Available online at http://www.journalcra.com

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

International Journal of Current Research
Vol.11, pp.107-116, December, 2010

ISSN: 0975-833X

REVIEW ARTICLE

GENDER EMPOWERMENT, DEPRIVATION AND POVERTY IN RURAL JHARKHAND: A CASE STUDY

Neelanjan Sen., Utpal Kumar De and Bhola Nath Ghosh*

Sociological Research Unit, Indian Statistical Institute, 203, B.T. Road, Kolkata-700 108,
Ph: (033) 2575-3500 (O), 9433018495 (M)
Department of Economics, North-Eastern Hill University, Shillong, 793022,
Ph: 0364-2723182 (O), 91+9436102066
Sociological Research Unit, Indian Statistical Institute, 203, B.T. Road, Kolkata-700 108

ARTICLE INFO

Article History:
Received 18th September, 2010
Received in revised form
15th October, 2010
Accepted 26th November, 2010
Published online 5th December, 2010

Key words:
Development in economic
Social front across
Categories of population
Gender Deprivation
Women empowerment
Education

ABSTRACT

The development in economic and social front across the states in India has not been inclusive of all categories of population and that has been highlighted in several earlier studies. The experience of the newly formed state Jharkhand is not different where women is excluded from the access to those required for the human development as well as empowering them. The primary objective of this paper is thus to understand the level of Gender Deprivation in Jharkhand. For understanding it, various socio-economic variables such as health, education etc and the extent of poverty and inequality will be considered. This paper also tries to estimate the level of poverty and inequality in this area and its relationship with an index of non-income women empowerment that may be constructed on the basis of the primary data collected on the level of education, political and social participation and participation in various other socio-economic activities. The thrust would be to see whether the level of education or the incidence of poverty has any connection with the level of women empowerment in rural Jharkhand.

INTRODUCTION

Gender discrimination refers to the discrimination in the access to different social, economic and political activities at various stages on the basis of sex of individuals. The long lasting deprivation of a particular gender in Indian society has been due to the inhibited beliefs and attitudes and does not carry any legal base under constitutional set up.

***Corresponding author:** *bholanathghosh@hotmail.com*

This type of discrimination actually starts from home, which is reflected by the attitudes of the parents in various aspects such as in decision making, allocation of resources, putting responsibility on son and daughter as well as between husband and wife themselves. There is also discrimination or deprivation on the ground of gender in job markets; such as unequal remunerations, privileges, opportunities during

interview and promotion and in an educational setting; where a student can be excluded in an educational institute from availing program, opportunity, loan, student group, or scholarship. 'Unfair discrimination usually follows the gender stereotyping held by a society…. "When you grow up, you can be whatever you want to be." Little girls in the United States hear this all the time, from their mothers to teacher … Almost everywhere they go; they are encouraged to believe that girls can be just as smart, athletic and successful as boys. But for girls in developing countries, the message is just the opposite. From the day they are born, they are constantly reminded of the things they are not allowed to do.'(Gender Discrimination, Wikipedia).

Gender relations are the key to understand the inequalities between men and women, which may be explicit and implicit. At macro level, the explicit measures are well known and are revealed in statistics depicting differences in the sex ratio, child infanticide, literacy rates, health and nutrition indicators, wage differentials and ownership of land and property. The implicit measures are embedded in power relations and hierarchies and are more difficult to measure. At micro level, in the households, in custom, religion and culture, these intra-household inequalities result in unequal distribution of power, unequal control over resources and decision-making; dependence rather than self-reliance; and unfair, unequal distribution of work, drudgery, and even food (GoI)[1]. In order to remove the evil effects of such discrimination from the society and to promote gender equality; empowerment of women is being declared as one of the UN Millennium Development Goals (MDGs)[2], (Goal-3 of the eight goals targeted to be achieved by 2015). These are identified as the world's main development challenges of the Century, which are drawn from the actions and targets contained in the Millennium Declaration that was adopted by 189 nations of the globe and signed by 147 heads of state and governments during the UN Millennium Summit in September 2000. It includes eliminating gender disparity in ratios of girls to boys in primary, secondary and tertiary education, in share of women in wage employment in the non-agricultural sector and in proportion of seats held by women in national parliament.

