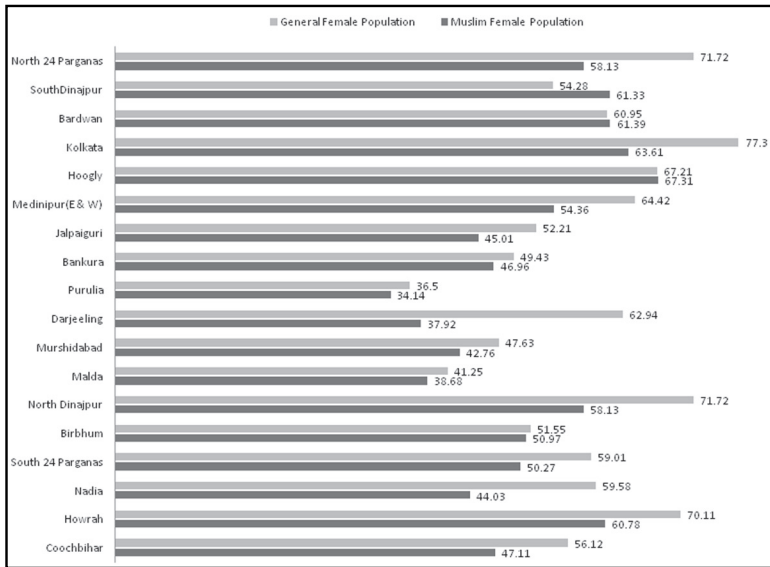
Muslims	50.1	42.7	63.2
Christians	76.2	69.7	86.3
Sikhs	63.1	57.2	79.2
Buddhists	61.7	54.6	72.9
Jains	90.6	80.3	93.6
Other Religions	33.2	29.5	66.5

Source: Census 2001

For Muslim male, the literacy rate was 67.6%, much lower in comparison to 75.3% for all communities and 76.2% for Hindu males. The literacy rates are much higher amongst other minorities, Jains lead, followed by Christians, Sikhs and even Buddhists in rural areas. Literacy rate is higher among the urban residents in comparison to the rural residents in all the religious communities. The right to education, especially at the primary level is mandated by the Constitution, yet over six decades after Independence less than 50% of Muslim women in India are literate. Compare this with other women from other minorities: 76% literacy among Christians, 64% among Sikhs, 62% among Buddhists and a whopping 90% among Jain women.

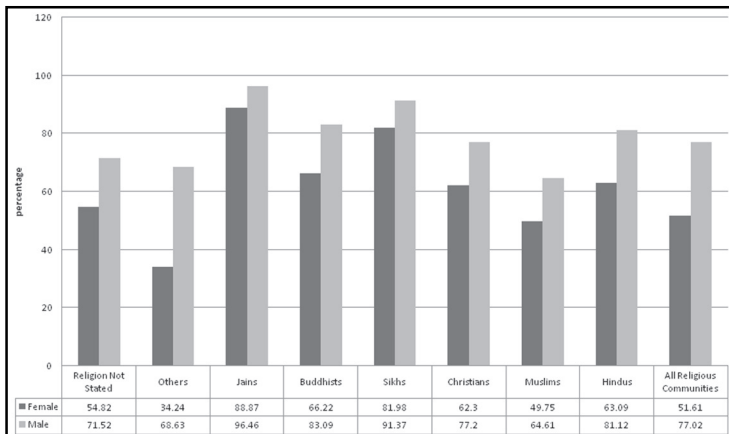
According to 2001 census Muslims constitute 25.20 per cent of the total population of West Bengal, 84.26% of the Muslims live in rural and 15.74 percent in urban areas. The incidence of illiteracy among Muslim women in the state is 61.07% compared to 47.04% among Hindu women. According to a report (National Family Health Survey 1992-93) in the age group of 13-49 years only 1.4.p.c of Muslim women have read up to high school standard, while 6.9 per cent of non-Muslim women are in the category. The percentage of Muslim women in the post-high school education was stated to be 0.5 while that of non-Muslim women is 4.6. The ratios of Muslim and non-Muslim in the categories are 1:7 and 1:9.

Figure: 5. District Wise Rate of Literacy on the basis of Sex between General and Muslim Religious Communities of West Bengal (In per cent)



Source: Govt. of India, Census Report, 2001

Figure: 6. Rate of Literacy on the basis of Gender among various Religious Communities of West Bengal (In Percent)



Source: Based on Census Report, 2001, Govt. of India.

Table: 2. Rate of Literacy and Illiteracy among the Muslims including Male and Female of West Bengal on the basis of their Place of Residence (In per cent)

Place of Residence	Literacy Rate		Illiteracy Rate	
	Male	Female	Male	Female
Whole State	64.61%	49.75%	35.39%	50.25%
Urban	72.04%	59.23%	27.97%	40.77%
Rural	62.92%	47.87%	37.08%	52.13%

Source: Govt. of India, Census Report, 2001.

Survey

A questionnaire based survey was conducted by the Researcher during July, 2010 to September 2010. The survey took place in West Bengal, a state of eastern India. I chose to conduct a series of high-quality interviews with a small group of our target population, Muslim females attending University. In Kolkata, I was able to interview 110 female College and University students, 35 more professional women in the job market, 21 female worker and 35 parents.

