Chapter Two

REVIEW OF LITERATURE

A good number of research works have been done on various aspects of the poverty, inequality and human development. There is hardly any comprehensive study done on the proposed study. However, the works done so far related to the proposed study are being reviewed here.

This chapter has five sections. The first section of the chapter focuses the theoretical works on poverty and inequality. In the second section the relevant research works are reviewed regarding international and national empirical works on poverty and inequality. The third and fourth sections incorporate theoretical and empirical literature on human development. In the concluding section five, a thumbnail of literature gaps has been mentioned to justify the present study.

2.1 Theoretical Works on Poverty and Inequality

Growth is the principal means for poverty reduction, rather than an end in itself. Debunking the myths that undermine progress of India since 1991 economic reforms, Bhagwati and Panagariya (2014) said reform-led growth leads to reduction of poverty in India. Track I reforms leads to accelerating and sustainable growth that reduces poverty directly pulling the poor into gainful employment and generates revenues to facilitate additional poverty reduction. In addition, Track II reforms imply the use of revenues in redistributive programmes aimed at poor. Bhagwati-Panagariya duo focused on targeted (instead of universal) and unconditional cash (instead of kind) transfers for removal of poverty.

Based on cross-country data set on absolute poverty, Hasan and Quibria (2002) examine the relationship between poverty and growth with reference to the regional and sectoral variation. The economic growth had the highest impact on poverty in East Asia, followed by Latin America, South Asia, and Sub-Saharan Africa. In East Asia, economic growth in the industrial sector has higher impact in poverty, whereas, growth in agriculture affects poverty more in Latin America,

South Asia, and Sub-Saharan Africa. Instead of emphasizing in growth in agriculture, they interpreted, all labor-abundant ones regions other than East Asia should avail the comparative advantage in labor-intensive industries to reduce poverty.

Haughton and Khander (2010) provides conceptual framework and tools for measurement of poverty and inequality, description of poverty profile, determinants of poverty, analysis of poverty overtime, poverty comparison, monitoring and evaluation of micro and macro projects of poverty.

Mehta and Chatterjee (2011) picturize the great poverty debate on growth and poverty between two groups of India. Amartya Sen and Jean Drèze group argued that India should invest more in its social sector (such as, health, education etc) to improve human capabilities that will lead to economic growth. They emphasise on social expenditure rather than growth. The second group of Jagdish Bhagwati and Arvind Panagariya asserted that growth must be treated as the principal means for poverty reduction, not an end in itself. Growth is a "pull-up" strategy for poverty reduction rather than a "trickle-down" strategy. They said that high pro-growth reforms pulls the poor into gainful employment and also lead to greater revenues. Higher growth generates higher tax revenues and social expenditure to be incurred in poverty reduction cannot be continued without revenues.

"Voices of the Poor" of Narayan et. al. (2000, 2002) consists of three-part series. The first volume in the series was "Can Anyone Hear Us?" that was the result of studies on 40,000 poor people from fifty countries carried out in the 1990s. The second volume entitled "Crying Out for Change" was the voices of over 20,000 poor people in twenty-three countries conducted in 1999. "From Many Lands" was the third volume that presents a selection of these country studies. In contrast to the poverty studies, the "Voices of the Poor" studies presents directly the own voices of the poor, the realities of their lives, own perceptions on well-being and poverty, problems faced the using participatory and qualitative research methods.

Poverty is both an economic and a social phenomenon. Since the adoption of new economic reforms, debate prevails on the determinants of poverty and poverty remedial measures through raising employment opportunities, by policy intervention or by the endowment of land and other assets. While providing a historical account of the incidences, trends, and determinants of poverty, Radhakrishna and Ray (Eds) (2005) showcase the major policies and programmes of post-reforms periods, self-employment and public distribution systems, some legislative and other initiatives of the government, institutional interventions (such as employment security, relief measures, food security, land reforms, human development, and empowerment). They examine the public expenditure on social services and poverty alleviation programmes, rural banking and microcredit operations. It presents the work of some eminent scholars in development economics focusing on key issues of post-reform period.

There are conceptual and methodological difficulties in the poverty analysis. Ravallion (1992) presents an overview of these problems, and provide some solutions. He tries to assess well-being of the poor, necessity of household survey and alternative measures, matter of choice in determining poverty line and poverty measurement. He examines certain new tools of poverty comparisons and put the theory into the applications in assessment, monitoring and policy evaluations of poverty in context of developing world. Recommendations are made for further theoretical and applied work.

Salverda, Nolan and Smeeding (2011) provide current state of research regarding overview, conceptual framework, measurement, dynamics (focusing on time element of demographic change, movement of people and jobs, lifetime mobility and intergenerational mobility), dimension (emphasizing on happiness, health, education, time use), extent of economic inequality around the world. They also look forward the global perspectives of future research in this area. It is argued that nature and extent of intervention by the state plays a critical role in removing inequality.

Using axiomatic approach where welfare notion is ordinal, Sen (1976) propose a new measure of poverty. The core problems of poverty measurement are: selection of poverty line and construction of poverty index. This new measure overcomes the measurement difficulties of poverty and lead to practical use due to requirement of limited information.

Poverty must be seen primarily as an absolute notion. The distinction between the absolute and relative features many times is confusing as absolute deprivation relates to relative deprivation. The debate of absolute vs relative poverty can be resolved in terms of space, such as, income, capabilities. Sen (1983b) outlined absolute poverty in terms of capabilities and differed it from commodities, characteristics and utilities. Absolute approach of poverty in terms of the space "capabilities", becomes relative in the space of incomes, resources and commodities. So, we must know whether the poor, relatively speaking, are absolutely deprived.

The inequality is, simultaneously a very simple and an exceedingly complex notion. Sen (2008a) presents comprehensively the conceptual framework and practical problems on measurements of inequality and poverty. Alternative approaches of inequality are evaluated based on philosophy, statistics and economics in a systematic and holistic way. Thus they analyze the past achievements, present status and further research on inequality.

