Chapter - VI

6.1. Introduction:

The present chapter consists of the findings, conclusions and suggestions. The finding of the study is the ultimate goal of any research work. So, in this chapter also, we enumerate the findings of the various statistical and econometrical works which has been done in the earlier chapter. The aim of these statistical and econometrical works is to assess at what level the objectives of the study are achieved as well as to test whether the hypothesis are accepted or rejected.

6.2. Overall finding of the study:

This study using the Alkire-Foster multidimensional method conducted a survey to gauge the inclusion and exclusion errors in the identification of poor in Cachar district. By the use of statistical analysis various related findings are obtained. The brief summarization of the findings of the present study is depicted in the given headings:

Findings regarding poverty identification:

❖ Using union approach, a significant amount of households has been identified as poor in every revenue circles. The highest number of poor households is in Sonai and the lowest is in Silchar.

❖ Among Municipal Wards and Villages, the highest proportion of poor households is found in Narsinghpur Pt. IV of Sonai and the lowest is in Ward 4 of Silchar.

❖ It is also observed that the households reside in rural circles, viz., Sonai, Katigora and Udharbond have more probability of being poor than that of the households of urban circles, viz., Silchar and Lakhipur.

Findings concerning identification errors:

❖ There is a significant amount of inclusion and exclusion errors in the study area. By using union approach of the multidimensional method, it is observed that 24.53% households are erroneously excluded from and 14.77% households are mistakenly included in the BPL list. 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.

❖ Silchar is the only revenue circle where inclusion error is found maximum. Using union approach, 26.83% households are erroneously included in the BPL list of Silchar. Other circles have low share of inclusion error. Of these, Katigora has minimum inclusion error.

❖ Rural revenue circles show more exclusion error than urban circles. 41.73%, 27.66% and 23.38% of exclusion error have been found in Sonai, Katigora and Udharbond respectively by union approach.

❖ The magnitude of exclusion error is high compared to inclusion error in all revenue circles except Silchar by union approach. The highest amount of exclusion error is 41.73% in Sonai and the lowest is 10.36% in Silchar.

❖ Katigora, Sonai and Udharbond have 29.08%, 36.69% and 28.58% of inclusion error respectively by intersection approach. Among these circles, Katigora has the highest proportion of inclusion error.

❖ Silchar has the maximum proportion of inclusion error by intersection approach across the revenue circle. It has 38.41% of inclusion error. On the other hand, Udharbond has the minimum percentage of inclusion error.

❖ In Municipal Wards wise study, 20.39% of inclusion error and 15.79% of exclusion error is found by union Approach. It is estimated that Ward 4 of Silchar has 31.03% of inclusion error, the highest and Ward 5 of Lakhipur has 7.79% of inclusion error, the lowest by union approach. Similarly, Ward 6 of Lakhipur has the highest percentage of exclusion error and Ward 4 of Silchar has the lowest share of exclusion error by union approach. Contrary to that, 31.91% of household is wrongly included in the BPL list as estimated by Intersection approach. Of these, 40.23% of households belong to Ward 4 of Silchar is erroneously included which is the highest ratio and 16.88% of households reside at Ward 5 of Lakhipur, the lowest across the revenue circles, is wrongly included, as estimated by Intersection Approach.

❖ Out of the six villages, using union approach, the lowest proportion of inclusion error is observed in Tarapur village of Katigora and the highest percentage of inclusion error is found in Sonabarighat Pt. I of Sonai. While, in case of exclusion error, it is also found high in Sonabarighat Pt.I of Sonai and low in Doyapore Pt. II of Udharbond. Similarly, using intersection approach, inclusion error is 39.29% in Narsinghpur Pt. IV of Sonai which is the highest whereas inclusion error is 25.30% in Tarapur which is the lowest across villages.

❖ Apparently, inclusion error is found high among the urban revenue circles than that of rural circles while exclusion error is high among rural revenue circles than that of urban circles as calculated by union approach. Interestingly, inclusion error as estimated by intersection approach is more or less equal in both rural and urban circles.