I had personally interviewed 35 female worker, 50 parents and visited 204 women, from Rajapur and Rojipur Villages in North 24 Paraganas, West Bengal, which are both around two hours from Kolkata. These villages are predominately Muslim, and have local educational institutions which were of some interest to our project. In Kolkata, my research location was luckily located right in the middle of a large Muslim neighborhood, Park Circus and Tiljala Basti, which is referred to as a slum area. And I was able to visit and speak with some Muslim women who had grown up in this neighborhood and were successfully attending college. At all of these sites, as well as at the educational institutions and local research groups in each location, I was able to conduct interviews with experts in the fields of female Muslim education and development. In this survey I collected information from both the rural and urban areas of two districts (Kolkata and North 24 Parganas) in

west Bengal. There were 41% urban and 59% rural respondents. Respondents of this survey are from different economic strata as well as representing different educational levels. We will discuss this further in the main body of our paper. A replica of the questionnaire is given here. Besides that, I also recorded open ended answer from women and parents.

Questionnaire

* Region of the State where opinion maker belongs to

(a) North (b) East (c) West (d) South

* Area (a) Urban (b) sub-Urban (c) rural

* Name of City/ Town/Village:

Ward:

* Name:

* Present & Permanent Address:

* Sex : (a) Male (b) Female.

* Age :

* Marital Status:

* Education:

* Occupation:

* Family income per month:

* Religion:

* Caste:

* Whether belong to OBC/NO:

* Mother Tongue:

1. How do you label gender discrimination in our state?

(a) Alarming (b) Moderate

(c) A little bit of (d) No discrimination.

2. The worst cases of gender discrimination take place in
 - (a) Urban
 - (b) Rural areas.
3. What is the status of women in the Muslim family/society in West Bengal?
 - (a) Very good
 - (b) Good
 - (c) Satisfactory
 - (d) Not so good
 - (e) Dissatisfactory.
4. Problem of gender inequality may be eradicated by
 - (a) Expansion of education,
 - (b) Enhancement of social awareness of people, (c) Giving them equal share and status in family/society (d) All of the above.
5. Do you think expansion of Muslim women education in this state is satisfactory?
 - (a) Yes
 - (b) No
 - (c) No comment.
6. Do you have any personal experience of gender discrimination in education?
 - (a) Yes
 - (b) No
 - (c) No comment.
7. According to your opinion
 - (a) 0-25%, (b) 26-50% (c) 51-75% (d) 76-100%
 of The women in our state are aware and conscious of gender discrimination in education.
8. What reason responsible for gender discrimination in education?
 - (a)poverty,
 - (b)parental negligence,
 - (c)early marriage
 - (d)comm.
 - (e)any other
 - (f) No comment

9. Do you think son preference is an important reason for gender discrimination in education?

- (a) Yes (b) No (c) No comment.

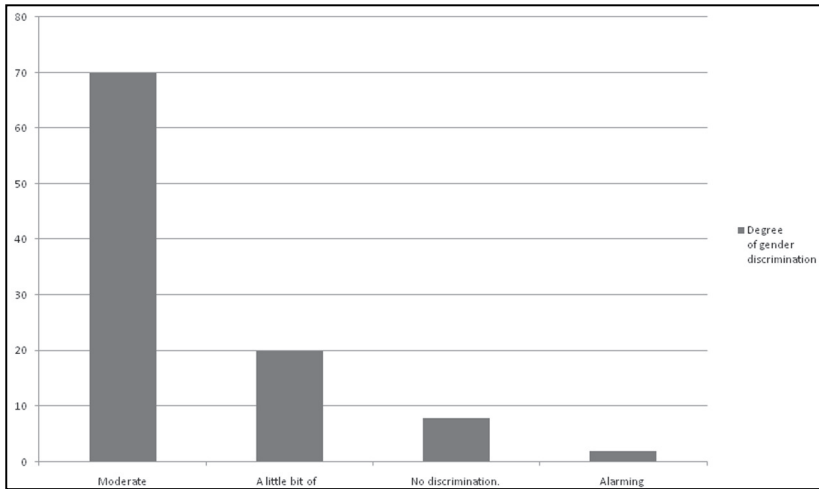
10. What reason responsible for son preference in education?

- (a) Job market, (b) dowry payment,
(c) old age care, (d) patriarchal society,
(e) Religious rituals

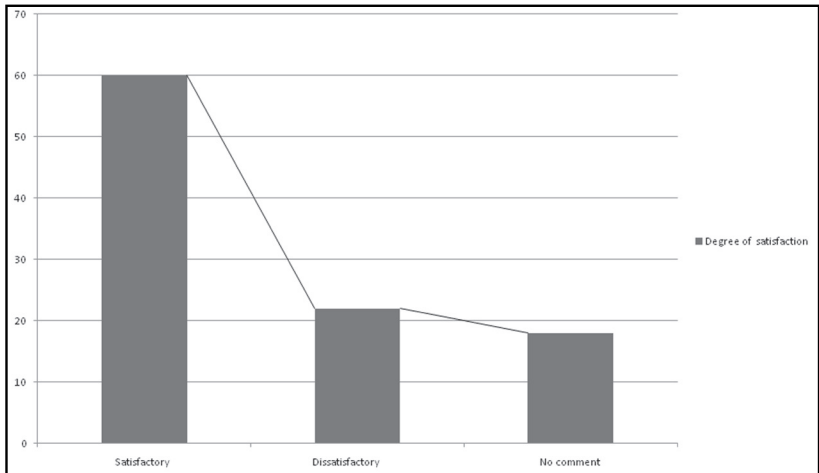
Result and Analysis of the Survey:

70% of the respondent has expressed their view about moderate gender discrimination in our state while 20% have marked the situation as a little bit of worry. 70% of the respondent expressed that rural areas being the place of worst cases of gender discrimination. Urban women satisfy with their status but the response of rural women shows they are not so good. Majority of the women prescribed the eradication of this problem by means of political social economic cultural, educational awareness. 60% of women expressed that they are satisfy with the expansion of education of this state. 60% of the women in the survey have first hand personal experience of gender discrimination in education. 70% respondent views that 26-50% of women in our state are aware and consciousness of gender discrimination in education.

