

MEASUREMENT OF THE SOCIAL EXCLUSION: A CHALLENGE

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ABSTRACT:

The paper attempts to measure the one of dimension of social exclusion that is some how related to poverty which shows the deprivation of individual at different level as income, education and health. There is no doubt that social exclusion goes beyond the poverty and poverty is neither a necessary and nor a sufficient condition of social exclusion but broad aspect of poverty captures the some aspect of social exclusion as social exclusion also represents the deprivation of an individual and society at economic, political and civil bases in a society. So the main objective of paper is to measure the social exclusion using the multidimensional poverty through Alkire –Foster methodology in Sonapat district of Haryana. Paper also provides a broad view of deprivation in some selected indicators as health, education for different caste in selected region.

Key Words: Social Exclusion, Multidimensional Poverty, Sonapat

1.0 Introduction

Social exclusion is a multidimensional phenomenon which shows exclusion from adequate income or resources, labour market exclusion, service exclusion and exclusion from social services or it explores the non participation in key social activities as consumption which shows exclusion from purchasing of good and services, production incorporate the non participation in economically or socially valuable activity, political engagement represents the non involvement in local or national decision making and last but not least social interaction with family friend and communities. In short social exclusion has three decisions as economic, social and political. The economic dimension of social exclusion shows the deprivation of an individual from some basic need including food, shelter, safe drinking water, sanitation facilities, deprivation in health and education. It is somehow similar to broad definition of the poverty which represents the economic dimension of social exclusion and if we want to measure social exclusion rightly then there is need of appropriate measurement of each of dimension of exclusion. Since economic dimension of social exclusion is some how related to poverty so in the proper measurement of social exclusion measurement of poverty can play a significant role but depends on how broadly we define poverty. Income is one of several means for achieving inclusion in some aspect of social interaction. Although social exclusion is an end whereas short fall of income which is cause root of poverty is a mean

which prevents the poor from having the financial means to achieve participation in the society. Poverty is neither a necessary nor a sufficient condition for exclusion as non-poor may be excluded from participation and some poor may not necessarily be or feel excluded but it is a barrier which excludes the poor from interaction in society. Keeping in the mind that economic dimension of social exclusion is some how related to poverty the paper made an attempt to measure social exclusion widely as using one of approach of poverty that is multidimensional poverty which identifies multiple deprivations at household level in education, health and standard of living. The paper is organised as follows Section 1 leads to review of theory and empirics on multidimensional poverty. Section 2 describes the objective and research methodology for present paper. Section third explores the findings of paper and last section is devoted to conclusion and suggestions.

1.1 Measurement of Economic Dimension of Social Exclusion through Poverty Approach

Social exclusion is a term that has come to be widely used but whose exact meaning and measurement is a problem of key concern for policy maker, academician and much of debate and disagreement as poverty. Although poverty and social exclusion are not same where as poverty in general is an absolute phenomenon social exclusion represents the relative part. There is a difficulty in distinguishing social exclusion from poverty since both are multifaceted but poverty has strongest effect on social relationships and participation of individual in society at different level of decision making. So alleviation of poverty can be a measure to reduce social exclusion or increase social support but will be possible when an appropriate measurement is used. There is range of method for calculating poverty but relative method of poverty is more nearer to social exclusion and the question of how to define poverty is at the heart of policy debate and academic analysis and it is the question to which there is no agreed answer. The initial idea of poverty is concerned with substantial level of income but in practice which is essential for life varies from according to where and when one is living. In most of countries the basic definition of poverty is focused on income base or consumption base but only income alone is not a suitable measure about the well-being of the people. There is no doubt that income is one of strong dimension of poverty but it is not put a true picture of well being of people.

So income as a sole indicator of poverty is not only injustice with measurement of poverty but with government efforts to alleviate the poverty and among many measure HPI was an indicator which developed by UNDP and was first reported as part of HDR in 1997. But MPI is replaced the HPI later on which was published from 1997-2009. The HPI used country averages to reflect aggregate deprivation in health, education and standard of living. It could not identify specific individuals, households or large groups of people as jointly deprived. But the MPI captures how many deprivations they face on average. So if we measure poverty with widest approach as possible it can capture the true measurement of social exclusion.