❖ A significant amount of left out households from the poverty list is found in the study area. Of these, 55.80% and 16.02% of excluded households are casual labour and both agricultural labour and driver respectively. Interestingly, a significant share of inclusion error is also observed. The proportion of 44.04% and 31.19% of such included households are Entrepreneur and Non-Government employee respectively.

❖ The study reveals that the distribution of poverty cards has gone in favour of the non-poor compared to poor households in many cases. Of the total card distributed, only 46.78% is allotted to the "Poor" and the remaining 53.22% to

the "Non-poor" households as identified by the union approach in the study area.

❖ There is a significant difference of relative poverty among the households across revenue circles. The mean relative poverty is found high in Sonai and low is in Lakhipur among the revenue circles.

❖ The result of the study shows that Ward 6 of Lakhipur has the highest while ward 5 of Lakhipur has the lowest mean relative poverty across the households of municipal wards. On the other hand, of the six sample villages, the average relative poverty of the households of Durganagar Pt. VI of Udharbond is low. However, the variation of relative poverty is found high among the households of Tarapur village of Katigora while it is observed low among the households of Narsinghpur Pt. IV of Sonai.

❖ Regarding residence, the low average relative poverty is observed among urban households whereas the high variation of relative poverty is found among the rural households. Similarly, the mean relative poverty is low among the Christian households and high among Muslims households. The variation of relative poverty is equally high among the Hindu and Muslim households. However, the average relative poverty is high among both the SC and OBC households and variation is high among ST households.

❖ It is found that the share of relative poverty is high among the households of Hindu, Rural and General. They have 55.55%, 58.81% and 66.53% of relative poverty respectively.

❖ Out of the five revenue circles, the mean severity of poverty is high among the households of Sonai and the variation is high among the households of Katigora.

❖ Among the villages, the lowest average poverty severity is found in Durganagar Pt. VI of Udharbond but the highest variation is observed in the households of Tarapur village of Katigora. Out of four wards, the severity of poverty is high in Ward 6 of Lakhipur but the variation is equally high both in the households of Ward 4 and Ward 8 of Silchar circle.

❖ The average poverty severity among the Hindu households is higher than the non-Hindu households. Similarly, the variation of poverty severity is also found high among Hindu households. It is also observed in the study area that there is very high level of severity of poverty among the rural households in comparison to urban households. In case of Caste, the insignificant difference is observed among the social categories.

❖ Muslims households contain the maximum share of poverty severity in the study area. It seems minimum among the urban households and the proportion of poverty severity is found high among the General category households.

Findings from the Econometric analysis:

❖ Poverty status is positively and significantly correlated with the variable literacy (LIT), residence (RES), ratio of working member (RWM) and religion (REL) of the household. The strongest positive correlation of poverty status is found with the variable literacy status of the households.

❖ Again, from the regression analysis, variables literacy (LIT), residence (RES), ratio of working member (RWM), caste (CAST) and religion (REL) are found to be statistically significant variables, i.e., these have the most considerable impact on the poverty status of the households, signifying that the poverty status is mainly dependent on these variables.

❖ As a result of the logistic regression model 1 , it can be interpreted that the Hindu household has more chance of being non-poor as shown by the odd ratio (2.21), i.e., two times more chance of being non-poor , compared to households belonging to other religions in the study area.

❖ The households having more working member have showed three times more chance of being non-poor compared to households having less working member. This implies households having more working member earn more money than the households having less working member. Thus, a higher dependency ratio has worse affect on the household's economic status.

❖ The urban households have 2.30 times more probability of being non-being compared to rural households. This may be because generally urban

households have got more opportunities of earning money than the rural households. They are well-informed, well-communicated, well-educated and well-trained. So, the economic condition of the urban households is better than the rural households.

❖ The odd ratio for literacy is 3.97 which implies that the literate households have 3.97 times more probability of being non-poor than the illiterate households. This shows clearly that the education is one of the most important factors in bringing economic soundness.

❖ The probability of being non-poor of the General household is two times more compared to households belonged to other social groups, i.e., SC, ST and OBCs. This may be due to social, educational and economical advancement of the General class households.

❖ The result of logistic regression model 2 states that variables, like, Katigora, Sonai and Udharbond are statistically significant at 1 percent level and show a lower probability of being non-poor in comparison to Silchar.