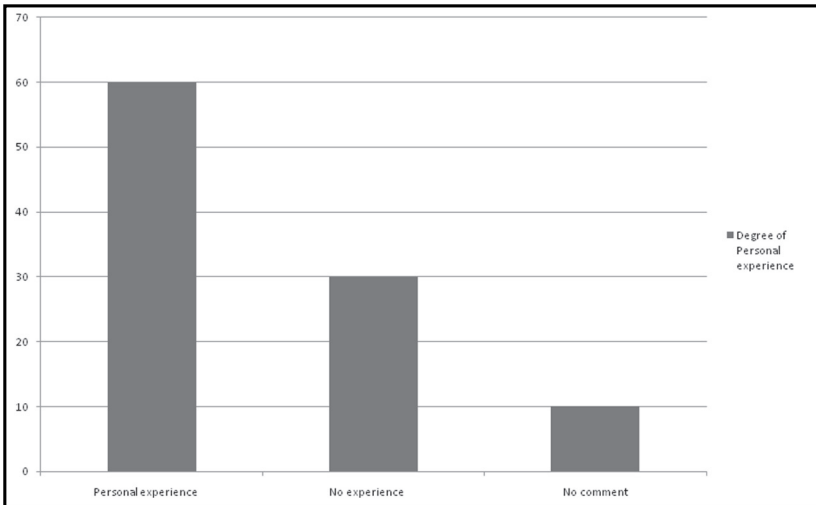
Graph 1: Bar Graph showing degree of gender discrimination in our state



Graph 2: Bar graph showing degree of satisfaction regarding expansion of common education in the state



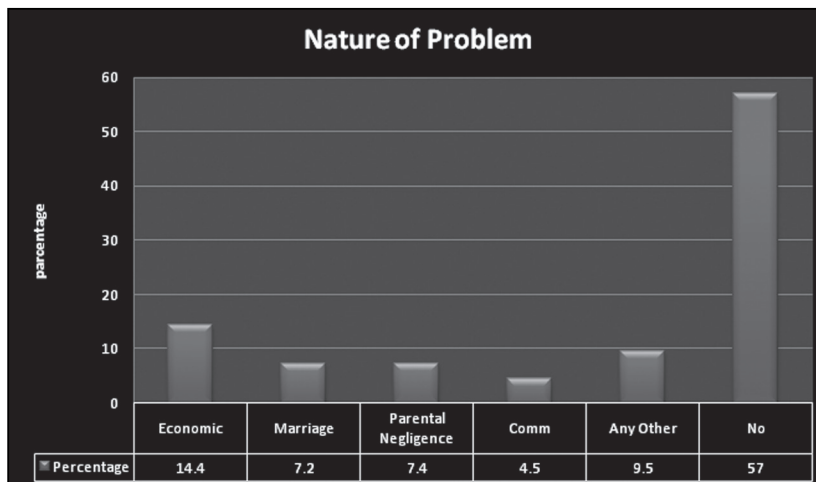
Graph 3: Bar graph showing personal experience of gender discrimination



Problems responsible for this discrimination of women in education:

The findings of the survey show that problems which deterred women from getting an education, as cited by the respondents, are poverty, parental negligence and early marriage (Fig.6). The early marriage and concurrence with this religious decree can be rooted with the lower level of education attained by Muslims, especially by Muslim women. Within the other problems Responsibilities for the family or the death of mother or father also emerged as reasons for the compulsory dropout from school at an early age as girl children had to take care of their younger siblings. Many poor, uneducated villagers do not attribute much importance to the education of girls. Even if girls are enrolled, they are withdrawn at an early age to marry them off. This leads to a higher dropout rate among Muslim girls. Our interactions indicate that the problem may lie in non-availability of schools within easy reach for girls at lower levels of education, absence of girl's hostels, absence of female teachers and availability of scholarships as they move up the education ladder.

Fig. 6: various problems affecting the education of women



Source: Field Survey

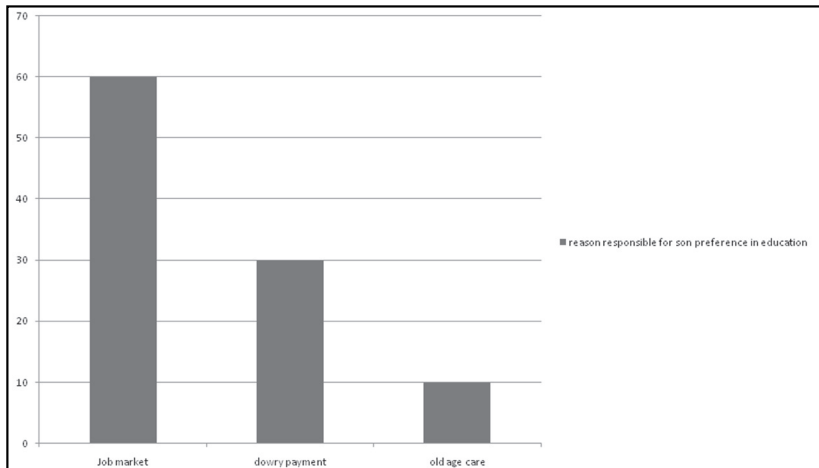
Son preference in education:

An important factor driving gender inequality is the preference for sons, and there are so many reasons responsible for that. Such as Exogamy , Early arranged marriages , Generational over conjugal ties , Support in old age , Patrilineality, Dowry and wedding expenses , Empowerment, Labour force participation , Role of sons in religious rituals etc,. But, it is a general overview of son preference, if we particularly pointed out in the field of education we can see that 60% of women expressed that son preference is an important factor of gender discrimination in education and job market, Dowry and wedding expenses, Support in old age these three factors are more responsible for son preference in education (graph-4). However, Boys are given the exclusive rights to inherit the family name and properties and they are viewed as additional status for their family. Moreover, the prospect of parents “losing” daughters to the husband’s family and expensive dowry of daughters further discourages parents from having daughters. There is a strong belief that daughter is a liability. So, they preferred to save money for their girl child Dowry and Wedding expenses rather than spend

money for their education. Muslim women are overwhelmingly self-employed (engaged in home-based work) in India. Sewing, embroidery, zari work, chikan work, readymade garments, agarbatti rolling, beedi rolling are some of the occupations in which Muslim women workers are concentrated. There is high share of Muslim women workers engaged in self-employment activity like in Own account worker in household enterprise 29.1% and employer in household enterprise 0.7% (higher than Hindus).

The high self-employment rates and the corresponding low participation of Muslim women as salaried workers (Figure: 4) indicate their marginal presence as workers in the formal economy. This does not imply the absence of Muslim women as workers; rather it indicates their 'invisibility' as informal workers. What are the reasons behind this are unknown but their educational status must influence the form and levels of Muslim women's employment in both urban and rural areas. And from the survey result it is clear that most of the poor Muslim family encourage their girl child to engage home-based work besides the same family pushed their son to school. Their policy was if they can educate their son in future son will enable to seek a formal job and they can enjoy their old age support from their son. On the other hand, they seemed Household Industry is the best place for women work to support their family expense. For this policy of son preference in education significant proportion of Muslim women are recorded as unskilled in the state. And it is only for lack of education.

Grap 4: Bar graph showing reason responsible for son preference in education



Conclusion:

Gender discrimination exists in every field of our country and from the above discussion we can interpret that education is a field where we find gender discrimination within Muslim society in West Bengal and there are so many factors which are responsible for gender discrimination in education. And son preference is such factor which is also responsible for gender discrimination in education. If we need gender equality it is necessary to deactivate the gender inequality in education. There is a solution for every problem. For reducing gender inequality in India, we should offer a high level of education to girls and increase women empowerment. We should organise a campaign against preference for sons over daughters. Government should make policies & strategies regarding stopping the sex identification & abortions. They should take steps to establish more schools, colleges, training centres, hostels for women. NGOs can also play an important role to eradicate gender inequality in education. Overall, we need more campaigns like our Prime Minister Mr. Narendra Modi's "Beti Bachao Beti Padhao" and more initiatives like Kanyashree Prakalpa, Government of West Bengal initiative, to improve the life and status of girls.

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100 % Financial Inclusion: Daydream or Nightmare?

Chirodip Majumdar *

Abstract

Financial inclusion implies access to formal financial services for everyone. Recent initiatives regarding financial inclusion started with a directive from Reserve Bank of India (RBI) in November 2005 that allowed bank branches to open no frills accounts. The present paper is an attempt to report initiatives taken in India to achieve the goal of 100 percent financial inclusion, how far the efforts match international standards and the extent of achievement made till date. While investigating causes of failure, the present paper investigates no frills account holders in the district of Hooghly, West Bengal, India and found that the scheme is largely unsuccessful in financially including the excluded categories i.e. the poor, people of backward community and caste and people having lower education level. This is in contrast to the fact that both institutional and non-institutional credit is need based and the people having lower income are the principal takers of credit. The paper concludes that strengthening of cooperative movement, subsidising the financially excluded, imposition of stricter corporate social responsibility norms could facilitate the process of 100 percent financial inclusion.

Keywords: Credit, Financial Inclusion, No Frills Accounts, Reserve Bank of India, Empowerment, Poverty

1. Introduction

Financial inclusion implies access to formal financial services for all sections of population. In a broad sense, it implies inclusion

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of all adult population under the ambit of banking and financial services, loan facility, insurance options, etc. or able to choose to use the services. In a narrow sense, financial inclusion implies inclusion of at least one member of a household in formal banking services through a deposit account. The narrow definition of financial inclusion can be a good initial target to achieve, towards full financial inclusion.

The recent initiative on financial inclusion got momentum by Reserve Bank of India's (RBI) policy statement of 2005-06. Several measures to target 100 percent financial inclusion followed the initial directive. The RBI allowed commercial banks to open no frills accounts i.e. accounts that require no or minimum balance (RBI, 2006). General Credit Card (GCC) was introduced to make credit easy accessible. The initial thrust continued and some achievements were made but the goal of 100 percent financial inclusion is yet to be achieved.

The present paper is an attempt to report initiatives taken in India to achieve the goal of 100 percent financial inclusion, how far the efforts match international standards and the extent of achievement made till date. It is observed that, though some progress towards the goal is made, much is still to be done to achieve the target. While investigating causes of failure, the present paper investigates no frills account holders in the district of Hooghly, West Bengal, India and found that the scheme is largely unsuccessful in financially including the excluded categories. Section 2 of the paper reports the financial inclusion initiatives taken in India. Sections 3 describe some initiatives taken in foreign countries. Section 4 analyses the success/failure of initiatives taken in recent years. Section 5 analyses no frills accounts from the district of Hooghly to observe that the scheme has failed to include the most excluded categories. Section 6 analyses institutional and non-institutional credit takers and found that the demand is need based and people having lower income are the principal takers of credit. The last section concludes with necessary policy implications.

