Poverty and Sustainable Development under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) with reference to Present Scenario of India: A Case Study of Karbi Anglong District

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Abstract: Poverty is a world-wide and multi-dimensional phenomenon and it exists both in developed and underdeveloped economy. In Rio-Declaration, the commission has given prominence on bio-diversity, climate change, forest management and conservation along with a priority to the poorest sections of the community. The central government of India, under UPA Government, enacted a National Employment Guarantee Act. This would provide a legal guarantee for at least 100 days of employment to begin with an asset-creating public works programmes every year at minimum wages to at least one able bodied person in a family. The act was notified on 7th September, 2005. The significance of the programmes makes the government legally acceptable for providing employment to those who ask for it. It was considered as growth engine for sustainable development of an agricultural economy through the process of providing employment on works that address causes of chronic poverty such as drought, deforestation and soil erosion. The Act seeks to strengthen the natural resource base of rural livelihood and create durable asset in rural areas. The present study has been conducted on the rural population under MGNREGA, who are able to cross their subsistence level of surviving. The incidence of poverty is very high in the different rural areas than estimated by Planning Commission of India (based on Suresh Tendulkar Committee).

Keywords: poverty, sustainable development, MGNREGA, Planning Commission of India, incidence of poverty.

Introduction: The concept ‘sustainable’ first appeared in Brundthland Report (1987) entitled “our common future” submitted before United Nations General Assembly by the World Commission on Environment and Development, defined as “the process that meets the need of the present without compromising the ability of the future generation to meet their needs”. The essence of sustainable development is to manage world economies in such a way that the present needs should be met
without impairing the capacity to meet the future needs. In Rio-Declaration, it has given prominence to bio diversity, climate change, forest management and conservation, along with a priority to the poorest sections of the community. It stressed the view that quality of life that can not be measured in monetary terms, but should be taken into account. Reduction in adverse externalities such as chemical pollution, noise levels, air and water-quality should be maintained in such measurement.

The commission has emphasized on consideration of intergenerational equity in resource use and on such use of natural resources that would enable the future generations to experience at least the present generation’s level of well-being. This refers to the implications in respect of terminal stocks of any time horizon. The terminal stocks of natural resources are determined by the rate of its use relative to the rate of regeneration during the relevant time horizon. Again, sustainability condition has emphasized conservation of resources which needs that stock of all individuals should not decline over time. “For exhaustible resources, the sustainability condition is to be interpreted as the discovery of alternative resources. Thus, the objective of development with intergenerational equity requires no end up of resources and declining of the human well being. Natural resources are only the means to the end with strong possibilities of substitution existing between one natural capital resources and another. Resources substitution would correspond to the technological substitution and would impact on the imbalance of ecosystem” (Sengupta 2002). Thus, the main issue of the contention of Rio- declaration is the well being index and the stocks of natural resources which should not be declined over time. “Sustainable development goes much beyond the concern for physical environment; it is based on a concept of intergenerational equity, however, with billion of people still steeped in poverty”, M.P Bezbaruah (2014). Local agenda-21 was the core of the earth Summit, which says that sustainability is a global issue and should be fought together; there is no one solution for everyone. In a sense, “it is the philosophy of democratic decentralization and Indian Panchayati Raj. In Panchayati Raj, there is so much of promise and also so much of frustration that the promise is not met”. M.P Bezbaruah (2014).

But “All the central sponsored schemes are stop gap arrangements rather than a permanent one, due to poor implementation of the programme. Still a larger number of Indian population remains in the grip of poverty for decades with frustrating hope of melioration in near future.” (Shankar and Shah 2009).

“Widespread poverty, environmental conditions, the use of natural resources, and economic, social development is closely linked to population growth, distribution.” (ICPD, Dannel C Maquire). From the above cited opinion, it is to be said that the growth of population is directly related to the environment.
**Problem to be addressed:** Karbi Anglong District is still dominated by widespread poverty, presence of marginal labourers, absence of good transport system, existence of lopsided industrial pattern, low electricity consumption etc. There are large numbers of people who work from dawn to dusk to earn a living but are not able to procure two square meals for a day, not to speak of having adequate clothing, shelter, education, recreation etc. The majority of the people have been living in the hilly places of Karbi Anglong, is known for its poverty and backwardness. Mostly the people are illiterate. The tertiary and industrial sectors have not developed till now. It is important to note down that the primary occupation is not sufficient to meet their subsistence needs. Under such a situation, they seek part time employment in a meagre income. Disguised unemployment is a major issue of the villagers. A new approach to poverty reduction is necessary and utmost essential in the present situation of the country.

