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Abstract

Inequality in individual income, assets or occupational status among society work as a hindrance to realize objective of balanced economic development. Also with the modernisation of society and integration of economies the question of social fluidity is becoming essential aspect of development. Certainly the issue of disparity and its impact on individual present and future has a bearing on intergenerational mobility. Historically some groups belong to lower strata of society due to economic and or social discrimination leading to lower income and asset possession as well as capability formation. It is often found that backward social classes are excluded from the process of capability formation and income-earning opportunities due to various forms of discrimination. This exclusion and backwardness transcends the boundary of the current generation and spills over to successive generations as well. As a result Intergenerational Mobility in terms of both Education and Occupation is very low among backward classes, trapping them in multidimensional poverty that continues across generations. This paper focuses on one of the most backward region of West Bengal, the district of Purulia which is a resource poor district dominated by Scheduled Tribes. Similar in socio-economic and geographic profile to its contagious areas of Jharkhand rather than that of West Bengal, this district has witnessed unprecedented severity of poverty and occupational stagnancy. We have tried to link these two issues by examining the deprivation aspect with question of intergenerational mobility. We measure poverty in Purulia district at the block level composing indices like Modified Capability Poverty Measure and Human Poverty Index (HPI) to get the intra district scenario. Then the intergenerational mobility in education and occupation status have been taken into account to explain the present scenario of the district.

JEL : I32 - Poverty , J62 - Intergenerational Mobility I24 - Education and Inequality

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Abstract

Inequality in individual income, assets or occupational status among society work as a hindrance to realize objective of balanced economic development. Also with the modernisation of society and integration of economies the question of social fluidity is becoming essential aspect of development. Certainly the issue of disparity and its impact on individual present and future has a bearing on intergenerational mobility. Historically some groups belong to lower strata of society due to economic and or social discrimination leading to lower income and asset possession as well as capability formation. It is often found that backward social classes are excluded from the process of capability formation and income-earning opportunities due to various forms of discrimination. This exclusion and backwardness transcends the boundary of the current generation and spills over to successive generations as well. As a result Intergenerational Mobility in terms of both Education and Occupation is very low among backward classes, trapping them in multidimensional poverty that continues across generations. This paper focuses on one of the most backward region of West Bengal, the district of Purulia which is a resource poor district dominated by Scheduled Tribes. Similar in socio-economic and geographic profile to its contagious areas of Jharkhand rather than that of West Bengal, this district has witnessed unprecedented severity of poverty and occupational stagnancy. We have tried to link these two issues by examining the deprivation aspect with question of intergenerational mobility. We measure poverty in Purulia district at the block level composing indices like Modified Capability Poverty Measure and Human Poverty Index (HPI) to get the intra district scenario. Then the intergenerational mobility in education and occupation status have been taken into account to explain the present scenario of the district.

INTRODUCTION:

Achieving a certain level of living and improving the standard is key to individual being as well as to society. And this goal of individual and society is obviously very much interdependent. We measure society's economic development as indicator of improvement of that standard in terms of growth and distributional aspect. Inequality in individual income, assets or

occupational status among society work as a hindrance to realize that objective in general. On the other hand, with the modernisation of society and integration of economies the question of social fluidity is becoming essential aspect of development. Certainly the issue of disparity and its impact on individual present and future has a bearing on intergenerational mobility (G.S. Becker & N. Tomes, 1994).

Historically some groups are belonging to lower strata of society due to economic and or social discrimination leading to lower income and asset possession as well as capability formation. It is often found that backward social classes are excluded from the process of capability formation and income-earning opportunities due to various forms of discrimination. This exclusion and backwardness transcends the boundary of the current generation and spills over to successive generations as well. As a result Intergenerational Mobility in terms of both Education and Occupation is very low among backward classes. This leads to substantial Social Exclusion through which individuals or groups are wholly or partially excluded from the society in which they live (De Haan and Maxwell, 1998). Such social exclusion focuses attention on central aspects of deprivation, is equally relevant to analysis and policies, and directs us to the fact that deprivation is a multi-generational - multidimensional phenomenon. It is also linked to social and political capital formation, particularly in terms of policies for alleviating social dimensions of poverty.

This paper focuses on one of the most backward region of West Bengal, the district of Purulia which is a resource poor district with a high population of tribals. The district is having second highest population of tribals (18.29%) in West Bengal and also a large section of it belongs to Schedule caste group (nearly 18%). The proportion of population living below poverty line is also very high (35%) . We tried to link the deprivation aspect with question of intergenerational mobility.