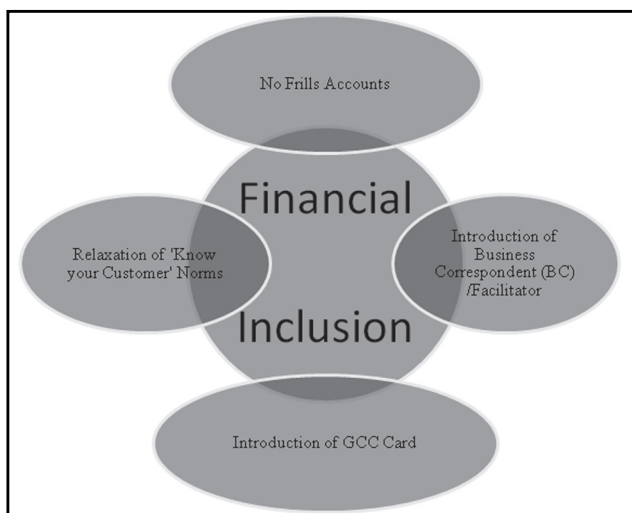
2. Financial Inclusion Initiatives in India

Steps towards financial inclusion in India have a long history. Introduction of cooperative banks for financing agricultural credit in late 1950's, branch licensing policy and use of commercial banks in priority sector lending after nationalisation of banks in 1969, induction of regional rural banks in 1975, reduction in cash reserve ratio and statutory liquidity ratio to release more loanable funds in the post liberalisation phase, initiation of microfinance by National Bank for Agricultural and Rural Development in 1992 linking self help groups with banks, introduction of Kissan Credit Card (KCC) scheme in 1998 were measures that targeted financial inclusion (Subba Rao 2007). But such measures, unfortunately, were not able to include all sections of population in the financial system. The census estimate of 2001 found that only 30.1 percent of rural households and 49.5 percent of urban households in India have a deposit account. RBI estimated that 139 districts in India suffer from severe financial exclusion. Adult population per branch in these districts is above 20000 and only 3 percent of them access formal credit. National Sample Survey Organisation (NSSO) data found that 51.4 percent of farmer households in the country do not access credit from any sources. Only 17 percent of total farm households access formal credit (RBI 2008). The extent of exclusion in terms of bank account or access to credit is severe in poor regions specially in North Eastern regions. Marginal farmer households, scheduled tribe farmer households are the most excluded. As per RBI estimate of March 2010, only 99 persons out of every 1000 persons had a credit account and 600 had a deposit account (RBI 2011).

Under this backdrop, the RBI more forcefully tried to enforce commercial banks to pursue the goal of 100 percent financial inclusion. The round of efforts started with allowing bank branches to open no frills accounts. No frills accounts permit subscribers to open an account at minimum or even at zero balance. Later banks were allowed to allow overdrafts on those accounts. Credit was offered through GCC to make it more accessible. In the supply

side, the vision of commercial banks changed. More emphasis is now given on making the banking service available at the doorstep of users by allowing Business Correspondents (BC) to operate. The more stringent norms for opening an account with a commercial bank were relaxed. All these efforts came as an initiative during 2005-2006 to make 100 percent financial inclusion possible. The following figure shows the recent initiatives on financial inclusion.

Figure 1: Recent Financial Inclusion Initiatives



3. Financial Inclusion: the World Experience

As the extent and nature of the problem of financial exclusion differs from a country to the other, the prescriptions also differ. In many developed countries, advanced technologies are used to target financial inclusion. Use of mobiles, incentives for electronic transfers, subsidising potential customers are methods used to attract the excluded. Steps to motivate people through local self-government, non-government organisations are thought as useful tools of inclusion in underdeveloped countries.

A number of advanced countries had made it obligatory for banking sector to provide basic banking facilities to everybody at the lowest possible cost. This is seen in parts of U.S. and Canada.

Germany took steps to ensure 'Current Account for Everyone' in 1995 and France made bank account a legal right in 1984. In U.K., matching grant from government for low income households to encourage banking habit is offered. In Sweden, banks cannot refuse to open an account. The use of microfinance institutions to include all strata of population in the financial system is widely applied in Mexico, Indonesia, Srilanka and Bangladesh. Recently mobile as a gadget is extensively used to financially include the excluded in a number of countries.

But international comparison, as shown in table 1, is indicative that there is enough scope of supply side improvement in provision of banking services in India. Not only the products, but supply of bank branches or automatic teller machine (ATM)'s in India is less than that available in many other countries.

Table 1: Availability of Bank Branches and ATMs in Different Countries

Country	Number of Branches per 0.1 Million Adult Population	Number of ATMs per per 0.1 Million Adult Population
India	10.64	8.90
Korea	18.80	-
Brazil	46.15	119.63
France	41.58	109.80
Australia	29.61	166.92
US	35.43	-

Source: RBI (2012)

Note: Estimate in 2011

4. The Impact of Financial Inclusion Initiatives in India

The supply side improvement in financial system is generally observed in terms of increase in bank branches. The increase in public sector banks over time is mainly due to increase in number of branches of State Bank of India (SBI) and its associates. Private

sector banks and foreign banks are also increasing at a rapid pace. Though the role of private and foreign banks in financial inclusion is debated, data on bank branches as shown in table 2 clearly reveal that the banking network is expanding at a reasonable rate.