The parameter is poverty, to reduce poverty in Karbi Anglong through providing regular works, which will reduce disease, hunger, ill-health, malnutrition and general degradation of human life. Another parameter which can be able to create durable assets through local economy within 5km of the works which are locally based on resources like water conservation, water harvesting, drought proofing including a forestation and tree plantation, constructing irrigation canals, including micro and minor irrigation works, horticulture and rural connectivity are the basic infrastructures of any economy to be developed.

**Area of the Study:** Assam is situated in the north east corner of India. The total geographical area of Assam is 78.438 Sq. KMs. This contains for about 2.4% of the total area of India. The state has two distinct natural regions such as Brahmaputra valley and the Barak Valley. The state comprises of 27 districts for administration. For administration and revenue purpose the 27 districts of the state are divided into 48 sub-divisions and 149 revenue-circles. According the provisional result of census of India, 2011 the population of Assam is 3,11,69,272 of which male population is 1,59,54,927 and female population is 1,52,14,345. Assam’s rank is 14th in size of population among all states of India. The decadal growth of the state’s population works out to 16.93 percent during 2001-11 as against 17.64 percent for the country as a whole.

Karbi Anglong District is the largest district of Assam. It is situated in the central part of Assam. The district with dense tropical forest covered hills and flat plains are situated between 25’ 33”N to 26’35’N latitude and 92’10” to 93’50” E longitude. The district occupies an area of 10,434 km². Within the map of undivided Assam, a new district called “United Mikir and North Cachar Hills District” was
created on Nov 17, 1957. But due to bifurcation of the erst while district of United Mikir and North Kachar Hills District into two separate district under a banner as “Mikir Hills” and “North – Cachar Hills District” in 1970. The Mikir hills district was again rechristened as “Karbi Anglong District” on October 14, 1976. Thus, Karbi Anglong came into existence as a full-fledged separate district of Assam. The district enjoys autonomy as per the provision of Sixth schedule of Indian constitution.

Recent survey regarding Below Poverty Level (BPL) reveals that 32,356 households beneficiaries receiving BPL rice. Therefore, district rural development agency of Karbi Anglong has taken various rural development schemes in different development block area for socio-economic uplift of rural people. Since inception of MGNREGA, Rs 54147.24 lakh has been received from Govt. of India, and Rs. 4202.80 lakh has been received from state Govt. Out of the total amount of Rs. 58350.04 lakh, Rs. 55342.31 lakh has been utilized till 2010-2011. In order to generate employment opportunities and to create infrastructural facilities in rural areas 15346 nos. of schemes have been executed.

According to the census of India, 2011 the total population of Karbi Anglong is 965280. Out of this total population male population is 493,482 and female population is 471,798. No of Literates are 574,509, the total density 93 per Sq. Km. The hill district is connected by national highway and PWD roads. Still, railway is not developed in the entire district except Diphu, the district headquarter.

The district is not connected by air. It is only 260km by road from Diphu to the state capital Dispur, Assam. The nearest airport is Dimapur (Nagaland), 54 km away from Diphu. Bokajan cement industry is only the major industry in the district run by govt. There are total 12 nos. of small tea gardens in the district. There are seven major towns in the district- Diphu, Bokajan, Donkamokam, Dokmoka, Hamren, Howraghat and Bokuliaghat. The major rivers are Kopili, Amreng, Borpani, Kolioni, Dhansiri and Dikharu river. The total forest area is covered by 4,922,019 sq km.

The Rural economy of the district depends upon agriculture and allied sectors such as dairy farming, poultry farming, pig farming, Goat farming and fodder cultivation. The dairy development department of the Karbi Anglong Autonomous Council within a short period of time has been able to supply hygienic milk at people’s doorstep. The forest area is covered by about 4,922,019 sq km. There are 31 Reserve Forests in the district. Among these, 14 Reserve Forests are under state and 17 Reserve Forests are under Karbi Anglong Autonomous District Council.
Material and Method: The study is based on the primary as well as the secondary data source. It is basically a case study of Karbi Anglong District of India. Secondary data are collected from the periodicals, books, articles journal and official gazette published by the Govt. of India. The primary data are collected through Questionnaire directly from respondents.