❖ It is also observed that the households reside in rural circles, viz., Sonai, Katigora and Udharbond have more probability of being poor than that of the households of urban circles, viz., Silchar and Lakhipur.

❖ Revenue circle wise logistic regression analysis shows that in Silchar, the variable ratio of working member is statistically significant at 1 percent level

and it indicates that the households having more working members have showed probability of being non-poor in comparison to households having less working member.

❖ The variable religion plays a significant role in determining the poverty status of the households of Lakhipur. The Hindu households have seven times more chance of being non-poor in comparison to households belonging to other religions.

❖ The variables, viz., religion and caste strongly affect the poverty status of the households of Sonai. These variables are statistically significant at 1 percent level.

❖ In the Udharbond circle, the most prominent factor is literacy as it is statistically significant at 1 percent level. However, another variable ratio of working member is also significant at 10 percent level and affects the poverty status of the households of Udharbond.

To be more precise the objective wise findings of the study are presented below:

▪ *The first objective of the present study is to examine whether there is any inclusion and exclusion errors in the identification of the poor.*

Here, in the present study, using union approach of the Alkire-Foster multidimensional methodology, it is found that out of the 738 sample households of

the Cachar district, 109 households are observed to enjoy poverty benefits despite they 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 in 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.

❖ *The second objective is to estimate the extent and magnitude of inclusion and exclusion errors in the identification of the poor.*

In order to serve this 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 wrongly excluded from and 14.77% households are found to be erroneously included in the poverty list according to union approach. Similarly, the amounts of exclusion error and inclusion error, according to intersection approach, are 31.57% and 0.14% respectively.

Regarding the extent of Municipal Ward wise inclusion and exclusion errors, 31.91% households are seen to be mistakenly included in the poverty list by intersection approach whereas 20.39% households are recorded erroneously included to and 15.79% households are left out from the list using union approach. While, the village wise study shows that 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.

- ❖ *The third objective is to assess the relative significance of various factors on the poverty estimate in the study area.*

Here, 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 be 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 variable literacy is one of the strongest variables which significantly influence the poverty status of the households.

- ❖ *The fourth objective is to suggest suitable measures to reduce the errors in the identification of poor in the study area.*

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 necessary 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 foregoing analysis and findings clearly help in pursuing the test of the two hypotheses set for this study, i.e.

(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.

- 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 identification. The variable literacy has the highest considerable influence of the probability of being non-poor in comparison to other variables.

6.3. Conclusion and Suggestions:

The main aim of the present study is to explore the possibility of a simple method for identification of households to declare them as eligible to avail of the benefits from various social assistance schemes. Using the limited database, the study underlined the importance of revising the existing methodology. It is also attempted to calculate errors, if any, in the identification of the poor of Cachar district in Assam, India. The study also tried to evaluate the various factors affecting poverty status of the households. Such evidence of identification of poor is important in helping to determine the targeted group who become eligible to obtain benefits from various social assistance programmes implemented by the Central and the State Governments. This in turn can help in taking proper decision and policies on the part of the policy makers to eradicate poverty from the district entirely.

By using Sabina- Alkire multidimensional method, it is found that the proportion of identified poor households is high in the study area compared to the proportion of poor as estimated by the Government. The adopted methodology identifies 41% of total number of households as poor. Apparently, our estimate on poor household corroborates with estimation of poor in Assam by Rangarajan committee (2011-12). It is also observed that poverty among the households across

revenue circles is not same. This kind of result is also seen in the work of Kakwani (1993).

It is observed that there is a significant amount of inclusion and exclusion errors in the identification of poor in Cachar district. The study shows 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. 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, the degree of both inclusion and exclusion error is quite prominent in the study area. Similarly, the results of studies like, Swaminathan and Misra (2001) and Mahamallik and Sahu (2011) showed high exclusion errors and the works of Ram et al (2009), Hirway (2003) and Khera (2008) showed high inclusion errors in the poverty identification. This significant amount of errors exists in the present BPL list may be due to the methodological weaknesses, lack of awareness among the poor households about poverty cards, dishonesty regarding distribution of poverty cards etc.