Review of Some Earlier Studies

In 1995, the UNDP[3] introduced two new indices: a Gender-related Development Index (GDI) and a Gender Empowerment Measure (GEM) in order to know the position of gender related development in comparison to general level of development measured in conventional sense on overall income and employment. Focusing on women's opportunities rather than their capabilities, the GEM captures gender inequality in three key areas: Political participation and decision making power, as measured by women's and men's percentage shares of parliamentary seats; Economic participation and decision-making power, as measured by two indictors- women's and men's percentage in employment as legislators, senior officials and managers and women's men's percentage shares of professional and technical positions; and Power over economic resources, as measured by women's and men's estimated earned income (PPP US$).

The GEM is calculated using equally distributed equivalent percentage (EDEP) mechanism, which was first developed by Atkinson (1970) while deriving a measure of income inequality through social welfare function. Ministry of women and child development of government of India (MWCD) supported by UNDP had changed the way of measuring the gender gaps in development and empowerment for India. According to MWCD the indices used by United Nations in general have been developed from a northern perspective and do not incorporate the perspective of the countries of southern hemisphere especially of India. With this as the objective, they decided to recast GDI and GEM for India and States/Union Territories. The final choice of dimensions and indicators was adopted on the need to use variables that are intuitively understandable and relevant, within the constraints imposed by availability of reliable data

[1] *MWCD- Ministry of Women and Child Development, Govt. of India*

[2] *MDGs- Millennium Development Goals*

[3] *UNDP- United Nations Development Program*

and for maintaining international comparability, the dimensions used are the same as used by UNDP. Equal weights are also being assigned to all the dimensions. 'However, within dimensions, the indicators chosen, weights and goal posts would be more relevant to the Indian context' (Gendering Human Development Indices, MWCD, 2009). The Dimensions and Indicators identified for computing GEM as followed by MWCD are given below:

Dimension-1: Participation in Political Arenas and in Decision-Making by Women

Indicators: a) Percentage Share of Parliamentary Seats; b) Percentage share of seats in Legislature; c) Percentage share of seats in Zilla Parishad; d) Percentage share of seats in Gram Panchayats; e) Percentage of candidates in Electoral Process in National Parties and f) Percentage of electors exercising their Right to Vote.

Dimension-2: Economic Participation and Decision-Making Power of Women

Indicators: a) Percentage share in Indian Administrative Services and Indian Forest Service; b) Percentage share of Professionals graduating from medical and engineering colleges and c) Percentage share of High Court Judges (Supreme Court Judges for all India estimate).

Dimension 3: Power of Women over Economic Resources

Indicators: a) Percentage of Female/Male Operational Land Holdings; b) Percentage of Female/Male Availed of Credit (accounts over Rs. 2 Lakhs); c) Percentage of Female/ Male Estimated Earned Income Share. Using goal posts and weights[4], the dimension indices are calculated. In case of GDI and GEM, while calculating dimension indices, the penalty for gender inequality, i.e., the value of '$\in$' is taken as 2, which is moderate penalty. The methodology of calculation is the same as followed by UNDP. The aggregate score of GEM for India was 0.451 in 2006 and for Jharkhand 0.350 in 2006 (Gendering Human Development Indices, 2009; MWCD).

Mehta (1996) using representation in Lok Sabha, state legislatures, gram panchayats, panchayats samitis and zilla parishads; literacy rate; exercise of the right to vote; life expectancy and income for the 16 states explained the existence of gender-based disparities and its degree of variation across those states that can be meaningfully used by policy-makers. In the present study, we would like to examine the existence of deprivation and the level of empowerment of women in extreme rural setup of Jharkhand. But there are problems relating to the availability of data and using the suitable formula for estimation. In most of the cases if the standard formula of GEM is used at the village level, the value of the indices would be very close to zero reflecting very poor performance as the female participation in various socio- economic field is negligible according to the norms set by MWCD or UNDP for measuring gender empowerment measure. But still there is a scope of measuring the gender empowerment in a similar manner for rural areas which is discussed in the later part of this paper.