The analysis is based on a case study of rural area to see the incidence of poverty. “Since poverty alleviation was accepted as one of the core objective of Planning Commission of India after 1947, a series of rural development programme are launched by the central government of India. Later on, the constitutional 73rd Amendment Act and the establishment of a local governance system in India through 3 tiers Panchyati Raj institutions (PRIS) has marked decentralization in India” (Pramathesh, Ambasta (2010)). The analysis is completely based on field survey in the areas of Dhethaghat, Langhin, Jengronghang and Jangsiguri villages from the Job-Cards holders under MGNREGA (Mahatma Gandhi National Employment Guarantee Act.2005). The sample data are collected from both BPL families and APL families because as per rule of MGNREGA Act adult members of a rural household, willing to do unskilled manual work, may apply for registration in writing or orally to the local Gram Panchayat. Income earned before MGNREGA means the income earned from their primary sources of the beneficiaries in the year 2013-14 and income earned after MGNREGA means income from primary sources and supplementary income from MGNREGA in the same year. The total sample size is 89 (eighty nine) households in said villages, which have been taken purposively.

Result of the Study: Result of the study is shown in the following table, showing population growth in India and the result of the case study in the selected area.

Table: 1. Growth of India’s Population

| Census Year | Population in Crore | Decadal growth (%) | Average Annual growth rate(y) | Density of Population (per Sq Km) |
|-------------|---------------------|--------------------|-----------------------------|----------------------------------|
| 1971        | 54.82               | 24.80              | 2.20                        | 177                              |
| 1981        | 68.33               | 24.66              | 2.22                        | 216                              |
| 1991        | 84.64               | 23.87              | 2.16                        | 267                              |
| 2001        | 102.87              | 21.54              | 1.97                        | 325                              |
| 2011        | 121.02.             | 17.64              | 1.64                        | 380                              |

Source: Govt. of India, census of India, Provisional tables: Paper-1, 2011
As per as size of population in concerned, India ranks second in the world population next to total world area, where as the population of India is nearly 17.5% of world population. In fact, the population of India at 124.78 crore in 2013 is almost equal to the combined population of U.S.A., Indonesia, Brazil, Pakistan, Bangladesh and Japan put together which is equal to 124.5 crore, as per projected population by United Nations department of economic and social affairs, 11 August 2013.

In fact, it indicates that pressure of population on the land is very high. Since the growth of population is the result of birth rate and death rate, the difference of the two can be explained. Due to this high growth rate of population in India, the entire economy is surrounded by the vicious circle of poverty. This poverty and growth of population lead to net global environmental degradation and likely to be worsened. The following table shows the total Below Poverty Level of population of India.
Table: 4: BPL Population (%) in 2009-10

| Sl. No. | States          | Total BPL Population (%) | Sl. No. | States          | Total BPL Population (%) | Sl. No. | States          | Total BPL Population (%) |
|---------|-----------------|--------------------------|---------|-----------------|--------------------------|---------|-----------------|--------------------------|
| 1       | Nagaland        | 20.9                     | 11      | Mizoram         | 21.1                     | 21      | West Bengal     | 26.7                     |
| 2       | Delhi           | 14.2                     | 12      | Andra Pradesh   | 21.1                     | 22      | Kerela          | 12.0                     |
| 3       | Sikkim          | 13.1                     | 13      | Arunachal Pradesh | 25.9                 | 23      | Chatisgarh      | 48.7                     |
| 4       | Goa             | 8.7                      | 14      | Karnataka       | 23.9                     | 24      | Tamil Nadu      | 17.1                     |
| 5       | Meghalaya       | 17.1                     | 15      | Uttarkhand      | 18.0                     | 25      | Uttar Pradesh   | 37.7                     |
| 6       | Hariyana        | 20.1                     | 16      | Himachal Pradesh | 9.5                      | 26      | Tripura         | 17.4                     |
| 7       | Maharashtra     | 24.5                     | 17      | Assam           | 37.9                     | 27      | Poudicherry     | 1.2                      |
| 8       | Punjab          | 15.9                     | 18      | Rajasthan       | 24.8                     | 28      | Bihar           | 53.5                     |
| 9       | Manipur         | 47.10                    | 19      | Jammu & Kashmir | 9.8                      | 29      | Madhya Pradesh  | 36.7                     |
| 10      | Gujrat          | 23                       | 20      | Jharkhand       | 39.1                     | 30      | Orissa          | 37.0                     |

