**Title of the Paper:** Understanding Poverty and Vulnerability: A Study among three Indigenous Communities of Eastern India.

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**Abstract:** The poverty and vulnerability are not only superficial problems of third world people, these also deeply rooted in their countries. Both of these problems are mostly complex in nature. Particularly in a culturally rich and socially diverse setting such as India, poverty and vulnerability are, in fact, highly complex phenomenon. These are comprised of economic, social and political factors that interact to maintain long-term structural disparities in opportunities and resources. Based on firsthand information, present paper is attempt to mark out the factors entail in poverty and examines their inter-linkages among three indigenous communities (Lepcha, Bhutia and Tamang) of 22 villages of Darjeeling district of West Bengal, India. This research paper also tries to detect a way out from these problems. The present result shows that the practice of their traditional occupations (terrace cultivation and pastoralism), customs, inappropriate application of local polities and improper resource distribution in their territories pushes these communities towards economic crisis within rapidly changing economic settings of their surroundings. In present circumstance, the study suggests to adjust their customs, raise their consciousness, promotion of microfinance and governmental vision in these areas for their poverty and vulnerability reduction.

Key Words: Poverty, Vulnerability, Related Factors, Indigenous Community.

'Poverty' and 'vulnerability' are not only philosophers' doctrines but these are the real fact for today's world and especially for third world countries. In the report of World Bank (2000) it appears very blatantly, in 1998, of the 1.2 billion poor people in the world (<\$1 a day), 800 million (67%) lived in Asia; in 1987, Asians made up 75% of the world's poor (Racelis, 2003). In Southeast Asia, India may serve as a reasonably typical case of a developing country whose economy is growing but faces serious problems in its efforts to end poverty and vulnerability. Both of these problems are mostly complex phenomenon, particularly in a culturally rich and socially diverse setting such as India. These are encompassing of economic, social, cultural and political issues that act together to continue long-term structural disparities in opportunities and resources.

The concepts of 'Poverty' and 'vulnerability' are fluid and vary according to different epistemologies of reality (Glewwe and Hall, 1998; Dercon and Krishnan, 2000; Kochar, 1995; Foster *et al.*, 1984; Kamanou and Morduch, 2002; Ligon and Schechter, 2003; Sulaiman and Holt, 2002). These concepts voices for emerge in the process of understanding the complexity of livelihood systems. Our understanding of the concept of poverty has primarily improved and deepened considerably from the last decade. The vast literature about poverty is organized around various ways of understanding this complex phenomenon. Income, exclusion/inclusion, levels of well-being, deprivation indices, access to material goods and only few other conceptual tools have been utilized as measures of poverty. The manner in which poverty is measured reflects fundamental assumptions as to its nature and causes. Usually, poverty measurements and subsequent policy/programme implications depend on what facets or angles of poverty are being addressed.

Few scholars consider poverty to be a multidimensional and complex phenomenon, difficult to reduce to a single or a few indices for its measurement and representation (Barrientos and Hulme, 2005; Barrett and McPeak, 2005; White, 2002; Kanbur, 2003; Kozel and Barbara, 2001; Banerjee, 2005; Jodha, 1988; Bardhan, 1989; Barrett, 2004). The poor are defined according to the livelihood system they enact. The

livelihood system includes the capabilities, the material and non-material resources, and the activities required for a means of living. The household constitutes the entry point and the principal unit of analysis. The livelihood-based group composed of families which share substantial common features in regards to their livelihood system, constraints that limit the viability of their livelihood strategies, and the potential opportunities which may be available to them to improve their situation. In order to understand the typologies, the depth, and the various dimensions of poverty situations, this study is producing poverty profiles that utilize the following approach as its conceptual framework and analytical tool. Utilizing the livelihood system as lens of analysis it tries to identify the major factors that cause, aggravate or may potentially improve the poverty situation of a given group of poor people. This study, in fact, has the advantage of looking at virtually several aspects of poverty at once, evidencing what assets people have access to, what are the constraints limiting their access to different types of assets, and what are some of the potential options that may be available to improve their livelihoods. In addition, poverty profiles highlight the external factors that are outside the control of a household that impact their livelihood options.