2.0 Review of Literature

Driven (1995) described the relationship between social exclusion and poverty in Netherland. The study is based on secondary data as source WORC and TISSER research. The results of the study show that the incident of the relative deprivation in the Netherland has decreased in the second half of 1980 while income poverty may even increase. The results on impoverishment and social exclusion revealed a growing dualisation and inequality between individual above and below the poverty line appear to have increased.

Bhappa and Lapeyre (1997) analysed the economic, social and political dimension of social exclusion. The study is based on secondary data as the source various UNDP Report and Survey of Centre'd Etude des Revenues eldes Couets (CERC). The results of the study shows that all three dimension of social exclusion are interrelated and can not be separated. With this study also explores that there is need of appropriate indicators to capture the various dimension of social exclusion. Research should therefore be undertaken to develop methodologies and indicators for the measurement of it and national databases on social exclusion need to establish.

Brien et al.(1997) showed the similarity of poverty and social exclusion for developing and underdeveloped countries. The study is based on secondary data as source Survey of institute of Development and studies and Poverty and Research Unit. The results of the study show that social exclusion in developed countries is almost similar to poverty of developing countries. The study also reveal that there is need of appropriate indicators and measurement of social exclusion so that policy maker know whether social exclusion was wide or narrow, transient or permanent, certain or probabilistic.

Klasen(1998) attempted to describe a link between children, education and social exclusion. The main objective of study is to examine to what extent educational policies can foster among children and adults. The study shows that education system is may one cause which is central to the issue of social exclusion. The study also shows that many educational systems fails to adequate considerable portion of its students and all policies will not have go beyond the education system for reduction of social exclusion so policies may be able to address issues poverty, inequality, discrimination and unemployment.

Gordon et al.(2000) described the poverty and social exclusion in Britain in 2000. The study analysed the four dimension of social exclusion as impoverishment, labour market, service exclusion and social relations. The results of the study reveal that at the end of 1999, 14.5 million people were living in poverty in Britain. It also explore that 43 percent of adult have no paid work and over one in three of population lives in a household with paid work under labour market exclusion. More than one in twenty have been disconnected from water gas, electricity or telephone and one in ten have used less than they need because of cost and about one in fourteen are excluded from essential public and private services.

Saunders (2003) provided the social exclusion as measure of poverty in Australia. The study is based on

- Electricity (no having access to electricity)
- Drinking Water (Not having access to clean drinking water or if the source of clean drinking water is located more than 30 minutes away by walking.
- Sanitation (not Having access to improved sanitation, or if improved it is shared)
- Cooking fuel (using dirty cooking fuel as dung, wood or charcoal)
- Having home with a dirt, sand or dung floor
- Assets (not having at least one assets related to access to information(radio, TV, telephone) and not having at least one assets related to mobility (bike, motorbike, car trunk, animal cart, motorboat) or at least related to livelihood (refrigerator, arable land, livestock)

To identify the multidimensional poor, the deprivation scores for each indicator are summed to obtain the household deprivation score c. A cut-off 33.3 percent, which is equivalent to 1/3 of the weight indicators, is used to distinguish between the poor and not poor. If the deprivation score is 33.3 percent or greater, the whole household is multidimensional poor. Household with a deprivation score greater than or equal to 20 percent but less than 33.3 percent are considered to be near multidimensional poverty. Household with a deprivation score of 50 percent or higher are severely multidimensional poor.

