IDENTIFICATION OF THE POOR:

A Case Study of Cachar District of Assam

<u>Abstract</u>

Poverty is a stumbling block in the economic development of a country. So, it is an urgent need of the time to eradicate poverty so as to bring all-round development of the country. The Governments of less developed countries have taken number of social assistance schemes in order to eradicate poverty and, to distribute the benefits of such schemes, it is necessary to identify the poor properly. Thus, identification of poor and distribution of Antyodaya Anna Yojana (AAY) and Below Poverty Line (BPL) cards have a great relevance at the policy level because once identified as BPL, households become eligible to obtain benefits from various social assistance programmes implemented by the Central and the State Governments. About the methods adopted for proper identification of poor at the micro level for providing various developmental assistances, a major issue has been the errors of high exclusion of the poor and the errors of high inclusion of the non-poor. In spite of continuous efforts towards improving the methodology of the BPL Census, a significant difference observed between the "estimated" and "identified" poor still persists. Against this backdrop, we, in the present study, attempt to use a multi-dimensional methodology for the identification of the poor. With the help this study, we try to estimate the extent of inclusion and exclusion errors in the identification of Below Poverty Line (BPL) households of Cachar district.

The study is organized in six chapters. The chapter I deals with introduction including statement of the problem with reference to the poverty identification, the relevance of the study, the objectives and hypotheses, profile of the study area and conceptual and theoretical

framework of the study. The chapter II is devoted to review of literature. The review of literature has been done at state, national and international level. The chapter III deals with methodology and database. The chapter IV presents general profile of poverty and sample households in Cachar district. The chapter V deals with analysis of the objectives and hypotheses formulated in this study based on the primary and secondary data. Tabular analysis and econometric models like logistic regression have been used in testing the hypotheses. The regression models have been estimated using the advanced statistical packages. The final and sixth chapter is devoted to findings, suggestions and conclusion.

At first, from various sources like journals, books, encyclopedia, thesis and dissertations, information regarding the present topic have been collected and reviewed. These reviews are mainly related to the definitions of poverty, different methodologies in the identification of poverty, errors in the identification of poverty and determinants or factors affecting poverty. The works of Dandekar and Rath (1971), Lakdawala (1993), Cornia and Stewert (1993), Falkingham and et al (2001), Daimari and Mishra (2005), Anderson and et al (2006), Sharifa (2008), Sexena (2009), Mehrotra and Mander (2009), Haughton and Khandker (2009), Dreze and Kher (2010), Thorat (2010), Tendulkar (2012), Alkire and Seth (2013), Rangarajan (2014) and many others have been reviewed. After reviewing these, it is observed that there is a difference between the Planning Commission and the Ministry of Rural Development on estimation and identification of poor in India. Moreover, a few limitations of the various methodologies of the Planning Commission on poverty estimation and BPL Census are also observed. From this, we come to the point that proper identification of the poor is the need of the hour. And this will be difficult to achieve if methodological weaknesses are not addressed in appropriate manner and adopted accordingly, thus the efforts of identification of the poor may not give desired result. In this backdrop, it is very interesting to make a study for dealing with the methodological weaknesses in identifying the poor.

In the present work, we attempt to address these methodological weaknesses by applying a multidimensional methodology for the identification of the poor in Cachar district. So, the study area is Cachar district. It is located in the southernmost part of Assam. Administratively the district is now divided into two subdivisions viz. Silchar (Sadar) and Lakhipur. It has five revenue circles. These are: Silchar, Lakhipur, Katigora, Sonai and Udharbond. According to the 2011 census, Cachar district has a population of 1,736,319. The Cachar district of Assam is one of the most developed commercial centers of the state as it holds not only the significant business centers, precious natural resources but also provides various historical and tourist places, like, Khaspur Rajbari, Kachakanti Temple, Shiva Temple at Bhuban and Borail wildlife sanctuary. Such assets attract huge number of businessmen, tourists and thus turn out to be the source of income as well as direct and indirect benefits to the local people. In spite of various economic advantages in Cachar district, the Government of India named Cachar one of the country's 250 most backward districts out of a total of 640 in 2006. It is one of the eleven districts in Assam currently receiving funds from the Backward Regions Grant Fund programme (BRGF). Thus, it is clear that the Cachar district is facing various challenges, like, poverty, unemployment, inequalities etc. The Government while undertaking the pioneering job of developing the district as a whole through various developmental and social assistance schemes, the benefits of these schemes often distributed erroneously. This is because the real beneficiaries or poor households are not appropriately identified. For this reason, the proper identification of the poor in Cachar district is very important for its economic development and poverty eradication. Considering the above, we set the specific objectives of the study: (i) To examine whether there is any inclusion and exclusion errors in the identification of the poor. (ii) To estimate the extent and magnitude of inclusion and exclusion errors in the identification of the poor. (iii) To assess the relative significance of various factors on the poverty estimate in