POVERTY IN DISTRICT OF PURULIA

Govt of West Bengal had conducted a Rural Household survey in 2005 to identify the BPL families based on scoring method which depends on 12 point criterion. Each indicator measured in a 5 point scale and the aggregate value of a household less than or equal to 33 is considered as a poor household. From the blockwise data we can find that 35.24 % in Purulia is living below poverty line (Table 1). Substantial inter-district variation in incidence of poverty is also observed with Bundwan, Kashipur, Manbazar-I, Raghunathpur-I & II, Hura being more poverty stricken

while poverty is lower than state average in blocks like Jhalda-I, Baghmundi, Santuri and Puncha.

MODIFIED CAPABILITY POVERTY MEASURE (MCPM)

The official BPL surveys of the state government have come under fire from various bodies on charges of corruption, nepotism, and inaccuracy. As an alternative measure we use ‘Capability Poverty Measure’ concept that considers lack of at least **three capabilities, namely (i) ‘deprivation from capability for healthy reproduction, represented by the proportion of births unattended by trained health persons, (ii) lack of capability to be well nourished and healthy, represented by the proportion of underweight children and (iii) lack of capability to be educated and knowledgeable, represented by female illiteracy’**. Block-level or municipality-level data on percentage of female illiteracy and percentage of non-institutional deliveries [an indicator of the first category of deprivation as suggested by Chatterjee and Ghosh (2003)] are available. But no reliable data at the disaggregated level is available on the second category of deprivation. In this study we have used a proxy variable, namely agricultural labourers as a percentage of total workers for the rural areas (and marginal workers as a percentage of total workers for the urban areas), which is supposed to represent the ‘lack of capability to be well nourished and healthy’ because here the incidence poverty is expected to be high.

We argue that three aspects may indicate capability poverty – Lack of Female Literacy, High proportion of marginal Workers, and Lack of Institutional Births. Using these three indicators, a Modified Capability Poverty (MCP) Index was constructed. Now if we observe the modified capability measure of poverty it is found that the MCP Indexes are very high in most of the blocks of Purulia which varies from 0.498 (Bundwan) to 0.693 in Raghunathput-I (Table 2). This represents a very despondent image of the district as far as the three important indicators are concerned while we look for educational gap, health deprivation and lack of gainful employment.

HUMAN POVERTY INDEX

We can construct Human Poverty Index (HPI) in the given context using three basic dimensions – Knowledge Poverty, Amenities Poverty, and Health Poverty. The first can be constructed from Extent of Illiteracy and Proportion of Out-of-School-Children. The second can be constructed from the Lack of Household Amenities like Electricity, Safe Drinking Water, and Toilet Facility

in the household. The third can be constructed from Non-institutional Delivery, Lack of ANC/PNC services, and Lack of Immunisation.

The resultant indices are reported in Table 3. It is observed that the HPI for the district (rural areas) comes to be 0.41, with Amenities Deprivation being strongest and Knowledge Deprivation being the least severe. Intra-district disparity is also glaring with HPI ranging from 0.463 in Kashipur to 0.679 in Arsha. While Knowledge Poverty is almost uniformly spread over the district, Amenities Deprivation is strongest in Arsha and lowest in Neturia. Health Deprivation is also strongest in Arsha, followed by Joypur, while being lowest in Balarampur.

LINKING POVERTY WITH EDUCATION & OCCUPATION

How does the pathetic poverty situation in the district compare with the educational and occupational scenario? Therefore we decided to conduct a Field Surevey during 2009-10 to understand the multidimensional aspect of poverty through the Capability angle. It is argued that lack of human capabilities push people into poverty and a close overlap can be found between Capability Poverty and Material / Income / Consumption Poverty.

Intergenerational Mobility:

Intergenerational transmission of educational and occupational characteristics have been studied by many researchers at international level. But the area remains less focused in Indian context. Intergenerational mobility is measured by cross tabulating individual characteristics with those of their parents and a Mobility Matrix is computed, based on which proportion of people exhibiting Upward Mobility (children having higher educational/occupational position compared to their parents) are calculated. Starting with Driver (1962), this method has been used by Erikson and Goldthorpe (1992, 2002), Cheng (1995), Biblarz (1996), Kumar (2002), Behrman et al (2001), Beller and Hout (2006), and Louw et al (2006). We tried to examine how children's education and occupation are related to parental standards. More specifically we want to quantify the degree of intergenerational upward mobility in education and occupation. This would be given by the percentage of children moving to a higher educational or occupational class compared to their parents.

Educational Scenario

It is observed that Literacy in the district is generally low, more so for the SCs and STs who form the major sections of the population. With less than 10 per cent of the population having completed 12 years of formal schooling, the human capital position of the district is really abysmal.

Educational Mobility across generations is moderate. Just about half the current generation of children have higher educational level compared to their parents. The achievement is almost uniform over all sections of the society irrespective of caste.