Methodology and Data

In the present study, our focus of analysis was at the grass root level. We have chosen the state of Jharkhand for our analysis that ranked 32nd (with value 0.350 in 2006) in respect of dimension-wise GEM scores as constructed by MWCD for 35 states/union territories after recasting the measure realistically. Jharkhand also ranks last among the newly born states which came into being in 2000. The economy of the newly born state is predominantly agricultural even though a large number of mineral mines are prevalent. Poverty is a common scene especially in the rural setting and the society is characterised by its patrilineal structure even though large number of tribal groups are there.[5] However, the panchayati raj system is

[4] Genderng Hiuman Development Indices, 2009, Ministry of Women and Child Development

[5] In the tribal dominated North-Eastern states like Meghalaya, Mizoram, Nagaland we observe matrilineal framework of the society and there are Dorbars in the absence of any Panchayati Raj system of local self-government.

yet to come for the smooth implementation of several rural development and poverty eradication programme. Therefore, there is no question of reservation in the local administration and politics for the women who suffer most in the form of deprivation and lack of empowerment. In the present study the gender deprivation has been examined through the comparison of status of women, in terms of various social, economic and political indicators with that of their male counterpart. For the purpose of analysis, a primary survey was conducted during 2007-08 for the collection of information at the family level from eight villages in four blocks of two districts chosen by systematic multistage sampling procedure. First of all, two districts of the state namely Giridih and Dumka have been selected, one from comparatively developed and another from underdeveloped section of the districts. In the same way two blocks, Bengabad and Giridih from the district Giridih and two blocks Dumka and Ramgarh were selected, on the basis of records of District Census Handbook. Finally four villages are chosen from each of the two districts i.e., two from each of the selected blocks. The villages chosen from Giridih district are Baghra, Bhandaridih, Harsinggraidih and Parsatanr and other four villages of Dumka are Karikadar, Kusmaha, Murabahal and Purnia. Thereafter, a complete enumeration of households of the selected villages has been done and we observe a total of 1298 households combining all the eight villages of the selected districts namely Giridih and Dumka. Finally 50 households from each of the selected villages have been chosen as final sample units by the application of stratified random sampling method. Here, considering the Caste and Educational status of the head of the households, the stratification is done. The selection and distribution of sample on the basis of the sex of the household head is given in Table 1. The table itself shows a very few families having female household head.

Initially data have been collected on socio-economic characteristics of the households by questioning the head of the particular household. In the second stage, the heads of all the final sampled households were interviewed for further information relevant for the study. Also adult female members of the selected households were also interviewed in order have a comparison with the information on perception and opinion provided by the male heads as here we did not find sufficient female heads for comparison of status of male heads with the female heads. Also, the adult male members of a subset of selected households were interviewed to see if there are differences in the perceptions and opinions.

Observation and Analysis

Similarly we also need to recast realistically for capturing the level of empowerment in the rural villages of India. (All dimensions are given equal weight, i.e. one third). In this context we want to consider the indicators which actually enhance the capability of women, the expansion of choices in front of them by which they may consider themselves to be empowered. We are only interpreting their condition according to our perspective, but what they consider about their life is much more important, but still expanding the choices or rather their capability is our concern, but how they or society functions with the available choices is a difficult question beyond our scope in this analysis. The values we have inherited through generations, way of looking at different issues matters a lot. Still expansion of information, knowledge and participations in social networks empower them and ask them to consider their own situation. We have constructed gender empowerment measure according to the formula used by UNDP[6]. We have thus considered some different indicators to make up the gap as far as possible depending upon the availability and those are relevant for the analysis of rural Jharkhand. These are given below. For understanding the level of gender empowerment by GEM, we have considered the following dimensions as well as indicators:

Dimension 1: Participation in social and political arenas and decision-making power of women.

Indicators: a) percentage of Female/Male who are member of any club, community centre, social

[6] Dimension index=(actual value-minimum value)/(maximum value-minimum value), Equally Distributed index= $\{[\text{female population share (female index}^{-1})] + [\text{male population share (male index}^{-1})]\}^{-1}$ for each indicator.

Table 1. Sampling and Distribution of the Households by the Sex of the Head

District	Block	Village	Sex of the Households He		
			Male	Female	Total
		Baghra	49	1	50
Giridih	Bengabad	Bhandaridih	50	0	50
		Harsingraidih	50	0	50
	Giridih	Parsatanr	48	2	50
		Karikadar	49	1	50
Dumka	Dumka	Murabahal	49	1	50
		Kusmaha	50	0	50
	Ramgarh	Purnia	49	1	50
		Grand Total	394 (98.5)	6 (1.5)	400

Note: Figures in the parentheses represent percentage to total.