the study area. (iv) To suggest suitable measures to reduce the errors in the identification of poor in the study area. In order to attain these objectives, the two hypotheses have been taken to test in the study: (i) Ho: There is a significant amount of inclusion and exclusion errors in the identification of the poor. (ii) Ho: All the causal factors have equal impact on poverty identification.

To test the first hypothesis, it is important to know the status of the two types of households. First those households who have a BPL/ AAY card but do not fall under the category of poor households. Second, other households who do not have BPL / AAY card but fall under the category of poor household. Therefore, we are required to collect the data from both Government identified poor and non-poor households. The present study has relied both on the primary and on the secondary sources of data. The primary data were collected from both types of households with and without a BPL/AAY card. The data were collected with the help of an interview schedule, having questions both structured and open-ended. In order to understand the socio-economic conditions of the households and to elicit certain information which was difficult to get from the households by asking questions, like the type of sanitation, the observation method was also adopted. The sources of secondary data include census reports, Government reports, research papers, published and unpublished works on poverty and Government BPL lists etc. The study has adopted a multistage random sampling technique. At the first stage, we have randomly selected the five revenues circles of Cachar district. These are -- Silchar, Lakhipur, Katigorah, Sonai and Udharbond. To retain the true representativeness of the entire area, the sites of samples are selected from all the five revenue circles. Among the revenue circles, Silchar and Lakhipur have the Municipal Boards but the other revenue circles have no such boards. So, there are two segments of revenue circles. These are - urban segment and rural segment. Among these, there are two urban segments, viz., Silchar and Lakhipur and three rural segments, viz., Katigora, Sonai and

Udharbond. In the second stage, from each urban segment, two wards have been selected randomly, viz., Ward 4 and Ward 8 from Silchar and Ward 5 and Ward 6 from Lakhipur as well as two villages have been selected from each rural segment, viz., Tarapur and Kusiarkul from Katigorah, Sonabarighat Part-I and Narshingpur Part-IV from Sonai, Durganagar Part VI and Doyapore Part-II from Udharbond. In the third stage, sample size has been selected from each of the selected wards or villages using a scientific formula originally developed by Cochran (1977). The sample size so determined are: 87 out of 927 from Ward 4 and 77 out of 376 from Ward 8 of Silchar Revenue circle, 77 out of 394 from ward 5 and 63 out of 179 from Ward 6 of Lakhipur circle, 58 out of 144 households from Kusiarkul and 83 out of 622 from Tarapur of Katigorah, 77 out of 387 households from Durganagar Part-VI and 77 out of 583 households from Doyapore Part-II of Udharbond and 56 out of 132 from Narsinghpur Part-IV and 83 out of 594 households from Sonabarighat Part-I of Sonai. This sample selection procedure resulted in 738 households out of 4338 households. Once the sample size is determined, the individual households (ultimate sampling unit) have been selected using systematic random sampling. The field survey has been taken during September, 2014 to April, 2015.