Table 2: Number of Bank Branches in Different Years

Bank Group	Number of Bank Branches				
	2005-06	2006-07	2007-08	2008-09	2009-10
Public Sector Banks	50168	52104	55080	57732	61301
Private Sector Banks	6835	7424	8322	9236	10387
Foreign Banks	259	272	279	295	310
All Scheduled Commercial banks	57262	59800	63681	67263	71998

Source: A Profile of Banks 2009-10; Available from www.rbi.org.in [Accessed 15 April 2012]

Note: This data excludes information about regional rural banks

Apart from expansion in branch network, improvement in other services is also seen in recent years. Number of branches per one lakh of people served rose from 6.33 in 2005 to 6.6 in 2008, deposit accounts per 1000 people increased from 432.1 in 2005 to 467.4 in 2008 and loan accounts from 71.42 to 89.03 in the same period. Population per bank branch has reduced from 14000 in 2009-10 to 13466 in 2010-11. Similarly population per ATM has decreased from 19700 to 16243 during the same reference period. Almost 10 percent of new bank branches were opened in unbanked areas in 2010-11. The same percentage in the pervious year was only 6 (RBI 2011). Table 3 reports expansion in banking services during different years.

Table 3: Progress of Banking Facilities Over Time In India

Criteria	2005	2006	2007	2008
Branches per 1 Lakh Population	6.33	6.37	6.35	6.6
ATM's per 1 Lakh Population	1.63	1.93	2.4	3.28
Deposit Account per 1000 People	432.1	443.1	459.5	467.4
Loan Account per 1000 People	71.42	78	83.59	89.03
Branches per 1000 Square Kilometer	22.99	23.5	24.13	25.49
ATM per 1000 Square Kilometer	5.93	7.11	9.11	12.68

Source: Quoted from Sophastienphong, K & A. Kulathunga (2010). Getting Finance in South Asia, The World Bank in Address Delivered by Dr. K. C. Chakraborty, Deputy Governor, RBI at the National Finance Conclave 2010 Organised by KIIT University, Bhubaneswar Available at The RBI Bulletin December, Vol LXIV, No 12.

Opening of no frills accounts has facilitated the attainment of the target. There is a chance that no frills accounts created become inactive after some period of time. To overcome the difficulty, small overdrafts were made available against these accounts and a number of accounts received overdrafts. Later existing no frills accounts were converted to Basic Savings Bank Deposit Accounts (BSBDA). As on March 31, 2010 a total of 50.3 million no frills accounts have been opened by banks (RBI 2010). The public sector banks took the major role in opening these accounts.

Progress in opening of banking outlets in remote villages was observed during 3 year financial inclusion plan for the period April 2010 to March 2013. Banking outlets in villages have increased from 67694 outlets in March 2010 to 268000 in March 2013. BSBDA have increased to 182 millions. Progress towards opening banking outlets in unbanked villages having less than 2000 population have also got momentum during the 3 year financial inclusion plan for the period 2013-2016. By March 2015, 390387 villages among identified 490000 villages were covered. Opening of 165.7 million of Pradhan Mantri Jan Dhan Yojana accounts by June 2015 gave further impetus to financial inclusion (RBI 2015).

The recent progress in financial inclusion plans are listed in table 4.

Table 4: Recent Progress in Financial Inclusion Plans

Indicators	Upto the month of March of every year					
	2010	2011	2012	2013	2014	2015
Total Banking Outlets in Villages	67694	116208	181753	268454	383804	553713
Total BSBDA (in Millions)	73.45	104.76	138.50	182.06	243.0	398.1
Number of BSBDA Receiving Overdraft (in Millions)	0.18	0.61	2.71	3.95	5.9	7.6
Number of KCC (in Millions)	24.31	27.11	30.24	33.79	39.9	42.5
Number of GCC (in Millions)	1.39	1.70	2.11	3.63	7.4	9.2

Source: RBI (2012a), RBI (2015)

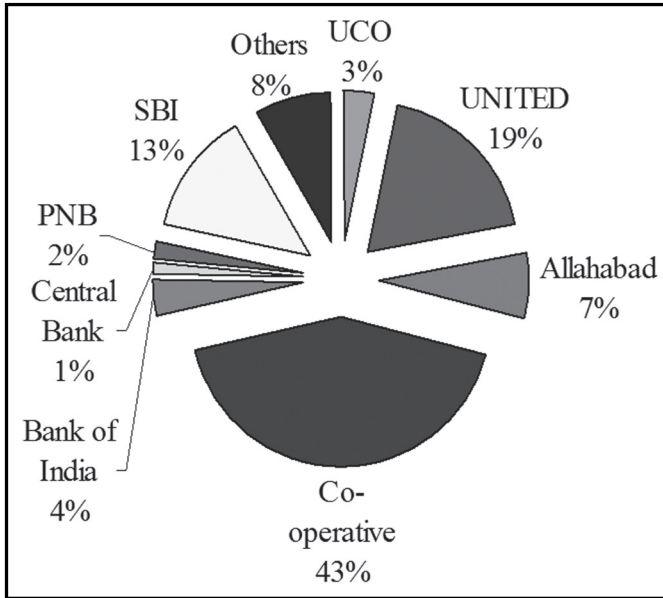
Efforts by Government of India and RBI have resulted in some attainments in financial inclusion front. The target of 100 percent financial inclusion has been achieved in 204 districts in 18 states and 6 union territories. All districts of Haryana, Himachal Pradesh, Karnataka, Kerala, Uttarakhand, Goa, Chandigarh, Pondichery, Daman and Diu, Dadra and Nagarhaveli and Lakshadweep have achieved 100 percent financial inclusion. By March 2012, 99 percent of villages having population above 2000 have been provided with banking outlets. All targeted villages in north-eastern region have been provided with a banking outlet. But the non-attainment in financial inclusion specially for the poor is found in several investigative studies. Deb & Rajeev (2007) observed that traders are becoming a significant source of credit for marginal farmers in the district of Hooghly, West Bengal at the midst of poor credit