Sen (2010a) re-examines the nature and reach of inequality. He examines the core questions: Equality of what and why equality. Inequality is analysed in context of capability, functioning, agency, gender and class. He develops methodology dealing with issues of inequality in general and explores substantive approach to assessment of social arrangement in particular. His analysis is basically that bears matter of practical concern.

2.2 Empirical Works on Poverty and Inequality

International Studies

Instead of income, expenditure and consumption data, Achia, Wangombe and Khadioli (2010) used data of Demographic and Health Surveys, (DHS) to examine the determinants of poverty in Kenya. They construct an asset index using Principal Component Analysis (PCA) and use logistic regression to identify key determinants of poverty. The results presented in this paper suggest that the DHS data can be used to determine the correlates of poverty. It was found that increases in educational attainment reduce the probability of being poor. The factors that increase the probability of being poor are the age of the household head, religion, region and ethnicity. As the assets used in the asset index are by their nature urban, so these are biased for urban areas and against the rural areas.

Based on data of two national surveys: Household Income and Expenditure Survey (HIES) and Poverty Monitoring Survey (PMS) from 1985-1986 to 2000, Ahmed (2004) tries to analyse the poverty profile of Bangladesh using the poverty measurement techniques. The result of Foster-Greer-Thorbecke class of poverty estimates shows decline in incidence, depth and severity of poverty. Income has increased, but income distribution has become skewed with high concentration of income in the highest decile and lower income share in the lowest decile. The same holds good in the quintile distribution of income also. The non-income indicators have changed in desired levels, e.g. infant mortality rate has fallen, life expectancy rate has improved, and enrollment in primary and secondary levels has increased.

Alkire and Santos (2010) computed Multi-dimensional Poverty Index (MPI) for 104 developing countries based on three prime data-sets, namely, Demographic and Health Survey (DHS), the Multiple Indicators Cluster Survey (MICS), and the World Health Survey (WHS). The MPI has been able to capture the MDGs as the eight of the ten indicators of MPI are directly associated with the MDGs. The MPI poor Sub-Saharan Africa South Asia was estimated to be highest in Arab States followed by East Asia and the Pacific, Latin America and Caribbean, Central and

Eastern Europe and the Commonwealth of Independent States (CIS). Among the three dimensions, deprivations in the living standard dimension, in general, is the most widespread all over the world.

"Eradicating poverty irrespective of race" and "restructuring society to correct racial economic imbalance" were the twin objectives of New Economic Policy (NEP) of 1971 policy announced by Malaysian government in the Second Malaysia Plan (1971-75). Anand, Sudhir (1983) tries to document the state and nature of income inequality and poverty in Malaysia, and develops a methodology along with decomposition by socioeconomic variables. The overall inequality in Malaysia was found to be fairly high (Gini coefficient of 0.5129). Large inequalities were found to be prevailing within the racial groups. Profile of poverty in Malaysia showed that the socioeconomic variables that are used to identify poverty in Malaysia are not helpful in explaining overall income inequality. It was observed that the chances of being poor are extremely high in case of consideration of numerous characteristics associated with high rates of poverty. Large disparities appeared in between the mean income of employers and that of other groups with small (9.0 per cent by the Theil L measure) contribution of employment to income inequality . It is due to few employers with high incomes. It was concluded that if adequate data is lacking on the distribution of physical wealth among individuals, the personal income distribution by employment status can be broke-down to analyse the distribution of capital assets.

Cheema and Sial (2012) estimate the incidence, profile and economic determinants of poverty in Pakistan using the Household Income and Expenditure Survey (HIES) data 2005-06. Poverty incidence was estimated to be more than double in rural area as compared to urban area. It was found that poverty incidence is high in case of illiterate head of the household, high dependency ratio and no access to basic facilities, such as, electricity, gas and telephone. Similarly, incidence of poverty is the high where head of household is employment status, sector and occupation is sharecropper, construction and elementary, respectively. The poverty is found to be associated positively with household size and inversely with age,

education attainment and owned land, foreign remittances or having sewing machine or livestock. It is suggested that to focus on agro-based industries, livestock development, land reforms, free education for the poor specially the vocational course, overseas employment policy and family planning.

Based on ECAM II Cameroon consumption household survey, Epo (2010) tries to identify the macro-and-micro determinants of persistent and moderate poverty status in Cameroon. Binomial logit estimate reveals that the poverty situation of household are worsen by age of household head, household size, and number of children, working in the primary sector of the economy, household head being sick, and residing in rural areas. These variables lead to extreme poverty with their marginal effects. The result reveals that age of household head, fraction of active adult household members, and access to infrastructure is likely to reduce the poverty status of households. Public policies are recommended to raise educational attainment of household heads, employment, minimize the household sizes and spatially disparity of poverty among regions.

Idrees (2006) tries to analyse the historical background, compare the alternative measures of inequality, examine the income and consumption inequalities, earning inequalities among the earners and their decomposition in Pakistan. Level of consumption inequality was estimated to be less than the level of income inequality. The level of consumption and income inequalities are high in urban area than in rural area. The inter-regional inequalities in income or consumption are evident across the rural and urban areas rather than across the provincial divide. There is inequality in non-earned incomes than that of earned incomes. Comparison of more than twenty inequality measures reveals that only few fulfill the desirable properties of an ideal measure of inequality. Among them Gini coefficient, Generalised entropy indices, Atkinson index, Ebert's Index are proved to be the best measures.