The vulnerability refers to people's propensity to fall, or stay, below a predetermined minimum security of basic needs of life (Dasgupta, 1997; Pritchett et al. 2000; Halder and Husain, 1999; Hashemi, 1997; Rahman, 1995). Vulnerability is a function of people's exposure to risks and of their resilience to these. By risks we understand events or trends that create a measure of instability which may have a negative impact on people's welfare. Vulnerable groups comprise people with common characteristics, who are likely to fall or remain below a certain welfare threshold in the near future. While most of those who are presently below the threshold may face a high probability of being so also in the future as the basic need security and poverty are not static. That people move in and out of basic need insecurity and poverty (Baulsch and Hoddinot 2000; Dercon 1999; Løvendal et al, 2004; Dreze and Sen, 1995; Krishna, 2004; Baulch and Hoddinott, 2000; Jalan and Ravallion, 2001; Epstein, 1973; Khandker, 1996 and 1998; Chowdhury and Alam, 1997; Copestake, 1992; Hussain, 1998; Goetz and Sengupta, 1996). Basically the Poverty and vulnerability are two sides of the same coin.

The observed poverty status of a household (defined simply by whether or not the household's observed level of consumption expenditure is above or below a pre-selected poverty line) is the ex-post realization of a state, the ex-ante probability of which can be taken to be the household's level of vulnerability. So, predicted probabilities of poverty for households with different sets of characteristics estimate the vulnerability of these households (Chaudhuri et al. 2001).

Considering the livelihood-based groups of poor people in the course of pilot testing activities conducted among three Indigenous Communities (namely Lepcha, Bhutia and Tamang) in different agro-ecological zones of the 22 villages of Darjeeling district of West Bengal, eastern India, the present study try to trace out major causes of poverty and vulnerability among the referred populations and their inter-linkages and also the probable solution to overcome these problems. Thus, the approach is people-centered rather than area based, although location and distribution of poor people are a crucial element in the profile.

II

The methodology adopted in preparing the present paper involved intensive use of both primary and secondary data. Relevant data and information were collected from 660 households commencing three Indigenous Communities' (namely Lepcha, Bhutia and Tamang) key informants/representatives of 22 surveyed villages of Darjeeling district of West Bengal, India. The studied villages are located in the very remote hilly regions of Darjeeling Himalayas. The households and subjects were selected by using random sampling method. Anthropometrics measurements viz Stature, Weight were taken to access the development and growth gradient in these societies. Stature was measured by Anthropometric rod and body weight was recorded using the Libra weighting machine. The boys were weighted wearing light clothing and no adjustment has been made for this. Utmost care was taken during measurement to keep the subject as possible as to the suggest position. For the assessment of nutritional and health status of these populations Body Mass Index (BMI) was used and WHO classification (WHO, 1995) and BCIMS classification for Asians cited by Singh (2005) were followed. The principal sources of

secondary data included the published as well as unpublished official data from several governmental offices. Univariate figures were used for data presentation and interpretation.

## III

The wealth ranking and social mapping exercises yielded a composite picture of impoverished households and the ways in which they differ from the better off. The study identifies salient characteristics relating to the demographic composition of a household such as, occupation of the household head, family income, education level, health and nutritional characteristics, quality of housing, asset ownership, access over modern facilities, occurrence of economic problem, to build a poverty and vulnerability profile for the referred people.