Table 2. Village Level Gender Empowerment Measure (GEM) for the Sample Areas of Jharkhand

Village	a1	b1	c1	d1	e1	a2	b2	a3	b3	DIM 1 Index	DIM 2 Index	DIM 3 Index	GEM
Baghra	0	0	0.9899	1	0	0	0.1244	0	0.3589	0.3980	0.0622	0.1794	0.2132
Bhandaridih	0.0384	0	1	0.9899	0	0	0.0320	0	0.4734	0.4057	0.0160	0.2367	0.2195
Harsingraidih	0	0	1	0.9899	0	0.0379	0.2519	0	0.5455	0.3980	0.1449	0.2728	0.2719
Parsatanr	0	0	0.9899	1	0	0.0369	0.1406	0	0.3844	0.3980	0.0888	0.1922	0.2263
Karikadar	0	0	1	0.9800	0	0.0367	0.3460	0	0.0411	0.3960	0.1914	0.0206	0.2026
Kusmaha	0	0	0.9796	0.8636	0	0	0.1697	0	0.0416	0.3686	0.0848	0.0208	0.1581
Murabahal	0	0	1	0.9899	0	0.0720	0.4392	0	0.0398	0.3980	0.2556	0.0199	0.2245
Purnia	0.0386	0	0.9899	0.9796	0	0	0.1737	0	0.0417	0.4016	0.0868	0.0208	0.1698

Note: Ki: indicator k of dimension i, k = (a, b, c, d, e), i = (1, 2, 3)
Source: Field Survey conducted during 2007-08.

Table 3. Membership of Social Network (SN) and Participation in Business & Services

Village	Male Members(SN)	Female Members(SN)	Male in Business & Services	Female in Business & Services
Baghra	0	0	11	0
Bhandaridih	1	24	2	0
Harsingraidih	0	0	18	1
Parsatanr	0	0	12	1
Karikadar	0	19	11	1
Kusmaha	0	0	2	0
Murabahal	0	28	18	2
Purnia	1	28	2	0

Source: Compiled from the Field Survey conducted during 2007-08.

Table-4: Education Indicators and Gender Gap in the Study Area

Village	Literacy Rate of Male (a)	Literacy Rate of Female (b)	Gender Gap1	% of Male in Class 5 and Above (c)	% of Female in Class 5 and Above (d)	Gender Gap2	Average Level of Edu. for Male (e)	Average Level of Edu. for Female (f)	Gender Gap 3
Baghra	54	16	38	28	8	20	0.82	0.28	0.54
Bhandaridih	48	12	36	8	2	6	0.56	0.14	0.42
Harsingraidih	58	28	30	34	20	14	1.08	0.56	0.52
Parsatanr	74	26	48	58	8	50	1.72	0.32	1.4
Karikadar	74	38	36	62	24	38	1.62	0.64	0.98
Kusmaha	58	24	34	56	10	46	1.14	0.36	0.78
Murabahal	70	44	26	62	34	28	1.8	0.88	0.92
Purnia	76	42	34	66	10	56	1.51	0.58	0.93

* Gender gap1= a - b, Gender gap2= c - d, Gender gap3= e - f.
Source: Compiled from the Field Survey conducted during 2007-08.

organization, NGO etc. b) percentage of Female/Male who are member of any political organization, c) percentage of Female/Male regularly attend/watch cultural programme, d) percentage of Female/Male who knows Panchayat member representing their area, e) percentage of

Female/Male who are aware of the activities of the Panchayat. (Weight- one fifth for each indicator within the dimension i.e., equal weight is given to all the indicators here).

Dimension 2: Economic participation and decision-making power

Indicators: a) percentage of Female/Male engaged in business/services, b) percentage of Female/Male who has read at least up to class five. (Weight- half for each indicator within the dimension)