Isah (2011) assessed the nature, pattern and extent of income and non-income inequality and thus evaluated both the general form of inequalities (vertical) and across group of individuals (horizontal) in Kaduna state of Nigeria. The

empirical evidence revealed the existence of both vertical and horizontal inequality, the wider income gap between the rich and the poor and high degree in asset inequality. The Gini Indices show high   inequality across   gender, religion, location and ethnic groups and access to health and education. Similarly, the extent of horizontal inequality varies across the gender, religion, ethnicity and location. The prime causes of vertical inequalities are earnings (wages and salaries), assets and   total   income ;whereas, major determinants of horizontal inequalities are earnings, asset, total income,   type of job, access to   health and education. Both the vertical and horizontal dimensions of poverty must be considered to make the anti-inequality policies more effective in Nigeria. The disadvantaged groups must be targeted focusing on the nature and extent of horizontal inequalities. Government must adopt structural redistribution policy, encourage asset acquisition and expand access to basic services.

Khan (2005) analyzes the usefulness of the Household Income and Expenditure Survey (HIES) data in Bangladesh to measure the inequality and poverty trends during 1991/92 to 2005. The poverty measurement necessitates estimates of both income (or consumption) and their distribution to provide a base for accurate measurement of poverty trends. But, he found that the HIES could not give the reliable estimates of income (or consumption) and their changes over time. So, it is suggested to combine them with the estimates of distribution for accurate estimates of the incidence of poverty and the changes over time. Care must be taken to improve the quality of the HIES, as well as the expenditure accounts of GDP.

Regional disparities that are increasing in Sri Lanka cause household poverty. Therefore, Ranathunga (2010) tries to identify the determinants of poverty and their behavioural changes over time against the anti-poverty programs in Sri Lanka during 2006/07 period. Among the prime determinants of poverty, it was observed that poverty is high in case of low educational attainment of head and family members of the household, large household size, higher dependency ratio, self-employed and female labours. Female headed households are poorer in urban sector as compared to the rural sector. Foreign remittances followed by local

remittances reduce poverty in Sri Lanka. So, special attention should be taken for foreign employment.

In spite of extensive poverty reduction strategy, poverty exists in Cambodia. Runsinarith (2011) examine the determinants of poverty based on panel data set of 827 households over the 3 rounds of surveys 2001, 2004 and 2008. The result shows that assets and live-stocks, agricultural land size, irrigated land size, access to microfinance institutions and access to Common Pooled Resources (CPR) have positive and significant impact on consumption, whereas, shock yields a negative effect. It was found that an increase in assets and live-stocks and agricultural land and irrigation reduce the possibility of being chronic or transient poor, while access to CPR increases the possibility of being chronic poor. Hence, it is suggested to promote ownership of capital asset and livestock, distribute concession land, improve irrigation system, reduce vulnerability of the poor, faciliatate access to credit and CPR to the poor.

Son (2007) examines the relationships between economic growth, inequality, and poverty for 17 Asian countries for the period 1981-2001. Using "inequality-growth trade-off index" he investigates how much growth in income or expenditure is needed to offset the adverse effect of inequality, being the poverty constant. With the "poverty equivalent growth rate", a measure of pro-poor growth proposed by Kakwani and Son (2007) he focused on generation of pro-poor growth for sustainable reduction of poverty and shows to distribute the benefits of growth between the poor and the rich.

Sousa (2000) examines the determinants of poverty and income inequality and the possibility of simultaneity between poverty and income inequality using cross-sectional data for 1980 and 1990 in 38 rural counties of West Virginia. The annual rate of change in poverty levels exists simultaneously with the annual rate of change in income inequality in West Virginia. The prime determinants that increases poverty are the increase in the proportions of population on welfare, proportions of the population age 65 or older, proportions of the female-headed households, proportions of unemployed, and the level of income inequality. The factors that

reduce poverty are the increase in per capita income and the proportion of the employment share in finance, insurance and real estate sector. Poverty level is prime determinant of increase in income inequality. On the other hand, per capita income, educational attainment, and the proportion of employment shares in manufacturing reduce income inequality.

Wang, Yao, Liu, Xin, Liu, and Ren (2006) made attempt to measure rural poverty in Hubei Province and Inner Mongolia in China. Empirical evidence reveals that the prime determinants of poverty are inadequate irrigation, large family size, fixed assets, low per capita land, agricultural living, and mountainous location. These factors reduce poverty. The growth-redistribution decomposition and the decomposition of poverty incidence reveal that redistribution effects counteracted the growth effects. This means anti-poverty strategy must solve the inequality problem.

Studies in India

Using NFHS (National Family Health Survey)-3 data, Alkire and Seth (2008) compare the current identification and aggregation methodology of 2002 Below the Poverty Line (BPL) to that of the Alkire Foster method of multidimensional poverty. The comparison of these two methods of BPL using the same variables shows different results. It was found that 12 per cent of the poor and 33 per cent of extremely poor of rural India can never be considered as BPL families under the 2002 BPL method.

It is still a matter of debate on poverty trends in India in the nineties. Deaton and Drèze (2002) present the estimates of poverty and inequality for Indian states for 1987-88, 1993-94 and 1999-2000. There is continuing poverty decline in the nineties, in terms of the "headcount ratio". Though, headcount ratios have good "communication value" and easy to understand and interpret, it is argued for alternative poverty indexes like the poverty-gap index. The decline in poverty in the 1990s proceeded in the earlier trends. In the 1990s, the growth co-existed with regional disparities, when the southern and western regions of India going ahead of

the northern and eastern regions. The different aspects of increased economic inequality in the 90s are regional disparities, disparities within urban areas and between urban and rural areas, slow increase in real wages of agricultural labourers etc. in most states. While expenditure-based data shows increased rural-urban disparities in the 90s, there were small gap in rural-urban gap in some social indicators, such as, school participation and life expectancy rate. Further extensive works remain to be done to ascertain the causal relations underlying trends of poverty and inequality in the nineties.