In such community like Lepcha, Bhutia and Tamang with high level of agricultural practices, ownership of land will play an important role in determining the levels of poverty. Among them the land holdings in general, are small while a very little portion of them occupies big plots of land (Figure-1). Although these studied villages have a young and rapidly growing population and fixed resources, but these studied communities are more traditional regarding their occupational pattern. Till date they mostly engaged in terrace cultivation, pastoralism and most of them faced economic problem (Figure-2). Among them, who come out from their traditional conception are mostly engaged in day labour occupation but not make a remarkable change in their economic status. As a result most of the studied households remain below poverty line (as defined by the Government of India). Using this poverty line, the household poverty rate for the Lepcha is high in comparison to Bhutia and Tamang (Figure-3) although the governmental record shows a reverse picture in favor of Tamang. As a whole, over 40% of studied families belongs to below poverty line and about one in every four families lives in such dire economic problem that they cannot even afford to meet the minimum standard for basic needs of their life.

The average level of education is observed slight differences between Lepcha, Bhutia and Tamang households. In studied villages, one fourth of Tamang villagers (above 6 years) have no education and it is also similar in case of Lepcha and Bhutia households (Figure-4). On the other hand, less than one fifth of the population in studied areas has completed secondary education or higher education. The results highlight the relationship between poverty and education. The Lepchas from non-poor households are more likely to be literate than from poor households. Still this situation is too close substantially when compared to the Bhutia and Tamang literacy rates. In general, the average level of education of all households is low. About one fourth of the villagers have no education, and one fourth have came into 'Without Standard' category and one third have only primary education, where as a very few of them privileged graduate and above education.

In the studied area it was found that fever, malaria, cough, diarrhea, skin infection are very common. Like many others indigenous communities of the world they are not conscious about the disease – in such case they wait for some days for natural recovery from that problem. As chronic illness is self-reported and not necessarily assessed objectively by a medical practitioner, it may not capture a person's actual health status. The results also show that the poor people have limited access over modern medical facilities as the trained medical practitioners are not available in all studied villages and very commonly one registered (through government) doctor fulfill 10-12 villages' need. The villagers are mostly consulting with local medical practitioners or go for home remedies during their illness (Figure-5). Though the Universal Immunization Programme on children against preventable childhood diseases (viz. T.B., tetanus, measles etc.), launched by the Govt. of India to prevent childhood diseases in whole country (to cover at least 85% of all infants) but this Programme do not achieve its goal among the studied populations – till now here one third of children remain outside the coverage of that Programme (Figure-6).

The nutritional well-being of individual directly and indirectly contributes to the overall community's development. Nutrition status is calculated using the height and weight measurements in the sample households. Figure-7 shows the prevalence of

underweight nutritional status of the studied population (considering BMI values) as per WHO classification (WHO, 1995) although this picture slightly improved according to BCIMS classification for Asians. This figure indicates that most of them suffering form under nutrition and a large portion of them face the problem of severe thinness (as per WHO classification). This figure also shows the mild thinness nutritional status as per BCIMS classification and it also identified the prevalence of under nutrition among the most of the individuals.

The house building materials clearly express the prosperity of the households. In the study area the peoples are mainly lived in the stone, wood and bamboo made houses. These type houses are less expensive and less time consuming. Besides these very few people built the *Pakka Ghar* (bricks' house). Among them the stones' houses was very popular in the previous days and till now they keep up their tradition. The Figure-8 show that most of them inhabit in stones' houses, followed by wooden and bamboo made houses and only a few of them enjoy the brick-built houses. Nevertheless the last one goes for the non-poor people.

Households with tangible assets can use those assets to improve their welfare, both by using the asset to help the household to work more efficiently and therefore increase income, or through the ability to sell off the assets when the household experiences a shock or there is a downturn in the economy. Motorbikes and cars are the major means of transportation in this region. These are used to transportation of goods and people. Overall, only a very few of all households own these automobiles and obviously it is completely for non-poor (Figure-9). Ownership of useful household implements such as bed, chair-table are common among both poor and non-poor but sewing machine or cell phone is rare in all households. The poor are almost underprivileged electricity facility even sometimes they make fire from wood when kerosene is unavailable in their areas (Figure-10) and this may cause of their less efficiency at night. Regarding the livestock, these communities rare cattle, goat, pig, chicken, dog, cat, etc mainly for their agricultural and household purpose and sometimes