The popular multidimensional method developed by Sabina Alkire and James Foster has been used in the present study to identify the poor. According to this method, a household is identified as poor either by the Union Approach or by the Intersection Approach. According to *the Union Approach (U.A.)*, a household is identified as poor if the household is deprived in at least one dimension. On the other hand, a household is identified as poor, according to *the Intersection Approach (I.A.)*, if the household is deprived in all dimensions (Alkire and Seth: 2008).The present study uses three dimensions and ten indicators in the identification of poor. We collected data on all these dimensions and indicators through field survey. We observed that, for most variables, the range of values is not uniform. Besides, the unit by which those variables are measured is also different. Thus, it becomes technically necessary to normalize the variables before we analyze them. In order to normalize the dimensional variables, we have used the popular method which is followed in calculating the Human Development Index (HDI). Then, using simple percentage methods, arithmetic mean, standard deviation, t-test, F-test, Relative Poverty Index, Severity Poverty Index, the primary data collected from the field survey were analyzed to satisfy the first two objectives. With a view to satisfy our third objective, a logistic regression model is also set up in order to assess the relative significance of various factors on the poverty estimate in the study area.

With the help of three dimensions, viz. Standard of living, Occupational status and Socio-health status, the socio-economic features of the households are understood. In the first dimension, it is found that the share of Kachha (40.84%) and Assam-type (39.44%) of house is high in the area under type of house. The availability of electricity of the households is good, i.e., 74.69%. Among all revenue circles, Silchar has the highest proportion (93.29%) of households having electricity at their houses. However, there are large proportions of households who have no adequate sanitation facilities in the study area. Most of the households have a pit latrine without slab (52.16%). On the issue of cooking fuel, LPG (40.40%) and firewood (58.39%) are two types of main cooking fuel in the study area. PHE/ Piped water is the main source of drinking water in Cachar. Only 30.1% were using other sources, like, river, well and pond. In the second dimension, it is observed that the study area is mainly dominated by the causal labour (27.40%), business man (21.39%) and Government employee (20.95%). Regarding households' assets, majority of the household in the study area have mobile phone, television and electric fan and have no refrigerator, two/three/four wheelers, computer, washing machine and inverter. The study, in the third dimension, reveals that the literacy status among the households is high. It is evident that only 13.9% of households have an illiterate member in the study area. Moreover, the level of health among

the households is also quite good as the percentage of household having member suffers from chronic disease is only 16.65%. Concerning decision making autonomy of women, the share of decision making is maximum in political decision (61.18%) in the area. While the share of other decisions, like, own health care, decision on child education and child health is very negligible. As regards other features of the sample unit, it is observed that 97.42% of the households have held bank account in Cachar. So, the status of availing banking facilities of the sample unit is quite satisfactory in the area. Secondly, most of the children in the survey area attend school. It is observed that only 1.76% does not attend school in the district. Thirdly, 90.12% of households have permanent ownership and the rest of the households have temporary ownership. Fourthly, the share percentage of using unprotected quality of water is dominant in the study. Fifthly, the study area is mostly occupied by households which consist of only one working member. Nearly 70.85% of households consist of one working member. Sixthly, the dependency ratio is also quite high (48.10%) in Cachar. Seventhly, the male headed households maintained 90.27% whereas the female headed households maintained the remaining percentage of the households. Thus, it shows that the area is dominated by male headed households. Eighthly, among the various types of media, the sample households have mainly accessed the Radio/ TV news (54.43%) and Newspaper (32.05%). Moreover, the proportion of accessing media is higher in urban revenue circles than the rural circles. The study area is mainly included the Hindu households (55.55%) and followed by Muslim households (43.93%). Finally, it is observed that majority of the households fall in the category of General. Its share is 66.53%. The profile of poverty in the study area shows that about 31.57% of households have held poverty cards. Of these, Silchar (38.41%) has the highest card holders. From this, it is also clear that the proportion of nonpoor households is more than the poor households in Cachar. Among the poverty cardholders, the share of BPL cardholders is high (22.54%) while only 7.51% of households

have AAY cards. The religion-wise study shows the proportion of Hindu poverty cardholders is 32.24% and the percent is a little lower (31.40) for the Muslim household in Cachar district. On the other hand, the caste-wise survey reveals that the households belong to General category have possessed slightly higher proportion of poverty cards in the study area. However, the proportion of urban and rural poverty card holders is more or less equal in Cachar district.