Dubey (2009) addresses poverty and under-nutrition among the Scheduled Tribes (STs) or Adivasis the districts of India at disaggregated levels. The evidence confirms the existence of large disparities in mean consumption and poverty incidence between ST and other population groups (OTH). Average annual change in mean consumption of STs is considerably lower than that of the OTH. The small proportion of STs is benefited who are in ST dominated area and enjoy constitutional privileges. The STs living in major states and less ST populated states are more deprived.

Gang, Sen and Yun (2008) studies the determinants of rural poverty in India for the period from July 1999 to June 2000 comparing the socio-economic conditions of scheduled caste (SC) and scheduled tribe (ST) households with that of other non-scheduled households. It was observed that the incidence of poverty among the SCs and STs is 12.4 percentage points and 21.7 percentage points higher than the other non-scheduled households. The decomposition analysis shows that differences in attributes of households (characteristics effects) among the SC vs. non-scheduled households shows that 60 percent of the poverty incidence gap is attributable to differences in coefficients. Among ST vs. non-scheduled households, it is with 51 percent of the poverty incidence gap attributable to the differences in coefficients. The prime determinants of poverty lie in educational attainment, demographic variables (age, household size, land owned) and occupational variable (self-employed in agriculture and non-agriculture etc.). The differences in causes of poverty between the SCs and STs lie in the characteristics effect of occupational

structure. It is suggested to allocate more resources to SC and ST children in education to reduce discrepancies in poverty incidence between the ST-SC households and non-scheduled households.

Two prime causes of living standard disparities between the SCs/STs and non- SCs/STs in India are: i) the SCs/STs have less human and physical capital and ii) significantly different structures of income generation. The study of Kijima (2006) reveals little change in the contribution of the structural difference between the SC/ST and the non-SC/ST in 1983, 1987, 1993 and 1999. The result shows that cause of living standard difference between the SCs/STs and non- SCs/STs is geographical differences. But, policy intervention that target the SCs/STs dominated geographical area to reduce inequality and poverty did not proved to be the best solution, for the SCs/STs earn less compared to non- SCs/STs within the mixed populated villages. Active labour market and high level human and physical capital among the SCs/STs are suggested to reduce living standard disparities between the SCs/STs and non- SCs/STs in India.

Mehta (2004) tries to analyse the spatial distribution of the chronically, severely and multi-dimensionally poor at the district level of Indian States by using multidimensional indicators that reflect persistent deprivation, such as illiteracy, infant mortality, low levels of agricultural productivity and poor infrastructure. Multidimensional indicators were estimated for 379 districts in 15 large states of India. The seven most deprived districts are Bahraich and Budaun in Uttar Pradesh (UP), Barmer in Rajasthan, Damoh and Shahdol in Madhya Pradesh (MP), Kishanganj in Bihar and Kalahandi in Orissa. Kalahandi is located in the most income poor regions, but, Bahraich and Budaun and Western UP are not in the poorest income regions of India. That is, the districts that are poor in terms of income, may not necessarily multi-dimensionally poor. It was suggested that female literacy at 7.7 per cent for Barmer and infant mortality at 166 in Damoh are matter of great concern and requires special attention.

Murgai, Suryanarayana and Zaidi (2003) presents regional variation in poverty in Karnataka based on pooled 1999-2000 NSS 55th round central and state

sample data. The study reveals significant geographic imbalances. Highest absolute number of poor (60 per cent of state's poor) with significant variation in poverty levels concentrated in northern districts of Karnataka. The poverty gap indices was found to be highly associated with head-count rates with significantly high correlation coefficient (.98) and Spearman's rank correlation coefficient (0.97). Pattern of district level poverty rates are reasonably consistent with per capita net district domestic product, employment shares and agricultural wages.

"Growth with equity" that is the basic, in objective of public policy in India, in practice, cannot be achieved till today. In this respect, Mutatkar (2005) provides a profile of social groups disparities and poverty in India, and examine the factors underlying in the disparities and inequalities. Empirical evidence depicts that the rate of decline in absolute poverty has been faster among the others as compared to the SCs and STs. The condition of rural poverty has been virtually stagnant among the scheduled tribes. Social disparities among the social groups are found to be state-specific. The STs and SCs remain concentrated at the bottom quintiles of the Indian economy. It was concluded that the social group disparities in India has its roots to the existing 'social disadvantages" to the STs and SCs in terms of social and physical exclusion till to date. Demographic and occupational factors, education and land size, and infrastructural facilities are found to be significant factors determining the rural poverty in India. Seasonal variations in consumption expenditure among the STs are found to be significant factor for their poverty. Levels of physical and human capital, differences in returns to education and land cause social group disparities in India.

After the adoption of new economic policy in 1991, the evidence shows the increase in persistent poverty and inequality spatially and vertically. Pal and Ghosh (2007) examines the nature and causes of the trends of inequality and poverty in India. Many claims that inequality has decreased in post-liberalization period, but, the comparative study of the 50th (1993-1994) and 55th (1999-2000) rounds of National Sample Survey data shows increasing inequality both in between as well as within the rural and urban areas. Vast inter-state disparities were found to exist in

health and education related indicators throughout India. The post-liberalisation policies that are responsible for these unexpected trends are: privatization and disinvestment of public sector units, stagnation of employment generation, declining employment, focus on reducing the fiscal deficit, regressive tax policies, expenditure cut on food subsidies and social welfare, reducing institutional credit to agriculturalists and small-medium producers, closure of non-profit making PSUs, open economy and liberalization. It is suggested to lay emphasis on continuous increase of public expenditure in productive investments in infrastructure as well as social welfare ensuring access to food, cloth and shelter.