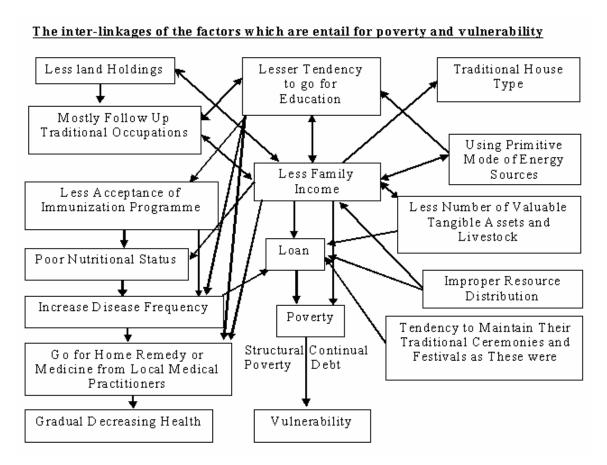
they sell these for their sustain (Figure-11) but as usual the poor have lesser number of livestock than their non-poor counterpart.

Figure-12 stated that most of the poor households facing lots of economic problem to setting up a traditional ceremony, especially in their marriage, followed by death, communal feast, birth, religious ceremonies but in case of health problem the poor are suffer mostly in comparison to other factors. To solve the economic problems for these purposes they mostly go for loan from different sources. Most of the studied households borrowed loan from moneylenders/traders with high interests and poor mainly follow this but the non-poor mainly go for institutional loan, while a small portion of them borrowed loan from their relatives (Figure-13). Thus the poor have to continue extra burden of huge interest of this type of loan. For those households that did obtain loans, a little portion used the loan for business start-up capital, mostly used the loan to maintain their social customs and purchase agricultural inputs for food crops (Figure-14). As a result the poor who borrowed loan gradually tends to poorer.

## IV

Traditionally the poor of these communities were work under well-to-do families. In this way they sustain and it may reduced their vulnerability in the past, but at present the cost of these dependency relationships has been high. Poor families who are dependent on a wealthy patron are effectively prevented from advancing economically or socially. To exit such a relationship is to lose a very basic but reliable form of security, but it is also to gain the opportunity to act as a free agent in the open labor market. Nevertheless, the non-poor households, unlike the poor, were also said to have extensive political contacts and ties outside their villages and such linkages improve the chances to educate their children to find a white color job in future. A similarly educated son or daughter of a poor family with limited political contacts outside the village is less likely to find suitable employment. Political contacts in outside of villages therefore, enhance the returns to education for the wealthy and thus may render them more likely than the poor to invest in the education of children.

Therefore, after analyzing the above discussion the present study assumes that the majority of the studied households belongs to below poverty line who have small plots of land, low level of education, less acceptance of Immunization Programme, limited access over modern medical facilities, poor nutritional status, less expensive traditional type houses, less number of tangible assets, less number of livestock, very limited access to electricity, very acute economic problem to setting up traditional ceremonies, compulsion to borrowed loan from moneylenders/traders with high interests and compulsion to expend borrowed loan to maintain their social customs. So, the typical poor households of these areas may not attain the position of extensive horizontal socio-capital modification. The poor household is in danger of falling into continual debt. As a result of shocks such as illness of a family member or death of a breadwinner, local crop failures, or even through unavoidable expenses of ceremonies and festivals these households are not capable to overcome from obstruction of poverty. Again, in changing situation at present the studied villages have young and rapidly growing population and fixed resources, but due to their indigenous ideology the referred populations are more prefer to stay in their traditional occupations which push them towards continuous economic crisis. Furthermore, the local polities in their territories sometimes create a barrier to appropriate distribution of money or other charitable deeds in these areas. So, the proper resource distribution is failed in these places. As a result, the poor compelled to take loan from moneylenders/traders with high interest which gradually convert them structural poor. Finally these structural poverty and continual debt gradually pushes these fellow poor people towards vulnerability. In below the inter-linkages of above mentioned factors which entail for poverty and vulnerability among studied communities represent diagrammatically.