Occupational Scenario

One of the important factor affecting economic status is the hierarchy of occupation and the pattern of employment in different strata of occupational ladder. If stickiness and inequality in occupational achievement persist that certainly affects income and asset of successive generations. We have classified workers into nine classes and in ascending order they are labourers, Transport workers, production related workers, farmers, service, sale workers, clerical workers, administrative and professions workers. We discuss the occupation structure and mobility with this classification. At the next level we have considered three broad occupation group – Blue (labourers, Transport workers, production related workers) Pink (farmers, clerical, sale workers) and white (service, administrative and professional workers).

The general low human capital level is reflected in the occupational pattern as well. It can be observed that most of the workers (56%) in Purulia are engaged as either Wage Labourer or Agricultural Labourer. Apart from that Cultivation provides livelihood to 30% of the working population. The proportion of workers engaged in upper tier of works like Service, Administrative or Managerial works are very few (1-2.5%). The low occupational pattern is more severe for the STs and SCs, compared to those from the advanced castes.

Occupational Mobility is generally poor – close to 70 per cent of the workers are stuck in their parental occupations, mainly Blue Collar jobs. This stickiness is stronger for the tribal compared to the others.

SUMMARY

It thus transpires that the district of Purulia is characterised by severe poverty which is multidimensional in nature, low human capital formation, and educational and occupational stagnancy. We argue that the incidence and depth of poverty in the district is directly linked to

the lack of occupational diversification / livelihood promotion among the majority population – the tribals. We also argue that this feature is quite common across all tribal dominated regions of the region, transcending Orissa, Bengal, and Jharkhand. Our field survey experience also suggests that the schemes planned and executed by the government in Purulia district reinforces this occupational stagnancy since the beneficiaries are always provided financial support for taking up their traditional family occupations. The state must think out of the box to come up with policies / schemes for occupational mobility of the tribals if any dent is to be made on the poverty front.

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Reference:

Becker, G.S. and N. Tomes (1986), “Human Capital and the Rise and Fall of Families.” *Journal of Labor Economics*, 4, S1-S39.

Biblarz, Timothy J., Vern L. Bengtson, and Alexander Bucur (1996) – “Social Mobility Across Three Generations”, *Journal of Marriage and the Family*, Vol. 58, No. 1 (Feb., 1996), pp. 188-200.

Behrman J.R., Alejandro Gaviria and Miguel Székely (2001) – “Intergenerational Mobility in Latin America”, Working Paper Number 352, Inter-American Development Bank, Research Department, Downloaded from www.iadb.org/res/publications/pubfiles/pubWP-452.pdf on 26-10-2009.

Census 2001: Govt. of India

Cheng, Yuan and Jianzhong Dai (1995) – “Intergenerational Mobility in Modern China”, *European Sociological Review*, Vol. 11, No. 1 (May, 1995), pp. 17-35.

Driver, Edwin D. (1962) – “Caste and Occupational Structure in Central India”, *Social Forces*, Vol. 41, No. 1 (Oct., 1962), pp. 26-31

Erikson, R. and J.H. Goldthorpe (2002), “Intergenerational Inequality: A Sociological Perspective”, *The Journal of Economic Perspectives*, Vol. 16, No. 3 (Summer, 2002), pp. 31-44.

Kumar, S., A. Heath, and O. Heath (2002), “Determinants of Social Mobility in India”, *Economic and Political Weekly*, Vol. 37, No. 29.

Human Development Report 2002, Technical appendix , UNDP (2002)

Human Development Report 1997: UNDP.

Table 1: Empirical Measurement of Rural Poverty in Purulia,				
Name of the Block	Total No of Households	No of Households below Poverty line	Rural Poverty (%)	Rank
Joypur	17956	5905	32.89	6
Purulia -II	23743	8745	36.83	8
Para	28462	9574	33.64	7
Raghunathpur -II	16271	7526	46.25	13
Raghunathpur -I	17905	8916	49.80	14
Neturia	15411			NA
Santuri	12213	3631	29.73	4
Kashipur	33703	17485	51.88	16
Hura	22517	10186	45.24	12
Purulia -I	21185			NA
Puncha	20526	6029	29.37	3
Arsha	22311	8750	39.22	10
Jhalda -I	22454	4461	19.87	1
Jhalda -II	21931	6937	31.63	5
Bagmundi	21629	5237	24.21	2
Balarampur	20844	6994	33.55	6
Barabazar	26402	9737	36.88	9
Manbazar -I	24175	12242	50.64	15
Manbazar -II	16585	6539	39.43	11
Bundwan	16713	10163	60.81	17
Total(Rural)	422936.00	149057.00	35.24	

Source : RHS Govt. of West Bengal

Table 2. Modified Capability Poverty Measure (MCPM)