Rani (2011) attempts to analyse trends and determinants of poverty constructing poverty deprivation index at the district level of Punjab. It was observed that that factors that have negative impact on poverty are: per capita income, percentage expenditure on education and health, literacy ratio, literacy ratio of female to male, average schooling years, number of earners, education of head, work participation rate, percentage of agricultural labour and labour productivity ratio. On the other hand, large family size, dependency ratio SC ratio, sex ratio and percentage of casual labour show positive impact. Most of the poor households are SCs signifying adverse impact of caste structure on poverty. Higher income inequality was in urban areas and among the non-SC groups. The consumption expenditure was low among casual labour, regular labour and the SCs. The SC households were landless, regular and casual labour. So it is suggested to develop the non-farm sector to absorb the surplus labour of agriculture sector. Deprivation index shows high deprivation among the SCs compared to others. It was suggested to increase the amount of non-food expenditure, generate income and employment opportunities along with proper distribution, impartial and non-political selection of the target group etc.

Reddy, Galab, and Rao (2003) analyse the trends of rural and urban poverty, determinants of rural poverty, and thus role of poverty alleviation programmes in poverty reduction in Andhra Pradesh during the period 1973-74 to 1999-2000. The annual decline in incidence of poverty was 0.39 per cent points in first period (1957-

58 to 1969-70) and 1.26 per cent points in second period (1970-71 to 1999-2000). It was due to significant impact of agricultural growth in first period and significant impact of wage rate in second period. The rural poverty declined from 48.41 per cent in 1973-74 to 15.92per cent in 1993-94 to 11.05per cent in 1999-2000; whereas, urban poverty increased in subsequent periods. The determinants of rural poverty are agricultural growth that increases agricultural wages or incomes of casual labourer, and demand for labourer. It results in poverty reduction. The major policy interventions suggested are: access to electricity and transport, provision of human capital (health and education) and safety nets (food subsidies), creation of non-farm employment etc.

Saggar and Pan (1994) examines the poverty and inequality among the SCs, STs and Others of four eastern states (Assam, Bihar, Orissa and West Bengal) based on consumption expenditure data of NSSO with special analysis of rural-urban and inter-state disparities. The incidence of poverty is significantly high among the SCs and STs of eastern region. Rural-urban disparities in consumption exist and it is high in case of West Bengal than others for all groups. One hand, the urban sector is better off as compared to rural sector and on the other hand, the SCs are better-off compared to the STs. The Monthly Per capita Consumption Expenditure (MPCE) and consumption inequality of the SCs and STs are significantly low than Others both in rural and urban sector. Among the eastern states, Assam among the eastern states is going ahead with lower level of poverty as compared to all-India levels and equal distribution of consumption across SCs, STs and Others.

Likeness to all other states of India, tribal population of Gujarat that constitutes 15 per cent of total population suffers from high incidence of poverty, multiple deprivation and inequality as compared to other non-tribal population. Shah and Sajitha (2008) analyse the poverty and multiple deprivations among tribal communities in Gujarat and examines the scope for forest and non-forest-based livelihood opportunities. It was envisaged that forest resource regeneration and the right to access to forest resources by the tribal play significant role in providing livelihood of tribal in Gujarat. The evidence shows that monthly per capita

65

expenditure on food items, health and education is considerably lower among poor-tribal compared to the non-poor tribal. The scarcity of food was severe in 43 tribal-dominated districts. About half of the tribal population (47.9 per cent) migrated for livelihood in the form of casual labourers or seasonal workers. The results highlighted the fact that the forest-based livelihood that play a significant role in providing livelihood for tribal and others in tribal-dominated area, cannot be applied to the whole state. Because, it is not desirable environmentally and feasible for 18 tribal talukas (out of 43) of less forest-based area.

Sundaram and Tendulkar (2003b) examine the levels and changes in poverty indicators in India disaggregated by social groups and economic groups in 1990s. Among the economic groups, they identified the agricultural labours in rural areas and the casual labours in urban areas as the most vulnerable group to poverty. It was found that the rate of change in decline in poverty among the SCs, agricultural labour (rural) and the casual labour (urban) was almost same with that of the total population. But, the STs suffer lot. So, it requires expansion of social services (such as, education, health, water, and sanitation), rural infrastructure (such as, irrigation, water conservation and management, telecommunication network, storage facilities).

2.3 Theoretical Works on Human Development

Human development is a multidimensional and evolving concept. Dimensions of human development are non-hierarchical, irreducible, incommensurable and thus basic kinds of human ends. Alkire (2002b) examines the dimensions of human development showing its usefulness and limitations in context of capability approach of Amartya Sen and in general. The dimensions that are dependent on resources are followed by the individuals and cultures in their ways. The availability and comparability of data vary theatrically. She makes surveys on key ""lists"" of dimensions based on human capabilities, well-being, quality of life, universal human values, universal psychological needs, basic human needs.

Alkire and Foster (2010) propose a method for adjusting the HDI for evaluating the distribution of human development across the population, and

dimensions, using Atkinson's inequality measure. Both theory and practical application of the proposed indices are discussed in details. The proposed indices are discussed where variables and their scales are identified with adequate data. The implementation issues are then analysed when applied to real data with reference to constructing variables and estimating inequalities. And then another related approach are evaluated.

Human development as a concept is poised to change. Therefor Alkire (2010) analyses the changes in the definition, dimensions of human development and their critiques based on human development reports from 1990 to 2009. She focused on inequality, time and environmental sustainability in this respect. Based on literature on the capability approach and human development from international institutions and academic and policy groups, the author proposes a "capsule" with concrete and key concepts of human development. It was observed that Human development is not one size fits all. It is elastic. Therefore, different nations and communities use different dimensions, indicators, principles and forms of agency to reflect their culture, values and priorities. Human development has been related to four other concepts, such as, the millennium development goals, human rights, human security, and happiness. Inequality, the duration of outcomes across time, and environmental sustainability become prominent factors in human development for their fundamental importance.

The human development report 1990 made a distinction between the means and ends of development. Anand and Sen (1994) trace the concepts, methodology and measurement of human development. They analyses the aggregative indicators and intra-population inequality, reviews the construction of the human development index and provides the supplementary criteria for measuring human development in more advanced countries. They make a note on income distribution and poverty, life expectancy and inequality. The authors also discuss on the measurement of human development over time, disaggregation of the HDI by population sub-groups and by gender.