Dimension 3: Power over economic resources

Indicators: a) percentage of Female/Male who have received any kind of property by inheritance, b) percentage of Female/Male agricultural worker in their village. (Weight- half for each indicator within the dimension) In case of all the indicators we have taken the maximum value as 100 and minimum value as 0. But in case of the agricultural wage we have taken maximum value and minimum value for male as Rs. 106.96 and Rs. 47.64 respectively and for female as Rs. 62.31 and Rs. 37.78 respectively[7]. In all of the Equally Distributed Indices for all indicators we have taken female and male population share as 0.5 as in each of the household we have considered the response of the household heads as well as that of counterparts, but in case of agricultural wage index we have taken the population shares in terms of the participation of the household heads and counterparts in agriculture. Actually the GEM measure in this case can be called as the Village Level GEM Measure. The computation and the variation in the level of gender empowerment measure are shown in Table 2. It is observed from the Table 2 that values of some indicators' b1, e1, a3 are zero for all the villages. For b1 and a3 as the value of the female/counterpart index is zero, the final value of the index also turns to be zero, thereby representing strong gender discrimination in this regard. This happens because in all the villages all the members of any political organisation are male and none of their female counterparts had received any kind of property by inheritance. This is the case that still now after marriage the females takes whatever is provided in the form of dowry, whereas they do not receive any share of their ancestral property even though there is a legal provision for that. All ancestral property is being inherited by the male members only. Similarly, female in those areas do not involve themselves (also not allowed from their families) in active politics, which could be changed (as happened in Tripura and West Bengal to a certain extent (Ghosh and De, 2003)) with the introduction of local self-government at the panchayat level. It is very interesting to find that all the household heads/males and counterparts/females are not aware of the activities of Panchayat system. The ideas of direct democracy which we talk about in these days are just a myth in this type of situation. This fact must be taken care off in a diligent manner for ensuring higher level of development in those rural set up. Similarly for a1 and a2 we have five and four villages which have got the indicators' value as zero which is reflected from Table 3.

It happens because almost all of the household heads are not member of any club, community centre, social organization, NGO etc. While in four out of the eight sample villages, more than fifty per cent of the female counterparts are the member of any social organisation. It is observed that women of some villages take part in the social network system which has an important role in empowering women. In this context one may also argue that men are lagging behind the women in forming a viable social network in those villages that plays an important role in the development process. Similarly, almost none of the counterparts participate in business and service related activities, while a significant percentage of male household heads are in these activities that reflects a segregation and deprivation in occupation for women. In case of c1 and d1 the values are close to 1 and that reflect almost a perfect equality situation in regards to attending/watching cultural programme. Thus we can say that almost all of these rural people are in a well knit traditional village culture, which if guided by quality education, training program leading to employment generation, can enhance the participation of women in various socio-economic activities leading

[7] All India annual average daily wage rates in different agricultural occupations, 2007-08. Downloaded from http://labourbureau.gov.in/WR%20Rural%India%202k7-8%Summary20Pages201-3.pdf

towards a higher level of development. In respect to education, for estimating b2, we have considered those who have crossed at least class five standards. A moderate level of performance is being observed which is shown in the later part of the analysis in detail. Lastly, concerning the disparity in the agricultural wage a very strong disparity is being observed where for same type of agricultural work women are paid much lower than that of men. Therefore, in these villages considering the three dimensions and on the basis of the aforesaid method of estimation, a very low level of empowerments (GEM) is being observed. The average GEM for the sample eight villages is 0.21073. The GEM index varies from about 0.16 in Kusmaha of Dumka to 0.27 in Harsingraidih of Giridih. It happens to be a fact that comparatively Giridih is much developed and the village Harsingraidih is much nearer to the urban area while Dumka is a much backward district and the village Kusmaha is also an underdeveloped in an interior area. Despite the poor values of the indicator across the selected villages of Jharkhand, a significant inter-village variation in gender empowerment and deprivation is observed.

Several indicators including measures of literacy, enrolment and years in school reveal patterns and trends of education of women that varies along with the development of the countries. Each of these indicators leads to the same conclusions: the level of female education is low in the poorest countries, with just a handful of exceptions, and by any measure, the gender gap is largest in these countries (Meier and Rauch, 2000). So, for the purpose of analysis, the proportion of household heads and counterparts who are literates and also read at least up to standard five are taken into consideration. Low adult literacy rates are a result of past underinvestment in the education of women. We also tried to examine the average level of education of household heads and its counterparts. In the same way, gender gap in respect of education is also compiled.[8]

From Table 4, it is clear that percentage of individuals (both male and female) decreases for higher level of education though we have considered only literacy to standard five or above. It shows the rapid decline in percentage of people crossing higher level of education or in other words rising drop-outs. In terms of literacy, except Bhandaridih (with literacy rates of 48) more than fifty per cent of the household heads are literate in all the villages, while in case of women none of the village crossed 50 per cent. The maximum 44 per cent is observed in Murabahal a comparatively rich village nearby Dumka town where as the lowest of 12 per cent is recorded in Bhandaridih far away from Bengabad headquarter and a poor village as shown in Table 7. Gender gap in respect to literacy rate is very high for all the villages and it is the highest in Parsatanr and lowest in Murabahal.