3.2 Basic Concepts

a) Head Count Ratio (H) :- It's the proportion of the multidimensional poor in the population.

$$H = q/n$$

q = Number of people who are multidimensional poor.

n = Total population.

b) Intensity of Poverty (A) :- It's proportion of the weighted component indicators in which, on average, poor people are deprived. For poor households only the deprivation scores are summed and divided by the total number of poor people.

$$A = \sum qi.ci /q$$

c=Deprivation score of ith poor household.

i= ith poor household.

c) Multidimensional Poverty Index: - The MPI value is the product of the multidimensional poverty headcount ratio and the intensity of poverty.

$$MPI = H . A$$

d) Contribution of deprivation in health, education and living condition:-

$$\text{Contributor } j = \sum qi.cj /n \div MPI$$

4.0 Result and Discussion

The main findings of the study will explore the deprivation of different selected villages of Sonapat district in terms of health, education, and living standard with this study also put a light on caste wise deprivation of selected villages in three above indicators of economic dimension of social exclusion.

Table 1 analyses some basic concepts of multidimensional poverty as head count ratio, Intensity of Poverty, MPI Value and deprivation of each dimensions as health education and living standard of multidimensional poverty index of selected region. Figures show that 43 %-85% household is multidimensional poor in the region whereas as average poor

person is deprived around 47.7 % of the weightage indicators. At disaggregated level around 30% -40% populations is deprived in terms of education, 40%-42% in health and 22%-36% in terms of living standard. Important observation is that population is more deprived in health and education in comparison to income.

Table 1: Multidimensional Poverty at Aggregated Level

S.No	Characteristics	Percentage of population							
		Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal Rai	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total
1	Head Count Ratio	55	43	64	51	85	60	43	56
2	Intensity to Poverty	47.7	47.79	49.57	44.72	44.90	45.33	45.61	46.84
3	Multidimensional Poverty Index	26.2	20.54	31.72	22.80	38.16	27.19	19.61	26.23
4	Contribution of Deprivation in terms	30.40	36.18	29.80	36	31	34	40	33
	Health Education	39.30	36.90	34.20	42	40	42	30	39
	Living Standard	30.30	27.02	36	22	29	24	30	28

Table 2 shows the intensity of poverty in Sonapat District at Aggregated and disaggregated level. Figures represent that only 2- 17 % household is non-poor in selected region whereas 83-98 % household has some degree of poverty as moderate or

severe Out of 83-98% 22-50% household is nearer to poor and remaining 26-52% and 9-30% household is exactly and extent poor respectively. It means around 55% population is severing poor in selected region whereas on income base this

percentage is only 27.5%. If we see Sonapat district as a whole then only 13 % household is non-poor and remaining 87% household poor is having some degree of poverty. One of the

observable analyses is that income base poverty is only a partial approach of poverty measurement.

Table2: Slabs of Multidimensional Poverty at Aggregated Level

Deprivation score	Percentage of population								Discription
	Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal R a i	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Sonepat	
0-20	16.25	15.36	12	16	2.10	5.90	6	13	Not- poor
20-33.5	29.98	41.50	22.80	32.00	17.40	33.50	50.30	32	Near to poverty
33.5-50	31.04	26.79	36.20	43.00	52.10	48.40	27.90	35	Exactly poor
50-100	22.73	16.35	29.00	9.00	28.40	12.20	15.80	20	Extent poor

Table 3 describes the multidimensional poverty for general category in selected villages. Figures show that 22-84 % household is multidimensional poor in these villages whereas as average poor person is deprived 39-48 % of the weightage indicators. At disaggregated level 32-46% population is deprived in terms of education, 32-42 % in health and only 15-

25% in terms of living standard. Important observation is that population is more deprived in health and education in comparison to income with this figure also reflects that general category is less deprived in comparison to other category or aggregated level and one of cause may be it has resources as land as comparison to other category.

Table 3: Multidimensional Poverty in General Category

S.No	Characteristics	Percentage of population							
		Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal Rai	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total
1	Head Count Ratio	38	22	63	84	38	48	38	42
2	Intensy to Poverty	44.43	43.91	48.366	42.97	44.43	43.37	42.82	43.83
3	Multidimensional Poverty Index	16.88	9.66	30.65	36.09	16.88	20.81	16.70	18.40
4	Contribution of Deprivation in terms	36	39	32	42	39	38	38.9	37
	Health Education	42	46	32	42	36.8	38	35.7	39.1
	Living Standard	22	15	36	16	24.2	24	25.4	23.9

Source: Author's Calculation

Table 4 shows deprivation score of general category of different randomly selected village. Figures represent that only 4-27 % household is non-poor in selected villages whereas 96-73 % household has some degree of poverty as moderate or severe Out of 96-73% more than

half i.e 12-55% household is nearer to poor and remaining 13-72% and 0-30% household is exactly and extent poor respectively. In short figure explains that general category in good state as only 12% population is extreme poor in maximum villages.