The concept of human development has been developed and popularized by United Nations Development Programme (UNDP) by publishing the human development reports since 1990 each year. It is said that people is the centre of development and objective of development is expansion of people's choices and enhancement of capabilities. Fukuda-Parr and Shiva Kumar (2011) focus on theory and practice of human development. Since 1990, there was addition, omission and modification in the human development indices, their methodology and measurement. Debate continues on the indicators of human development index with the prime objective of reduction of poverty and inequality, and acceleration of human progress throughout the world. Many critical issues, such as, inequality, deprivation, gender, social justice, environmental sustainability, human rights etc came into the human development area. The role of democracy and multiculturalism in human development and global strategies has been discussed to tackle human poverty.

Human development is not a new invention. It is attributed to the early economic and political thinkers. While, economic growth focus on expansion of one choice, i.e, income, human development enlargement of all choices, such as, economic, social, cultural and political. The human development paradigm aims at building of human capabilities and thus use of it. So, he emphasizes on investment on health and education to enable people to participate in growth process. In this way, Haq (1995) explores the holistic concept of human development. He gives the facts behind the Human Development Reports and the impacts of these reports. The human development reports have been able to influence the human development strategies of underdeveloped and developing countries. It paves the way for the "global search for new development paradigms". He, in his characteristic style, summarizes the essence of human development and the main messages of the first five human development reports.

Human deprivation and inequality were not taken into consideration in calculating the country-level averages human development indicators. Inadequate disaggregated data, conceptual and measurement difficulties are the prime hurdles

for not adjusting the HDI for inequality. Considering these facts, Kovacevic (2010, November) review some recent changes in measurement of inequality in human development and present a practical implication of the Alkire and Foster (2010) adaptation of the Foster, Lopez-Calva, Szekely (2005) method. It recognizes the complexity of integrating inequality into the HDI. The study reviews the normative issues of accounting for inequality in opportunities for and outcomes of human development, and review different approaches to accounting for inequality when quantifying HD.   The study analyses reviewed four criteria: the lowest disaggregation required, coverage, intuitive appeal and ease of interpretation and provides its limited sensitivity analysis.

Arranged thematically, Nayak (Ed.)(2010) analyse the issues associated with concept and measurement of human development. Issues, status and perspective of human development are discussed both at all India and North East level. It is suggested to rethink about the choice of indicators, methods and measurement of constructing indices and problems of constructing composite indices by Principal Component Analysis. Evidence reveals that the NE region as a whole is experiencing promising human development with unsatisfactory economic growth. Governance must be transparent, accountable and participatory as its quality leads to high human development. Steps should be taken to improve the reproductive health care of married women and children as it plays important role in human development. Institutions involved with implementation process of development are suggested to examine the mechanism of generation of poverty.

Human development now has been recognized as the central objective of all human activity in place of economic growth. Economic growth (EG) and human development (HD) are interrelated and interdependent. There are two chains: i) from EG to HD, that is the resources from national income are allocated to activities contributing to HD, ii) from HD to EG, that is, people must be healthy, well-nourished and educated then they can contribute to economic growth. The said two chains are examined empirically with the help of cross-country regressions for the period 1960-92 with samples of 35-76 developing countries. Ranis, Stewart, and

Ramirez (2000) proved that high growth in GDP per capita leads to reduce shortfalls in life expectancy rate. It implies high EG leads to higher performance in HD. Given the GDP per capita, the higher the level of social expenditure, adult literacy rate and female education, larger in performance in HD. On the other hand, public expenditures on health and education, shows the determining the factor leading to economic growth. The higher the investment rate and income distribution, the stronger relationship between HD and EG in case of chain B (HD to EG).

The main change introduced in 2010, was to switch from the original the arithmetic mean to their geometric mean of the three components of Human Development Index (HDI) to allow for imperfect substitutability between its three components. Ravallion (2010) argued that new HDI has considerably reduced the implicit weight on longevity in poor countries, compared to rich ones. A poor country which has decline in life expectancy may experience high HDI with small rate of economic growth. Valuations of the gains from extra schooling in terms of new HDI may appear irrationally high. It seems to be many times greater than the economic returns to schooling. While allowing imperfect substitutability, such troubling trade-offs could have been avoided to a large extent using a different aggregation function for the HDI. Simultaneously, various problematic value judgments may arise. The transparency about the implicit tradeoffs is must for future composite indices, especially in more complicated indices. If the expert group of 2010 HDI had calculated the tradeoffs implicit in their index, they would have had thoughts about modification and its alternatives.

Human Development Index (HDI) of United Nations Development Program (UNDP) is used extensively by all nations of the world to gauge the human progress. In practice, the HDI doesnot take into account the distribution of health, education, or income within countries. Stanton (2007) analyse the history, accounting of inequality, and disaggregation of HDI by gender, race and state along with its criticisms. HDI fails to depict accurately the scale and changes in social welfare. He proposes alternative indices to capture inequality in the measurement of human development.

2.4 Empirical Works on Human Development

From the study of Ahmad (2012) it was found that there were disparities in human development among the districts of Jammu and Kashmir. There were disparities in levels of health and education among the districts. It was found that number of male teachers, numbers of males enrolled, numbers of institutions meant for male and number of male population are found high as compared the female counterpart. Disparities are found in terms of morbidity rates among male and female, and among the districts. Hence, opportunities and accessibilities to school and college education for both male and female equally are must to minimize the gender disparity in education. Special health facilities to women are recommended. The study concludes that equal opportunities, accessibilities and utilization are pre-requisites for removing gender disparities in Jammu and Kasmir.