The results of analysis show a significant variation of poor households across revenue circles. The highest number of poor households is in Sonai (67.6%) and the lowest is in Silchar (22.0%) by U.A. The municipal ward and village wise study reveals that the highest proportion of poor households is found in Narshingpur Part-IV (71.4%) of Sonai and the lowest is in Ward 4 (13.8%) of Silchar by U.A. It is observed that 24.53% households are erroneously excluded from and 14.77% households are mistakenly included in the BPL list by union approach of the multidimensional method in the study area. While using intersection approach, 31.57% households are incorrectly included in the list and only 0.14% households are wrongly left out from the list. Thus, it is seen that the survey area has a vast sum of exclusion and inclusion errors. It is also observed that rural revenue circles show more exclusion errors than urban circles. The proportion of 30.65% households has been found wrongly excluded from the list in rural areas using union approach. The households of Sonabarighat Part-I have been observed maximum share (44.58%) of exclusion error in comparison to other villages. On the contrary, in case of inclusion error, the result is reverse one. Here, urban circles show more inclusion errors compared to rural circles. About 20.39% households have been incorrectly included in urban areas. Among the municipal wards, Ward 4 (Silchar) has the highest proportion of inclusion errors across municipal wards. Apparently, an insignificant difference is observed between sample municipal wards and villages in regard to inclusion errors estimated by intersection approach. It is observed that the

distribution of poverty cards has gone in favour of the non-poor compared to poor households. Moreover, 55.80% and 16.02% of excluded households are casual labour and both agricultural labour and driver respectively. In the present study, the relative position of one household is compared with other households and tried to find out the variation. Overall observation is that the average relative poverty is found high in Sonai (0.43) and low is in Lakhipur (0.65) among the revenue circles. The study also finds that Ward 6 of Lakhipur has the highest (0.52) while Ward 5 of Lakhipur has the lowest (0.76) average relative poverty among the households of Municipal Wards. Of the six sample villages, the average relative poverty of the households of Durganagar Part-VI is low (0.61). The average relative poverty is low (0.79) among the Christian households and low (0.53) among the Muslim households. Regarding residence, the low average relative poverty is observed among the urban household whereas the high variation of relative poverty is found among the rural households. In case of Caste, we find that the average relative poverty is high among both the SC and OBC households and also the variation is high among the ST households. The average poverty severity across revenue circles is high among the households of Sonai but the highest variation is observed among the households of Katigorah. Among the Municipal Wards, the severity of poverty is high among the households of Ward 6 (Lakhipur) but low in Ward 4 (Silchar). The highest average poverty severity is found in both Sonabarighat Part-I and Narshingpur Part-IV of Sonai but the lowest variation is observed in Durganagar Part-VI of Udharbond. The poverty of majority of the households of the study area is observed as moderately severe. Of 305 poor households, 156 (51.15%) households are Muslim which contains the highest share of poverty severity. It also seems that the percentage share of severity of poverty is low among the Urban (27.21%) households. Lastly, the proportion of poverty severity among the General (62.95%) households is high. The result of logistic regression Model 1 shows that all the variables, viz., residence, religion, caste, literacy and ratio of working member of the households are significant at 1 percent level. Among these variables, Literacy (LIT) of the household significantly influences the probability of being non-poor. However, the Model 2 reveals that Religion, Ratio of Working Member, Caste, Literacy, Katigorah, Sonai and Udharbond strongly influence the poverty status of the households. The revenue wise logistic analysis shows that the variable ratio of working member is statistically significant at 1 percent level which shows a positive influence on the poverty status of the households of Silchar. On the contrary, in Lakhipur, the variable religion plays a significant at 1 % level and influence poverty status negatively in Sonai. While literacy is significant at 5% level and positively influences the poverty status. The poverty status of the households of Udharbond is influenced by the variable literacy at 1% level of significance and the variable ratio of working member at 10% level of significance.