After evaluating the above issues this study could be meaningful to state here some suggestions for decreasing the poverty and vulnerability for these referred populations –

- ♣ To come out from their traditional concept and adopts modern education.
- ♣ To come out from their traditional concept and adjust their customs as per changing situation.
- ♣ To promotion appropriate modern health care facilities in the referred areas.
- ♣ To appropriate distribution of external aids for the poor in the referred areas.
- ♣ To promotion of microfinance (through governmental agencies) on poverty reduction in the referred areas.

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## **Figures:**

Figure-1: Distribution of Households According to the Land Holding Pattern

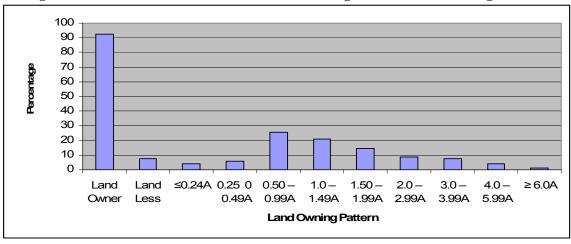


Figure-2: Community wise distribution of Households according to Occupation of Family head

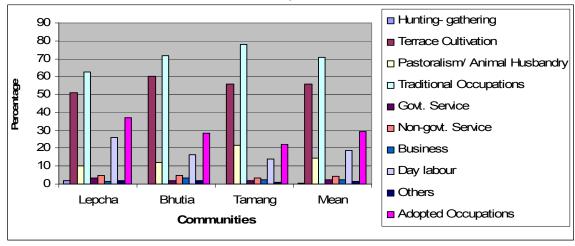


Figure-3: Community wise distribution of Households according to Economic Status

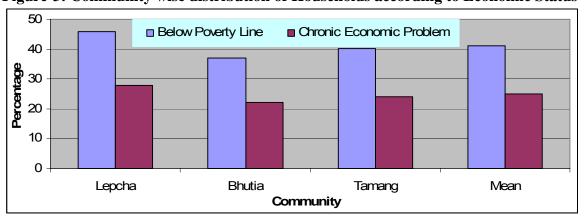


Figure-4: Community wise distribution of Households according to Educational Status

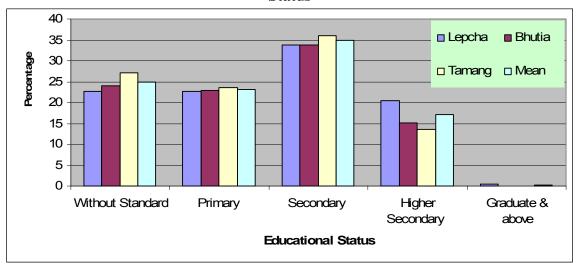


Figure-5: Distribution of Population according to Mode of Treatment

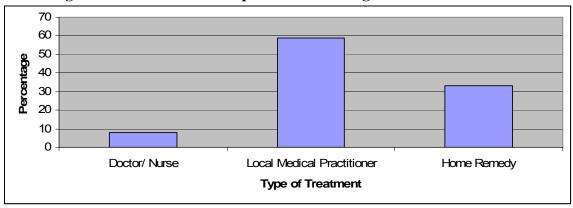


Figure-6: Distribution of Children According to Immunization Status

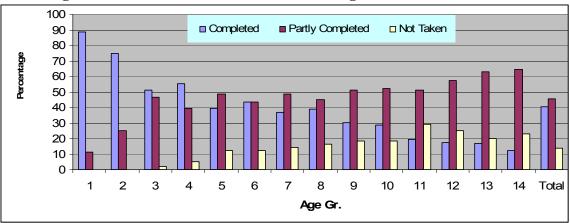


Figure-7: Distribution of Population according to Nutritional Status (BMI)