Basumatary (2010) analyse political economy of Boro movement, evaluate the human development status of Bodos of the Bodoland Territorial Area District (BTAD) and identified the factors behind Bodo movement by examining their socio-economic status. He presented a descriptive and analytical frame through which the inference can be drawn about the role of the status of human development for the Bodo Movement in Assam. He found the HDI for four districts of BTAD as Baska (0.342), Chirang (0.354), Kokrajhar (0.491) and Udalguri (0.5). Poor performance of public services, low level of human capabilities, red-tapism, and identity crises causes frustration among the Boros with the feeling of socio-political isolation. It was recommended to understand the factors behind Boro movement and formulate the policy where everybody must play an equal role in decision making. It was concluded that severe imbalance between the expansion of economic opportunity and enhancement of human capability causes polito-ethnic unrest in BTAD.

Borgohain (2012) made a case study on human development among the Tai Ahoms of upper Assam. It included seven districts Lakhimpur, Tinsukia, Dibrugarh, Golaghat, Jorhat, Sivasagar and Dhemaji. Among the five districts, Tai Ahoms of Dibrugarh district ranked first position with HDI value 0.729, Sivasagar district ranked second position with HDI value 0.728, Golaghat district ranked third position

with HDI value 0.700. HDI values among the Tai Ahoms were low in Jorhat (0.665), Dhemaji (0.646) and Tinsukia (0.637). Human development of Tai Ahoms was lowest in Lakhimpur district with HDI value 0.402. Wide variation of infant mortality rate was observed among the Tai-Ahoms. Literacy rate was highest in Dibrugarh (99.65) and lowest in Jorhat (96.25). Per capita income among the Tai-Ahoms of Golaghat, Dibrugarh and Sivasagar was estimated to be high as compared to all-India and State level. Level of inequality was significantly high with high Gini-coefficient value (0.49) as compared to all India level (0.36). It is recommended to creation opportunities entrusting more power (money and man) to Tai-Ahom Development Council, more public health sub-centres to enhance health care facilities and institutions to develop soft- skills, handi-craft and technical educations. Expansion of human capabilities and agricultural development are recommended for uplift of the community.

Chetia (2003) studied the level of human development of the resident tea garden labourer of Assam. Empirical evidence depicts low level of human development of tea garden labourer as compared to state and national levels. In spite of earning comparatively regular income by large portion of tea-labourers, they suffers from low educational attainment, poor health and social condition. Explaining the "cause and effect" of vicious cycle of poverty, he found that poor human development conditions of tea garden labourer leads to their underdevelopment and the underdevelopment leads to poor human living conditions. So, human development perspective is said to be the rigt way to address the socio-economic issues of the tribe.

Gumede (2010) analyse poverty, inequality and human development in a post-apartheid South Africa based on the National Income Dynamics Study (NIDS) dataset. The findings indicate that the highest percentage of South Africans (47per cent) live below the poverty line where blacks are more poor (56per cent) compared to whites (2per cent). Economic inequality that is significantly high in South Africa with high value of Gini coefficient (0.69) differs from that of many African countries. The rich non-white groups have benefitted more from high income. The

trend of the Human Development Index (HDI) for South Africa (SA) has generally been rising in 1980 (0.65), 2007 (0.68) and 2008 (0.69). The black has the lowest HDI (0.63), compared to that of whites (0.91). Human Poverty Index (HPI-1) is considerably high (31.2) for the black. The human development and human poverty differs significantly by location with low HDI and higher HPI values in rural provinces. So it is suggested that the govt must take initiative to tackle these challenges, (such as, racial redress, gender redress, spatial redress, skewed income distribution and high human poverty) and further restructuring the economy of South Africa. But it is a complex task.

The objectives of Leni (2006) are to analyse the drawbacks of the human development indicators and understand the methodological problems. He discussed the nature and extent of regional disparities of human development in Kerala and suggested remedial measures. He found disparities in human development in Kerela in terms of gender, ethnicity and locality. It is suggested to use GPI/c in place of GDP/c. Constructing a Child Development Index showed that as it deals with human development, so it requires further research and improvements, as a supplementary index of human development. Factors such as distresses, entertainments etc., that directly affect one's psychology must beused as indicators in human development.

Human development means the enlargement of people's choices, whereas poverty implies deprivation of choices and opportunities. Eradication of poverty has become the main concern of human development. Madan (2012) analyse the inter-state differences in multiple dimensions of poverty index (MPI) and human development index (HDI) in major states of India and explore the relationship between human development and various dimensions of poverty. It was found that poverty head-count ratio in India has reduced from 45.3 per cent (1993–94) to 37.2 percent (2004) and to 29.8 per cent (2009–10). It signifies the decline in poverty in India that is corresponded with development. The same hold good in case of multidimensional poverty also. The regression analysis confirms the negative relationship between the HDI and MPI. Among three dimensions of MPI, it was

found that, standard of living and education dimensions were the significant determinants of HD. It is recommended the need of raising economic opportunities, educational facilities and their equitable distribution among all the sections of the society.

Mahanta (2011) explored the reproductive health of the Mishing women using standard health indicators and examined the impact of the determinants of fertility (proximate and distant) on their reproductive performance. He also assessed the mortality and morbility pattern of the Mishings, their health and hygiene behavior, and study the determinants of infant mortality. On the basis of survey in three districts, viz., Dhemaji, Lakhimpur and Jorhat, he found that attitude of the Mishings is in favour of modern healthcare facilities even if they use traditional healthcare practices. He felt that comprehensive study of reproductive and general health of a population is a challenging task. It was found that there was close association between knowledge of and attitude of family planning, as well as knowledge of and practice of family planning. They have favourable attitude towards practice of family planning. Demographic study can solve only a part of the several problems faced by the Mishing tribe.