Source: Planning Commission of India (Figures based on Suresh Tendulkar Committee)

The above table indicates the existing Below Poverty Level of population of India. The poor are now ready to thrive, for betterment of their lives but they face the serious problem of sustainability, it becomes the biggest challenge for India how to attain sustainability with improvement of the lives of the poor. Though Central Government has given fund and power to the Panchayat, yet they are mostly without functionaries.
Table 5: Income of Sample Households of the different income Level (Annual & Per capita per month before and after MGNREGA (2013-14))

| Sl. No | Income Level (In Rs.) | No. of Household | No. of Population | Annual Income | Average Household Income | Annual Household Income | Average Per Capita Income (In Rs.) | Per Capita per Month (In Rs.) | % of Income Increase |
|--------|-----------------------|------------------|-------------------|---------------|--------------------------|------------------------|-----------------------------------|-------------------------------|---------------------|
| 1      | Less than 5000        | 40               | 44.97 %           | 198           | 181000                   | 4525                   | 259000                            | 6475                          | 3.06%               |
| 2      | 5000-20,000           | 30               | 33.71 %           | 143           | 384000                   | 12800                  | 442500                            | 1475                          | 1.09%               |
| 3      | 20,000-40,000         | 06               | 6.74%             | 23            | 161000                   | 26833.33               | 172700                            | 2878                          | 0.19%               |
| 4      | 40,000-60,000         | 04               | 4.49%             | 22            | 200000                   | 50000                  | 207800                            | 5195                          | 0.58%               |
| 5      | 60,000-above          | 9                | 10.00 %           | 49            | 880000                   | 97777.78              | 897550                            | 9972                          | 2.37%               |
| 6      | Total                 | 89               | 100%              | 435           | 180600                   | 20292.13              | 197955                            | 2224                          | 379.22              |

Source: Field survey

The table indicates that 51.69% of the household are Below Poverty Level and 83.68% of the sample population lives Below Poverty Level. Their per-capita income is less than Rs.781.00 which is the boarder line of poverty and all have to be crossed. Hence, incidence of poverty is very high in the tribal community in the district which is a tribal dominated area.
Measuring of poverty level whether income increased or not after participating MGNREGA (Paired ‘t’ test): Taking the income earned before MGNREGA as ‘$x_i$’ and the income earned after MGNREGA as ‘$y_i$’ and then taking the null hypothesis that mean of difference is zero, we can write $H_0 : \mu_x = \mu_y$, which is equivalent to test $H_0, \bar{d} = 0 \ H_0 : \mu_x < \mu_y$, as we want to conclude that MGNREGA increased income after participating at MGNREGA.

As we are having matched pairs, we use paired ‘t’ test and work out the test statistic as $\bar{d} \over s/\sqrt{n}$.

Table: 6

| Sl. No. | Income level | Number of population. | Per Capita Income per month before MGNREGA ($x_i$) | Per Capita Income per month after MGNREGA ($y_i$) | Difference $D_i = x_i - y_i$ | Difference Square $(D_i)^2$ |
|---------|--------------|----------------------|--------------------------------------------------|-------------------------------------------------|-----------------------------|-----------------------------|
| 1       | Less than Rs 5000 | 190                  | Rs 76.18                                         | Rs 109.00                                       | -43.82                      | 1077.15                     |
| 2       | Rs 5000- Rs 20,000 | 143                  | Rs 223.78                                        | Rs 257.87                                       | -34.09                      | 1162.13                     |
| 3       | Rs 20,000- Rs 40,000 | 23                   | Rs 583.33                                        | Rs 625.72                                       | -42.39                      | 1796.91                     |
| 4       | Rs 40,000- Rs 60,000 | 22                   | Rs 757.58                                        | Rs 787.12                                       | -29.54                      | 872.61                      |
| 5       | Rs 60,000 above | 49                    | Rs 1496.60                                       | Rs 1526.45                                      | -29.85                      | 891.02                      |
| 6       | Total         | 435                  |                                                   |                                                 | -168.69                     | 5799.82                     |

$t = 1.8069$

Degree of freedom = $n-1 = 5-1 = 4$
As $H_a$ is one sided, we shall apply a one tailed test (left tail because $H_a$ is of less than type) for determining the rejection region at 5% level of significance, using table of $t$ distribution for 4 degrees of freedom.