Considering the importance of primary education in the development process, percentage of household heads and their counterparts, who have read class five and above have been computed. Sharp fall in the percentage is being observed in this case as compared to the literacy rate. Gender gap in this respect is also calculated. Except the first three villages in the list, gender gap is also very much higher than literacy rate gap. On the basis of the number assigned for different level of education, the average level of education and its gender gap are also calculated. The gap is found to be the highest in Parsatanr under Giridih while it is the lowest in Bhandaridih under Bengabad, where overall literacy and education is also very low.

Low levels of education for women are due to the fact that those who bear the private costs of investing in schooling for girls and women fail to receive the full benefits of their investment. This is especially true because much of the payoff in educating women is broadly social. Most of the decision makers (predominantly male) especially in the underdeveloped society weigh the benefits net of costs on education against the net benefits of keeping children out of school. The costs include direct financial costs, indirect or opportunity costs and non-pecuniary costs that are borne privately by the parents or the students. The benefits include returns both to the family in the form of higher earnings from the children, which is very low in case of female as it is transferred to their in-laws after marriage. Of course, a part of that return goes

[8] Illiterate as 0, class (1-4) as1, (5-8) as 2, (9-10) as 3, (11-12) as 4, below graduate as 5 and graduate and above as

Table 5. Property Received by Inheritance in the Study Area

Village	Percentage of Household Heads, Received Ancestral Property	Percentage of Counterparts, Received Ancestral Property
Baghra	68	0
Bhandaridih	60	0
Harsingraidih	20	0
Parsatanr	10	0
Karikadar	62	0
Kusmaha	92	0
Murabahal	70	0
Purnia	98	0

Source: Compiled from the Field Survey conducted during 2007-08.

Table 6. Average Age in Years at the Time of Marriage

Village	Bride	Bridegroom
Baghra	17	20
Bhandaridih	17.08	20.6
Harsingraidih	17	20
Parsatanr	17	**20**
Karikadar	21	23
Kusmaha	20.9	22.94
Murabahal	21	23
Purnia	20.94	22.94

Source: Compiled from the Field Survey conducted during 2007-08.

to the parents but some more goes to the society in improved quality of life. Thus, the observed discrimination in this respect may be a rational response to constraints imposed by poverty and to expected returns determined by labour market conditions and traditions in those areas.

property is inherited by the males and not by females (Table 5). Here the percentage of male is lower than 100 which is an indication that some of them could not inherit which may be due to the non-availability or those do not want. In the study area we observe marriage to take place at very low age for both the male and female, which may be due to the lack of education among both. Moreover, parents want to get relieved of their burden of daughters whom they used to regard as liability. However, the gap between the age at marriage of bride and that of groom is more or less same in all the villages of the study area.

'Women make up a substantial majority of the worlds' poor. If we compare the lives of the inhabitants of the poorer communities across the developing world, we would discover that virtually everywhere, women and children experience the harshest deprivation. They are more likely to be poor and malnourished and less likely to receive medical services, clean water, sanitation and other benefits. The prevalence of lower earning capacity of women, and their limited control over their spouses' income all contribute to this disturbing phenomenon' (Todaro and Smith, 2003). But such 'feminisation' of poverty that finds women facing the brunt of low wages and unemployment is now increasingly a worldwide trend (Agiropoulos and Rajagopal, 2003). Generally women are less empowered in the poor households and their level of empowerment decreases with the incidence of poverty. In the present analysis, we computed the headcount index for measuring the proportion of