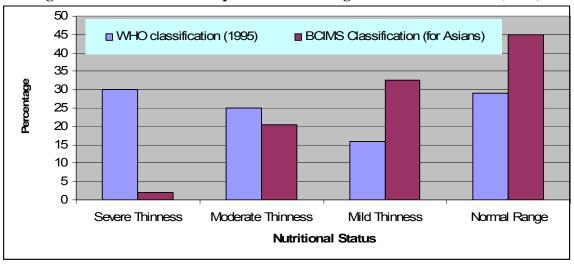


Figure-8: Distribution of Households According to the House Type

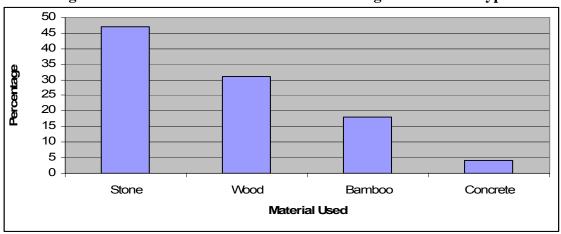


Figure-9: Distribution of Households according to access over Essential Implements

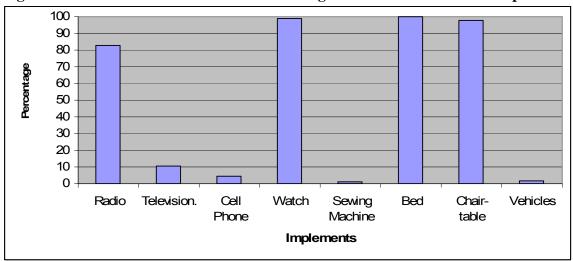


Figure-10: Distribution of Households according access over Source of Energy

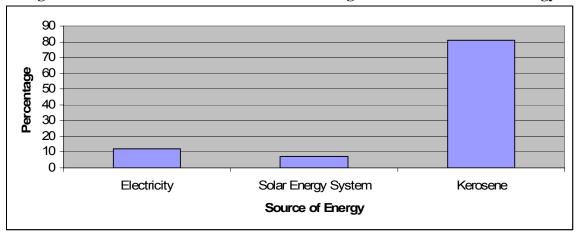


Figure-11: Distribution of Households according to the Livestock

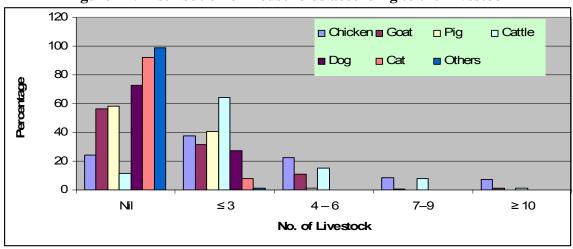


Figure-12: Percentage of Households facing Economic problem

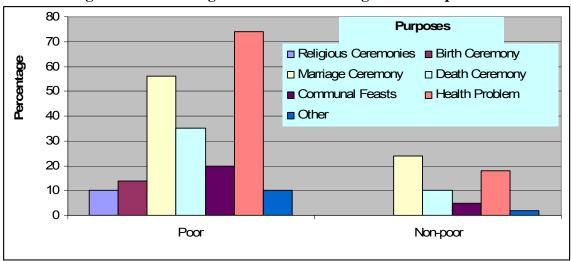


Figure-13: Distribution of Households according to Primary Sources of Loan

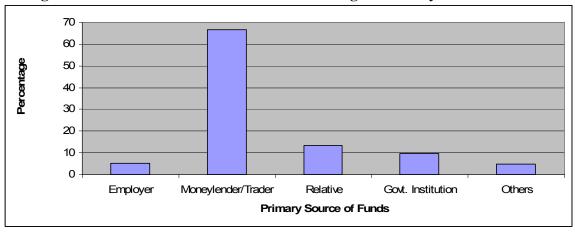


Figure-14: Distribution of Households according to Reasons for Obtaining Credit