delivery from formal institutions. Chavan (2007) analysed data obtained from NSSO and RBI sources and found that bank credit is not accessible for dalit households and they have to resort to informal sources. A study by Bhatia & Chatterjee (2010) in some slums in Mumbai found that only one third of the respondents had a bank account. The role of private banks in financial inclusion is completely absent as none of the poor respondents reported to have an account with a private bank. The World Bank study of 3518 households during April-June 2011 (RBI 2012a) found that India lags behind developing countries in opening bank accounts. When borrowing from formal institutions in India is compared with world average, it is seen that they are not quite different.

5. Who Holds No Frills Accounts in Hooghly?

This study is a part of the investigative study that interacted with 20753 households to know the financial inclusion scenario in the district of Hooghly. These households were selected from 183 villages across all 18 blocks and 61 municipal wards across all 12 municipalities of the district. Only 1041 households among 10632 financially included households reported possessing a no frills account in the survey. They were asked to report the name of the bank that has provided the account. It is found that most of the no frills accounts had been provided by the Co-operative, United and SBI. The major role of co-operative banks in opening of no frills accounts is presented in figure 2. Whereas 28 % of financially included households possess a co-operative bank account, above 40 % of no frills accounts were found to be provided by the bank.

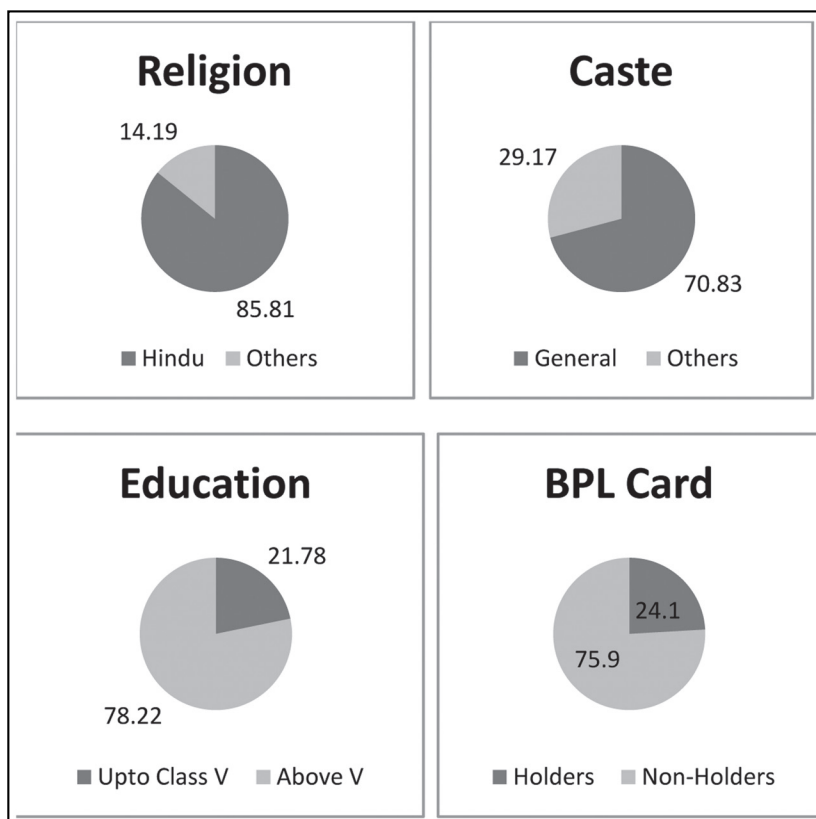
Figure 2: Bank Coverage of No Frills Accounts



Another investigation made during the study was to check whether the socially and economically backward categories of population are actually getting the benefit of no frills accounts. The success of the scheme lies in attracting the so far excluded categories. Thus most of these no frills account holders should mainly comprise of minority communities, dalits, agricultural workers, uneducated and the poor. Figure 3 reports the socio economic categories of the households having no frills accounts. It is found that people from the most excluded categories largely have not benefited from the no frills accounts. Whereas 57.45 % of minority communities were found financially excluded, only 14.19 % had obtained a no frills account. Poor targeting of no frills accounts is manifested in that only 24.1 % of BPL cardholders having a no frills account. Agricultural labourers and daily workers being excluded by a very high proportion have not obtained the benefit to a reasonable extent. This is representative of the well known phenomenon that the benefit of a government programme

is often reaped by the socially and economically advanced. The result is an indication that more careful targeting in selection of households for no frills accounts should be done. It is often the case that the service providers find these excluded categories not cost-effective customers of the financial system. This attitude is reflected in the provision of no frills accounts to the economically and socially advanced categories of people.