Table 7. Indicators of Poverty and Income Inequality in the Study Area

Village	Average Poverty Gap	Normalized Poverty Gap	Head Count Ratio	FGT Index	Gini Coefficient
Baghra	191.4025	0.4699	0.9195	97.5264	0.3204
Bhandaridih	184.3473	0.4526	0.9257	88.6533	0.2419
Harsingraidih	195.4588	0.4798	0.9018	101.9150	0.2648
Parsatanr	136.7974	0.3358	0.8350	46.3187	0.2488
Karikadar	141.1300	0.3465	0.8521	59.4295	0.2490
Kusmaha	166.3723	0.4084	0.9873	75.0091	0.1628
Murabahal	65.2945	0.1603	0.3793	6.7555	0.2208
Purnia	144.7945	0.3555	0.9076	59.0248	0.1072

Source: **Compiled from the Field Survey conducted during 2007-08.**

As noted earlier, we observed a very sharp discrimination in respect to inheritance of property for the sample villages, where the ancestral

poor in each village. Also to know the extent of poverty i.e., the size of the shortfall of income from the poverty line we have estimated the normalized

Table 8. Use of Health Facilities by Women from the Registered Medical Practitioner during Pregnancy

Village	No. of Visits to doctor during pregnancy for the birth of last child	No of times of tetanus Injection taken for last baby
Baghra	1.86	0.98
Bhandaridih	1.96	0.98
Harsingraidil	1.96	0.98
Parsatanr	1.84	0.92
Karikadar	1.85	1
Kusmaha	0.86	0.88
Murabahal	2	1
Purnia	1.85	1.32

poverty gap. There are four criteria for a desirable poverty measure that are widely accepted by development economists: these are anonymity, population independence, monotonicity and distributional sensitivity principles. Two well-known poverty indexes that satisfy all four criteria are the Sen's Index and certain forms of the Foster-Greer-Thorbecke (FGT) index, often called Pα class of poverty measures. We in our analysis considered α= 2, which satisfies all four of the poverty axioms for measuring poverty in the sample villages. We also estimated the degree of income inequality among the household heads with the help of Gini Coefficient. Therefore we want to see whether there is any association with the level of poverty (FGT index) and the level of empowerment of women (GEM) in our sample villages. If the incidence of poverty is measured with the help of per capita income, which is generally misreported by the individual respondents, it may prescribe wrong conclusions. Therefore in the analysis, poverty is estimated with the help of per capita expenditure, a close substitute of income (as per NSSO). Moreover, most of these families do not have much savings and thus expenditure is a much reliable option in this case.

From the monthly household expenditure we have calculated the per capita monthly expenditure and using suitable formula we have calculated those various measures of poverty. For the computation, poverty line ($Y_{p)}$ for the year 2007-08 of rural area is considered to be Rs. 407.34[9]. The calculated results of the head count ratio (H), average poverty gap (APG), normalized poverty gap (NPG), Foster-Greer-Thorbecke (FGT) index and Gini Coefficient (G) are presented in Table 7.

H=P/N, P: total number of poor, N: total population, TPG=$\sum (Y_p - Y_i)$, i =1, 2... P., Y_i is the income of individual; where i. APG=TPG/P, NPG=APG/Y_p, FGT index =$1/(N.Y_p).\{\sum(Y_p - Y_i)^{\alpha}\}$. Here we took α = 2 (Todaro and Smith, *op. cit.*), and

$G=1/N\ [N+1-2\{(\sum (N+1-i)Y_i)\}/\sum Y_i]$

(according to Gini coefficient- Wikipedia, the free encyclopedia, here i =1 to N , indexed in non-decreasing order in terms of Y_i).

It is quite clear from the above table that the selected sample villages are extremely poverty stricken though there is significant inter-village variation. Except Murabahal more than eighty per cent of the people of the other villages are living below the poverty line. Almost all the people of Kusmaha village are poor. Similarly, the average poverty gap except Murabahal is very high over Rs. 100 and for some villages is close to Rs. 200. The income short fall measured by the normalized poverty gap, which is nothing but APG divided by poverty line income yield a similar result. Finally our target was to have the FGT measure, which is also very high for most of the villages with Murabahal being an exception has just over six as its index. Where as, for the first three villages in the list, the value of index is very high and close to 100. It just provides us the message that the incidence of poverty in these villages is very deep.