Table4: Slabs of Multidimensional Poverty in General Category

Deprivation score	Percentage of population								Discription
	Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal R a i	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total	
0-20	22.72	27.77	06.70	18.84	4	11.60	8.10	18	Not- poor
20-33.5	40.55	54.45	30.20	46.38	12	40.00	52.80	41.40	Near to poverty
33.5-50	29.94	13.89	32.90	34.78	72	48.40	29.30	33.30	Exactly poor
50-100	06.79	03.89	30.20	00	12	00	09.80	07.30	Extent poor

Source: Author Calculation

Table 5 describes the multidimensional poverty for other backward caste category in selected villages at aggregated and disaggregated level. Figures show that more than 75% household is multidimensional poor in this villages whereas as average poor person is deprived more than half of the weightage indicators. At disaggregated level 19-44% population is deprived in terms of education, 27-44 % in health

and 26-46% in terms of living standard. Important observation is that population is almost same level in all indicators with minor difference in health, education and income with this figure also reflects that OBC category is more deprived in comparison to general category or aggregated level and one of cause may be it has less paternal resources as land as comparison to general category.

Table 5: Multidimensional Poverty in Other Backward Caste

S.No	Characteristics	Percentage of population							
		Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal Rai	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total
1	Head Count Ratio	68	58	74	65	88	65	40	67
2	Intensity to Poverty	55.73	47.58	45.92	50.46	45.91	45.68	47.55	49.88
3	Multidimensional Poverty Index	37.89	27.59	33.98	32.79	40.40	29.69	19.02	33.41
4	Contribution of Deprivation in terms	33	38.80	36.40	32	27.70	28.50	35	33
	Health Education	37	27.20	30.90	42	36.30	44.5	19	36
	Living Standard	30	34	32.70	26	36	27	46	31

Source: Author's Calculation

Table 6 shows deprivation score of OBC Category in selected villages. Figures represent that less than 0-21% household in this category is non-poor in selected village whereas 100- 79 % population has some degree of poverty as moderate or severe Out of 100-79% in some villages more than half i.e 11-

59% household is extreme poor and remaining 15-51% and 18-50% household is near to poverty and exactly poor respectively. In short figure explains that in OBC category more than half population is severe poor.

Table 6: Slabs of Multidimensional Poverty in OBC Category

Deprivation score	Percentage of population								Discription
	Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal R a i	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total	
0-20	09	00	00	21	00	00	00	5.20	Not- poor
20-33.5	24.82	41.43	25.90	13	11.54	35	59	28.30	Near to poverty
33.5-50	15.18	38.57	55.50	34.40	51.92	38	18.20	31.70	Exactly poor
50-100	50.34	20	18.55	31.60	36.54	27	22.80	34.80	Extent poor

Source: Author Calculation

Table 7 represents the multidimensional poverty for schedule caste category in selected villages. Figures show that two third to ninety percent household is multidimensional poor in these village whereas as average poor person is deprived more half of the weightage indicators. At disaggregated level 20-51% population is deprived in terms of education, 16-45% in health and around 30% in terms of living standard. Important

observation is that population has almost same level of deprivation in health and education but less deprivation in living standard, with this figure also reflects that schedule category is more deprived as OBC in comparison to general category at aggregated or disaggregated level and one of cause may be it has less paternal resources as land as comparison to general category.