Block/MC/MP	% of Illiterate Female	Marginal - Work/total worker	proportion of non-institutional delivery	MCPM	Rank
Puruliya District total	69.414	42.748	44.490	0.522	
Jaipur	78.286	50.198	74.137	0.675	18
Purulia – II	70.508	44.627	71.813	0.623	16
Para	68.120	45.183	68.936	0.607	14
Raghunathpur – II	69.638	49.516	53.758	0.576	11
Raghunathpur – I	63.141	44.669	100.000	0.693	20
Neturia	65.015	43.384	50.099	0.528	7
Santuri	66.026	45.389	53.556	0.550	9
Kashipur	58.939	47.815	49.063	0.519	3
Hura	65.155	45.286	47.062	0.525	5
Purulia – I	72.381	41.706	73.497	0.625	17
Puncha	66.775	44.154	68.389	0.598	13
Arsha	80.609	45.611	80.790	0.690	19
Jhalda – I	72.633	34.597	50.381	0.525	6
Jhalda – II	85.109	37.590	61.441	0.614	15
Bagmundi	79.265	42.302	55.261	0.589	12
Balarampur	75.021	39.058	35.476	0.499	2
Barabazar	73.206	49.566	48.655	0.571	10
Manbazar – I	69.427	49.286	37.487	0.521	4
Manbazar – II	71.238	44.345	44.847	0.535	8
Bundwan	75.882	36.680	36.949	0.498	1

Source :Census 2001, Statistical Abstract , Govt. of West Bengal

Table 3. :Human Poverty Index in Purulia

Block/MC/MP	Knowledge Deprivation Index	Provisioning deprivation Index	Health deprivation Index	HPI	Rank
District rural	0.395511	0.629758	0.444899	0.413303	
Arsha	0.455	0.683	0.808	0.679	19
Baghmundi	0.471	0.650	0.553	0.567	12
Bandwan	0.451	0.669	0.369	0.528	9
Balarampur	0.414	0.612	0.355	0.486	3
Barabazar	0.409	0.657	0.487	0.538	11
Hura	0.382	0.614	0.471	0.507	5
Jhalda –I	0.418	0.612	0.504	0.523	8
Jhalda – II	0.470	0.635	0.614	0.582	14
Joypur	0.455	0.652	0.741	0.638	18
Kashipur	0.326	0.525	0.491	0.463	1
Manbazar – I	0.383	0.635	0.375	0.496	4
Manbazar – II	0.383	0.683	0.448	0.537	10
Neturia	0.388	0.513	0.501	0.474	2
Para	0.392	0.549	0.689	0.569	13
Puncha	0.369	0.643	0.684	0.596	15
Purulia –I	0.406	0.619	0.735	0.616	17
Purulia – II	0.392	0.608	0.718	0.602	16
R.N Pur- - I	0.379	0.523	1.000	0.736	20
R.N Pur- - II	0.389	0.580	0.538	0.515	7
Santuri	0.392	0.579	0.536	0.514	6

Table No. 4 : Educational Attributes of Different Groups in Purulia (%)

	ST	SC	OBC	GEN	ALL
Illiterate	39.86	45.31	25.51	26.67	35.8
Literate Below Primary	8.91	10.03	7.27	5.29	8.4
Primary Passed	21.11	18.70	19.16	20.23	19.8
Middle Passed	14.17	12.74	16.06	18.62	14.7
Secondary Passed	10.38	8.44	18.50	15.40	12.8
Hr. Secondary Passed	3.44	2.54	6.50	4.60	4.3
Graduate & Above	2.12	2.24	7.01	9.20	4.2

Source : Field Survey 2010

Table 5: Educational mobility across social Groups in Purulia (%)

	ST	SC	OBC	GEN	ALL
Downward	13.8	15.7	18.4	19.0	16.3
Static	37.7	34.3	29.4	28.6	33.2
Upward	48.5	50.0	52.2	52.4	50.5
Total	100.0	100.0	100.0	100.0	100.0

Source : Field Survey 2010

Table No. 6 :Occupational Pattern across different social groups in Purulia - (%)

	ST	SC	OBC	GEN	All
Labourers	69.6	57.7	43.1	45.0	56.0
Transport	1.3	0.2	0.7	0.5	0.8
Production	4.6	3.7	1.7	4.5	3.4
Farmers	18.6	35.0	45.3	30.5	32.8
Clerical & Related	0.3	0.3	1.0		0.5
Sales Workers	0.7		0.3	0.9	0.4
Service	1.6	1.7	3.6	4.1	2.5
Administrative	1.9	0.8	2.9	11.4	2.4
Professional	1.3	0.6	1.4	3.2	1.3
Total	100.0	100.0	100.0	100.0	100.0

Source : Field Survey 2010

Table 7: Occupational (Grade-wise) mobility across social Groups in Purulia

	ST	SC	OBC	GEN	ALL
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Downward	14.7	6.7	10.9	24.1	12.0
Static	78.7	89.9	73.0	62.1	78.9
Upward	6.7	3.4	16.1	13.8	9.2

Source : Field Survey 2010