The outcomes of the regression analysis show that variables , viz., residence, religion, caste, literacy and ratio of working member of the households significantly affects the poverty status of the households of Cachar district. Of these, Literacy of the households influences the probability of being non-poor the most. The studies of Schultz (1961), Becker (1975) and Haughton and Khandkar (2009) also state that literacy is one of the important factors of influencing poverty. Ratio of working member also plays an important role in determining the poverty status of the households. The similar result is observed in the work of Anderson et al. (2006). The

study also observes that the households reside in rural circles have more probability of being poor compared to the households of urban circles. The works of Wiggins and Sookram (2014) and Hashmi et al. (2009) also state that residence is one of the determinants which highly affect the poverty status of the households. The findings also show that religion and caste play an important role in determining the poverty status of the households of Cachar. The excellent works of Thorat (2010) and Bhalla and Luo (2013) have also made sure that these two variables are noteworthy for determining the poverty status of the households.

To remove various problems observed in the identification of the poor in Cachar district, the suggestions, as stated below, are put forward.

➢ 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 deprivations and the interconnections between these deprivations are also observed.

➢ Whatever methodology may be adopted in identify the poor, there is a need for a more watchful and transparent mechanism to exclude the non-poor. In case of false reporting, strict action should be taken against all involved so as to make the poverty reduction successful.

➢ There is a need to explore multiple options to assess the eligibility of beneficiaries for various welfare schemes rather than exclusively depending on any one scheme, such as, BPL card, for example.

- Awareness programmes regarding the benefits of poverty cards should be organized as it is observed that many of the households do not know the utility of poverty cards.

- It is suggested that vigilant and concurrent evolution by autonomous institutions to reduce the misuse of BPL Schemes.

- In order minimize corruption, 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.

- It is also observed that a large section of exclusion error occurs among the households whose means of livelihood is casual labour. So, it is suggested that while identifying poor in the study area, one indicator should be set in such a way to include casual labour automatically in the poverty list.

- In order to reduce identification errors, efforts are needed to build the capacity of administration and improve governance at the district level. The success of minimizing errors in the identification of poor is dependent upon the efficiency of Government machineries, transparency and supervision over field staff etc.

- The results reveal that the relative poverty among the households is high in some revenue circles and low in other circles. Hence, in order to cut inequality in relative poverty in the study area, it is necessary to boost up the process of economic growth across revenue circles and distribute the fruits of economic reforms equally to all sections of the society.

- 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. Priority must be given to the early age of education, i.e. primary education so that the habit to learn and develop study technique can be instilled and thus have a greater chance to perform well in the later stage of education which in turn will help to get skill education and subsequently get employment opportunities either in organized or in unorganized sector. So, primary education, secondary education and skill education etc. are indispensible tools to eradicate poverty and the provision of these educations should be extended in the study area as soon as possible.

- Another variable ratio of working member also positively affects the poverty status of the households in the study area. So, it is very essential to create job opportunities in the study area as this not only reduces the dependency ratio but also increases the income of the households. It, in turn, makes a poor household to become a non-poor household. For this, agriculture and allied activities, agro-based industries, small scale industries, tea industry, etc. should be encouraged.

➤ The study shows that the households reside in rural circles have more probability of being poor compared to the households of urban circles. So, more attention should be given to the rural circles. The Government should launch more rural development schemes and rural employment generation programmes.

➤ There are many schemes of the Government, like, National Food for Work Programme, Swarnajayanti Gram Swarojgar Yojana, Prime Minister Rojgar Yojana, National Rural Employment Guarantee Programme etc. which are directly or indirectly related to poverty reduction. So, proper implementation of these schemes can generate fruitful results to remove poverty in the study area.

➤ The scheme of short term credit facilities should be encouraged in rural areas to increase self employment. The facilities of credit not only improve the productivity of the people but also give them chance to live a better life.

➤ It is also necessary to give special importance to the minorities and socially backward sections of the study area because a major section of identified poor is found to be among them.

As a whole, it can be said 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 factors behind inclusion and exclusion errors, and consequently enable the authority to take necessary steps to minimize the incidence of such errors.