Though we found the level of empowerment of women (Table 2) is just above 0.21 on the average, considering the incidence of poverty it is the primary consideration. The degree of income inequality measured by Gini coefficient is not very high for most of the villages. It varies from 0.107 in Purnia to over 0.32 in Baghra. Low Gini measures indicate that the families are of more or less same category with little variations in their expenditure patterns. Correlation between FGT and Gini is only 0.33 not very strong but it is positive. Also Correlation between FGT and Head Count Ratio is 0.83. That means; there is strong

[9] According to Planning Commission, Govt. of India, the rural poverty line is Rs.366.56 in 2004-05 and a recent estimate of Suresh Tendulkar Committee Report, 14th Dec., 2009 the rural poverty line is Rs. 446.68 in 2009, therefore as our survey was on 2007-08 we have taken the average of the two lines.

correlation between different measures of incidence of poverty. Therefore, addressing poverty and neglecting the problems and issues of women cannot yield satisfactory result and solve the problems of the society properly.

Likewise, the distribution of household income across the families, within the household may be quite unequal. Existing studies of intra-household resource allocation clearly indicate that in many regions of the world, apart from education there exist a strong bias against females in areas such as nutrition, medical care and inheritance. For understanding the condition and awareness of women in respect to health, here number of visits to doctor during pregnancy for birth of last child and the number of times of tetanus toxoid injection taken for last baby are considered. Table 8 shows the average figures of those indicators for the female counterparts of the sample villages.

According to Maternal and Child Health, Ministry of Health and Family Welfare, Government of India three visits to doctor during the pregnancy and two tetanus toxoid injections during the same period is at least needed. While the survey report shows that the utilisation of the medical facilities for the purpose is far below the minimum requirement. In terms of average visit to doctor the highest value is observed 2 in case of Murbahal and the lowest 0.86 is observed in case of Kusmaha. The overall picture is very low with respect to all India standards. Similarly, the use of tetanus injections during pregnancy is less than 1 on an average in Kusmaha, which is the lowest among all the sample villages. It indicates that all the women do not visit doctor even a single time and take tetanus injection. It is the highest in Purnia with figure recorded as 1.32 on an average, which is also very low considering the Indian average standards. The observation reflects the strong lack of awareness in health and also the constraints they face in enjoying a healthy life.

Conclusions and Policy Implications

From the overall analysis, we can conclude that the study area of Jharkhand is heavily poverty stricken and there is high inter-village variation of it. But it should be noted most of the families are under poverty and the level of empowerment is also very low, despite high inter-village variation. So, overall development for all sections of the society including women needs to be prioritised.

Based on the analysis, we can also conclude that more employment generational activities for women is needed, the gender gap in all sphere of education should be reduced and finally the level of women empowerment which is very low for these villages. Finally, all the human development indicators (income, education and health) for women are extremely low, which is, due to discrimination and deprivation in occupation, education and lack of either healthcare facilities or awareness. These areas need special attention for the desired welfare of whole population of the area. As we have observed, that this region is one of the most poverty stricken areas therefore, incidence of poverty should be reduced at any cost. Therefore, the participation of both male and female in income generating activities should be increased for keeping lower level of poverty and higher level of women empowerment at the same time so that, the female would be empowered socially, economically and politically.

REFERENCES

Argiropoulas C. and Rajagopal, I. 2003. “Women in Poverty”, *Economic and Political Weekly*, 38(7: 612-614.

Ghosh B. N. and U. K. De (2003), “Leadership and the Performance of Panchayat in Rural Development: An Experience from Tripura, *Man & Development*, 4:135–148.

Government of India Ministry of Women and Child Development, 2009. *Gendering Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India*, Downloaded fromhttp://data.undp.org.in/governance/GHDI_SummaryReport.pdf (visited on 15-1-2010)

Mehta A. K. 1996. “Recasting Indices for Developing Countries: A Gender Empowerment Measure”, *Economic and Political Weekly*, Vol.31, No.43, Oct26, Pp.WS80-86.

Meier and Rauch 2000. *Leading Issues on Economic Development*, Oxford University Press, New Delhi.

Pal M., P. Bharati, B. N. Ghosh and T. S. Vasulu 2009. *Gender and Discrimination: Health, Nutritional Status and Role of Women in India*, Oxford University Press, New Delhi.

Todaro and Smith, 2003. *Economic Development*, (Eighth Edition), Pearson Education.

United Nations Development Programme’s article on Millennium Development Goals, Downloaded fromhttp://www.undp.org.in/index.php?option=com_content&view=article&id=404&Itemid=626 (visited on 15-1-2010).