Nagaland, a mountainous state, attained its statehood in December 1963. Mishra and Nayak (2010) analyzing on human Development and its correlates in Nagaland showed that human poverty index (HPI) is negatively correlated with human development index (HDI) and gender-related development index (GDI). The study showed that PCI, HDI and GDI are correlated weakly with the health indicators such as IMR, IMRM and IMRF, but significantly with educational attainment. It is concluded that official data on income, educational attainment and health provided by the socio-economic system are unreliable, administratively motivated and unsupervised. It results in denial of true findings of socio-economic status of Nagaland and difficulties policy making and implementation for fostering development.

Studying the inclusion and human development among social groups in Karnataka with special reference to Dalits, Pote (2011) found that the upper castes occupies the clean and lucrative jobs in the rural area, whereas the Dalits being a

lower caste are to involve in menial and unclean works. Dalits being a largely landless agricultural labourers and educationally backward, income is very low. So, it is suggested to adopt policies of reservation, elimination of discrimination and expansion of skill to enhance the earnings of Dalits. Inability to spend on food consumption and health among the Dalits results in lack of nutrition and low health care facilities. Human development position among SC and ST groups in Karnataka is higher than the all India level, but lower than that of non-ST/SC groups in Karnataka. Within Karnataka, literacy rate of SCs (52.87 per cent) was higher than that of STs (48.30 per cent). The study suggested to enhance infrastructure, provide reservation in the private sector, training programmers on modern technology, redistribution of land to the landless agricultural labour, minimum wage for agricultural workers, radical change in the social mind set on casteism etc.

The 2010 UNDP HDR focuses specifically on inequalities in human development. With this reference Suryanarayana, Agrawal, and Prabhu (2011) focuses on the methodology and data sources utilized for estimation of Inequality-adjusted Human Development Index (IHDI), outlines the IHDI estimates for India's states and highlighting key areas for further research and policy interventions. The study shows that the rank of Kerala in 99th position (between Philippines and the Republic of Moldova) and Orissa in 133th (between Myanmar and Yemen). Madhya Pradesh suffers the greatest loss of HDI due to inequality with 35.74 percent among all states of India. It reveals that inequality in the distribution of human development is more prominent in India compared to the global averages. Loss resulting from inequality varies across dimensions. It is highest in education (43 percent), followed by health (34 percent) and income. Loss resulting from inequality in education and health is much higher than the global averages (28 percent and 21 percent respectively). It is recommended to examine the inter-linkages between inequalities across various dimensions and to study the factors behind these inequalities.

Ray (2009) tries to analyse the trends in human development across states of India and explore the causal relationship between economic growth (EG) and human development (HD). The study reveals that inter-state disparities of income in India have been raising significantly that result in variation in human development. So, it is suggested to control the acute divergent trends of regional disparities for

convergence of human development. Studying the Chain A (EG to HD), it was found that per capita income had influence and determine the educational attainments, (such as, adult literacy rate) and health attainment. On the other hand, in case of Chain B (HD to EG), it was found that health attainment as compared to education attainment is more influential in determining per capita income. It is concluded and recommended the chain B, i.e., transformation of human development into economic growth is stronger and relevant in context of India.

Sarkar, Mishra, Dayal, & Nathan (2006) tries to analyse the three development indices, such as, Human Development Index (HDI), Human Poverty Index (HPI) and Gender Development Index (GDI) for a special socio-economic group, that is, STs and compares the estimated indices of STs to that of all India average in general and to that of SCs and Others in particular in context of development and deprivation. The findings show 35 per cent difference between the all India and ST HDI calculated based on Planning Commission's inequality-adjusted per capita consumption expenditure. The HDI and HPI for STs are estimated to be 30 per cent lower than that of all-India level in 1991. The Gender Equality Index (GEI) for STs (80.2 per cent) was much higher than for all-India level (69.1 per cent). Child mortality among the STs (46.3) is higher than of all-India level (29.3). The gap of secondary school education between STs and all-India level has risen from 14.2 (1991) to 17.7(2001). The STs of Arunachal Pradesh, Mizoram and Nagaland of North East India are clearly better than the all-India STs in these three indices.

2.5 Literature Gaps – Re-justifying the Present Study

It is evident from the above studies that majority of researchers have concentrated more on estimating numbers below the poverty line either at national or state levels. However, poverty studies on specific tribal groups are very rare. There are two areas of focus in studies on poverty; i) measurement and estimation of poverty and inequality among social groups or accross the population, and ii) identifying the factors influencing poverty and inequality. Thus, some studies focus on the measurement and estimation aspect only while others deal with factor influencing poverty and standard of living.

The present study estimates incidence, depth and severity of poverty among the Mishing tribe in Assam, on the other hand and socio-economic factors influencing the levels of standard of living and the poverty gap, on the other. No such studies are reported in literature among the Mishings of Assam.

The proposed study has been undertaken in two selected districts with detailed analytical and empirical analysis of a large number of interrelated variables. From the works reviewed, it is apparent that no systematic studies are reported in literature that examines poverty, inequality and human development in the region among the selected tribal group. Furthermore the studies reported in literature do not provide any parallel comparative picture of poverty, inequality and human development of a given area in the selected districts and blocks. In other words, causal relationship and linkages among poverty, inequality and human development are rarely studied among the important tribes of Assam. Interestingly such studies are available on SCs and STs in the rest of India. Similarly, most of the studies have tended to be either generalized or limited in geographical coverage. It is further observed that studies on poverty, inequality and human development are rarely compared with similar studies elsewhere.

Although quite a few econometric studies on determinants of poverty have been conducted at the national level, few econometric studies have been conducted in case of Assam. This highly justifies the necessity and importance of the present study.

From literature reviewed above, we can conclude that the analysis about the causes and determinants of poverty of Mishing tribe is rare in North Eastern India. Human development is rarely correlated with any of the parameters of multi-dimensional poverty in case of Mishing tribe of Assam. Similarly, estimation of incidence, depth and severity of poverty; examination of economic inequality across the different occupations and measurement of human development at the household level adjusted for inequality are rare in Assam among the Mishing tribe.