R: $t < 2.776$

The observed value of $t$ is 1.8069, thus we accept $H_0$ at 5% level and conclude that MGNREGA has failed to increase income to the beneficiaries after participating at MGNREGA.

**Socio-Economic Conditions:** The following data indicates the Socio-Economic conditions of the beneficiaries: (Those who well users of Common Property Resources among 89 sample size, 40 house holders are below poverty level and common users of CPRs)

- Literacy (%):
  - 60% of the beneficiaries are illiterate.
  - 32.50% of the beneficiaries are primary passed.
  - 32.50% of the beneficiaries are middle school studied.
  - Nobody studied up to H.S.L.C level of education.

- Holding of Land Size: (%)
  - 87.5% of the beneficiaries are land less population. Landless means here no cultivated land area for permanently cultivation used by them.
  - Only 12.5% of the beneficiaries have below 1 acre of cultivated land.

- Sanitary latrine facilities (%):
  - 92.5% the beneficiaries use open access area for their sanitation.
  - Rest 7.5% uses the private and temporary based made of bamboos toilet used for their sanitation.

- Family Status (%):
  - 100% of the household are the nuclear family.
  - 17.5% of the beneficiaries have their children up to 6 children.
  - 82.5% of the beneficiaries have their children up to 10 children.

- Structure of the savings account and other communications (%):
  - 50% of the beneficiaries have formed of S.H.G. (Self Help Group, but without registered in the Local Block Office.
  - Rest, 50% of the beneficiaries have without S.H.G.
. Nobody has accused why he has not received the house under Indira Awas Yajana Scheme, a central government scheme of India.
. Nobody has a single account in local Gramain Bikas Bank.
. None has knowledge about information technology or any other communicative system of the present.
. Not a single NGO is found for the voice in support of them.
. During the election period, they see the political agent without the candidate, after the election, it is very far to meet and claim their demand. This is the view of the beneficiaries.
. When it is asked about the environmental degradation- if they continuously collect the resources from the forest, their view is that it is their right to survive, no body can die in hunger. 100% populations of surveyed areas are ignorant of degradation of the forest. The Common Property Resources play important role in livelihood opportunity receiving from nature.
. 12.5% of the beneficiaries are depending on agriculture, but they prefer to jhum cultivation.
. Remaining 87.5% of the population landless but alternatively they have animal husbandry farm which are not continued, hence they directly depended on Non Timber forest product. The Scio-economic conditions obliged the people to depend on Non-Timber Forest Product (NTFP) like fuel wood, house building materials such as canes and bamboos, medical plants as well as green leafy vegetables and roots are important stuff gathered by the forest dwellers not only for self consumption but also to generate income.

**Conclusions:** “Combating Poverty” is the topic of Rio declaration (chapter 3 of Agenda 21); it is also in commitment to of the Copenhagen Declaration on the social development. Agenda 21 emphasized that poverty is a complex multi dimensional problem with origins in both National and International domains. No uniform solution can be found for global application. Rather, Country should have specific programmes’ to solve the problem with the international efforts, as well as the parallel process of creating as supportive international environment.

In the years, following the 1992 Rio Conference has witnessed the enormously increasing absolute poverty in developing countries and complexity of the poverty issue could end the social fabric.
The General Assembly, in its 1997 Poverty for the Future Implementation of agenda 21 decided that the poverty eradication should over ride them of sustainable development for the coming years. Poverty eradication is address in chapter 11 of the Johannesburg plan of implementation (2002), stressed the following points of requirement for sustainable development with poverty reduction, includes:

1. Improving access to sustainable livelihood, entrepreneurial opportunities and productive resources.
2. Providing universal access to basic social services.
3. Progressively developing social protection system to support those who can’t support themselves.
4. Empowering people living in poverty.
5. Addressing the disproportionate impact of poverty on women.
6. Working with international donors and recipients to allocate increased shares to poverty eradication and.
7. Intensifying international co-operation for poverty eradication.

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