The major findings of the study reveal that using union approach of the Alkire-Foster multidimensional methodology, out of the 738 sample households of the Cachar district, 109 households are observed to enjoy poverty benefits despite they are being actually non-poor, while 181 households are found to be deprived from poverty benefits despite they being actually poor. In a percentile form, inclusion and exclusion errors are 14.77% and 24.53% respectively. On the other hand, 233 households are observed to be included in the BPL list incorrectly by intersection approach. However, only 0.14% household is observed as mistakenly excluded from the list by intersection approach. Hence, this shows that there is a significant amount of inclusion and exclusion errors in the identification of the Poor of Cachar district. In order to serve second objective, a methodical calculation has been made and observed a large extent of inclusion and exclusion errors in the identification of the poor. Using a popular multidimensional method including union approach and intersection approach, we found that about 24.53% households of the Cachar district are observed to be

excluded from according to union approach and 31.57% households are found to be included in the poverty list according to intersection approach. Regarding the extent of municipal ward wise inclusion and exclusion errors, 31.91% of the households turn out to be excluded by intersection approach and 20.39% are recorded as inclusion errors using union approach. While, in the village wise, the proportion of exclusion error is 30.65% estimated by union approach and 31.34% households are observed to be included in the poverty list using intersection approach. For satisfying the third objective, it is found that literacy, residence, ratio of working member, caste and religions have considerable impact on the poverty status of the households. In the study area, the Hindu household has more chance of being non-poor compared to other religion. Secondly, the people residing in urban location is found to bearing higher probability of being non-poor. Thirdly, household with relatively higher number of working member is observed to have higher probability of being non-poor. Fourthly, the literate household has less chance of being poor compared to the illiterate household. Finally, the probability of being non-poor of the General household is more in comparison to households belonged to other social groups. Among these variables, the literacy is one of the strongest variables which influence the poverty status of the households the most. The analysis and findings of the study clearly help in pursuing the test of the two hypotheses set for this study. The first hypothesis is accepted as it is found that there is a significant amount of inclusion and exclusion errors in the identification of the poor. The second hypothesis is rejected as all the causal factors, viz. literacy, residence, caste, ratio of working member and religion have not equal impact on poverty.

To remove various problems observed in the identification of the poor in Cachar district, the suggestions are put forward. A significant amount of inclusion and exclusion errors is observed in the BPL list of the Cachar district. This is mainly because of the methodological weaknesses, lack of awareness among the poor households about poverty cards, corruption regarding distribution of poverty cards etc. For reducing methodological weaknesses, it is suggested to adopt multidimensional methodology to identify poor households as it seems that many of the poor in the study area suffered from multiple deprivation and the interconnections between these deprivations are also observed. During the survey period, it is found that some of the households among rural circles have not heard the name of BPL card and some others have failed to distinguish BPL card from AAY card. However, in urban circles, the situation is different. Here, non-poor households try to enter their names in the BPL list by taking illegal means or using their political power. Therefore, Government or NGOs should organize awareness programmes regarding poverty cards and their benefits. Besides, in order minimize irregularities in the distribution of poverty cards, strengthen local democratic institutions and empowering them to decide and influence inappropriate policy, encourage greater understanding and economic literacy among households to challenge and express dissatisfaction those responsible of wrongdoings. The results of the logistic analysis show Literacy of the households influences the probability of being non-poor the most. Therefore, literacy programmes are needed for the poor. For this, primary education, secondary education and skill education etc. are indispensible tools to eradicate poverty and the extent of these educations should be extended in the study area as soon as possible.

As a whole, it can be concluded that the estimation based on the multidimensional methodology not only reduces the non-poor households in the BPL list, but also advocates a larger coverage of the poor households. It is worth mentioning here that as the multi-dimensional method covers a significant proportion of households living below poverty line, it allows them to reduce the gap between the estimated and identified poor. It also suggests the possibility of withdrawing BPL or AAY cards from non-poor households for redistribution the same among the actual poor as identified by the multi-dimensional method.

Future study in this regard should investigate the reasons behind identification error of poor households. Such study will help Government to identify the culprits behind inclusion and exclusion errors and consequently enable the authority to take necessary steps to minimize the incidence of such errors.