Table7: Multidimensional Poverty in SC Category

S.No	Characteristics	Percentage of population							
		Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal Rai	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana	Total
1	Head Count Ratio	69	89	62	79	86	90	75	73

2	Intensity to Poverty	47.26	51.24	52.72	46.74	48.76	48.15	53.35	48.33
3	Multidimensional Poverty Index	32.60	45.60	32.68	36.92	41.93	43.35	40.01	35.28
4	Contribution of Deprivation in terms	30	32.60	26.20	31	16.5	34.60	45.8	30
	Health Education	40	38.40	37	41	51.9	42.30	20.8	40
	Living Standard	30	29	36.80	28	31.6	23.10	33.4	30

Source: Author's Calculation

Table 8 shows deprivation score of schedule caste Category in randomly selected villages. Figures represent that only one-fourth population in this category is non-poor only in one village whereas 94-100 % population has some degree of poverty

as moderate or severe Out of 94-100 % more than one-third to two third population is exactly poor and remaining 14-66% is extreme poor. In short figure explains that in SC category more than two third household is severe poor as OBC category.

Table 8: Slabs of Multidimensional Poverty in SC Category

Deprivation score	Percentage of population							Total	Discription
	Khanpur Kalan Gohana	Bajana Khurd Ganaur	Mahipur Sonipat	Jajal R a i	Muzzam Nager Kharkhoda	Kahalpa Kathura	Khanpur Khurd Mundlana		
0-20	11	10.72	25.50	6.30	00	00	00	10.40	Not- poor
20-33.5	19.63	00	11.80	14	13.90	10	25	16.25	Near to poverty
33.5-50	37.79	37.50	32.20	65.70	19.40	70	30	40.11	Exactly poor
50-100	31.58	51.78	30.50	14	66.70	20	45	33.24	Extent poor

Source: Author Calculation

5.0 Conclusions and Suggestions

There is no doubt that poverty and social exclusion is not similar but being poor can lead to other deprivation as excluded from opportunity to be employed and may lead to economic impoverishment, undernourishment or homeless which is directed to health and education deprivation. So broad definition of poverty is a tool to capture the economic dimension of social exclusion and using the Alkire- Foster methodology the study has measure the economic dimension of social exclusion on the basis of different indicators as education, health and standard of living. The results of the study shows that more than half population is multidimensional poor in this region and percentage of poor household varies from 43 to 85 percent at disaggregated level. The intensity of poverty shows that average poor person is around 50% deprived in terms of weightage indicators. At the aggregated level household have almost same level of deprivation i.e 33%, 39% and 28% in health education and living standard respectively and disaggregated level there is same scenario but with a wider range. Deprivation score at aggregated level also represents a poor picture of living condition of this region as only 13% household is non-poor and for different village this percentage varies from 2-16% and remaining 84-98% household is cached in vicious circle of poverty with different degree as more than 50% household is having sever situation at aggregated and disaggregated level.

In general category more than one third household is poor at both aggregated but at disaggregated level the percentage of poverty reached to 84% in one of village of the selected region. The intensity of poverty also reflects that

average poor person of general category is deprived to nearer 45% of the weightage indicators at both level. The results also explain that in general category household are more deprived in health and education in comparison to living standard. The deprivation score also reveals that at maximum level only 28% household is non-poor but at minimum level it reached to 4% and around 40% household is exactly poor and extent of poor in this caste. In other backward class and schedule caste two-third of household is poor at aggregated level and percentage of poor reached to 88-90% at disaggregated level in schedule caste. Intensity of poverty represents that average poor person is 50% deprived in terms of weighted indicators. In both castes household is following same scenario as general caste and more deprived in health and education in comparison to living standard. Deprivation also score reveals that only 5% household is non-poor in this class at aggregated level and this reached to zero in some villages and showing that every household is having some level of poverty and two-third household have a very poor situation.

In short, since social exclusion is a multifaceted so measurement of it is an issue not only for developing countries but developed also so wide measure of poverty is surely one of the measures to capture the economic aspect of social exclusion in society but with this there is need of appropriate indicators of social exclusion to capture its various dimensions at a single point. Study also provide an ample opportunity to develop the methodology for the measurement to researcher and national database on social exclusion need to established, further it should be agenda for policy making at regional or national level.

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