Figure 3: Category Wise Classification of No Frills Accounts Holders



Further, households having no frills accounts were asked to report the last closing balance held in their account. The savings behaviour of the no frills account holders reveal that the socially

and economically advanced categories of people maintained a higher balance in their accounts. Thus people of higher socio-economic categories not only reap the benefit of no frills accounts, they are also the people who maintain a higher balance in their accounts. This explains why banks are reluctant in providing no frills accounts to people belonging to the lower strata of the society. The banks are not positive in targeting the most excluded classes as banks prefer to deal a small number of large accounts than a large number of accounts with meagre balance. It is to be acknowledged that provision of no frills accounts in the district may be successful in including some excluded households but it is of no doubt that the financial system, while providing no frills accounts, had worked in a way that favoured the economically and socially powerful. The commercial banks should acknowledge that the high volume of deposit that these poor households together can generate makes them profitable customers of the system even though the transaction cost of serving them is high and the profit margin low.

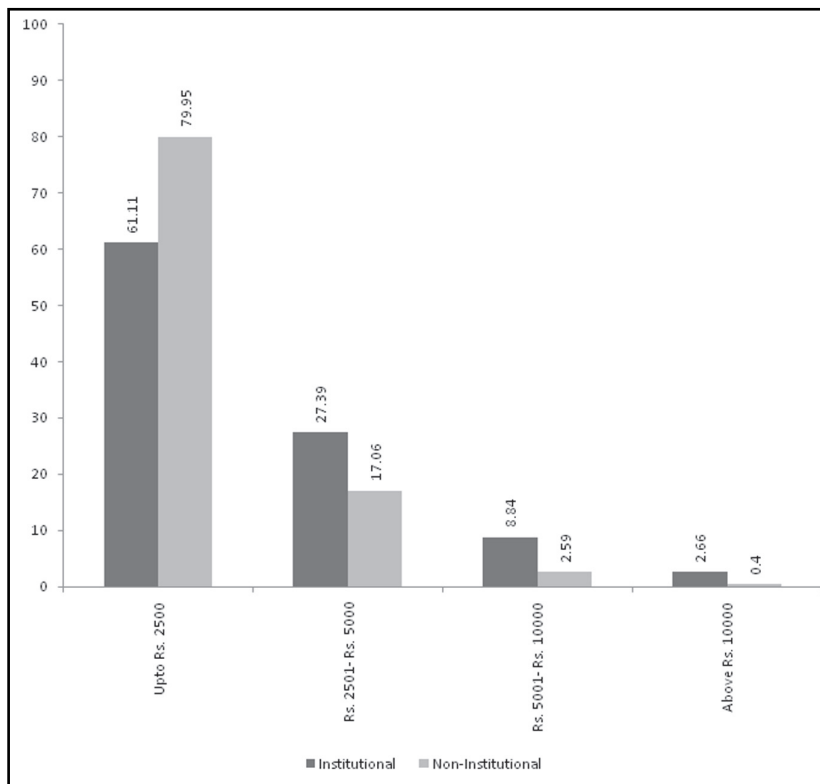
6. Institutional and Non-institutional Credit

The present study in the district of Hooghly clearly reveals that in terms of institutional credit delivery, the performance of formal financial institutions is quite poor. This study found 10632 i.e. 51.23 per cent of total 20753 surveyed households to be financially included in terms of having a savings account. Only 3616 households among these 10632 households i.e. 34 per cent are found to have ever obtained an institutional credit. This is around 17% of the total surveyed people. The lack of coverage of institutional credit has resulted in growth of non-institutional credit through moneylenders and traders. 3817 households i.e. around 20 per cent of total surveyed households reported to have obtained credit from a moneylender or other non-institutional sources.

The socio-economic classification of people taking credit is an important point of search. It is searched which categories of people

obtained institutional and non-institutional credit in the district. It is found that people belonging to minority communities, underprivileged castes have availed more non-institutional credit than institutional credit. Hindus and people belonging to general caste have availed more institutional credit than non-institutional credit. Only 22.59 per cent of BPL card holders got institutional credit. BPL card holders preferred or compelled to take credit from non-institutional sources. Around 40 per cent of non-institutional credit has been taken by BPL cardholders. This proves a strong dependence of poor households on non-institutional credit. As per as the occupation of the household is concerned, agricultural labourer and daily workers have depended more on non-institutional credit than institutional credit. They are workers of marginal nature. People with lower income and education level have depended more on non-institutional credit than institutional credit. 72.36 per cent of households availing non-institutional credit have not obtained any institutional credit. This is a clear sign that non-penetration of institutional credit has resulted in spread of moneylenders and other non-institutional sources of credit. Figure 4 shows that both institutional and non-institutional credit is need based and people of poor community are the principal takers.

Figure 4: Income Category Wise Receivers (% of total) of Credit



7. Conclusion

Ever since nationalisation of banks in India, one of the major thrusts of Indian banking system was to reach all sections of populace. This paper stresses the recent initiatives taken in India to attain 100 percent financial inclusion. While analysing impacts of no frills accounts in the district of Hooghly, it is found that the scheme is ill targeted. Unlike no frills accounts, a good number of poor people have taken institutional credit and non-institutional credit and thus credit is found to be need based.

Public sector banks have played an active role to attain the objective of 100 percent financial inclusion and they have to continue to play the role. The role of agricultural cooperative

societies in financial inclusion is also important. These societies can act as a source of institutional strength and an instrument of change. Steps should be taken to strengthen the movement to achieve financial inclusion in Hooghly.

It is a common knowledge that people belonging to minority communities, underprivileged castes, marginal workers, low education level and people lying below the poverty line are the most excluded. There is a chance that people with lower educational status do not feel the importance of having a bank account. Marginal workers generally do not have surplus funds to save. Some sort of incentive is to be provided to create a habit of savings among them. A starting point can be households of all newborn girl children below poverty line. A no frills account for them where the government makes matching payment equal to the amount saved by the household may be a proper incentive.

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