

# Rural Development in India with special reference to Assam

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**Abstract:** India is a country where the majority of the population resides in the rural areas. Rural development is one of the major aspects in the development in a country which is predominated with rural population. A major portion of the population in India resides in the rural areas, in such a situation merely focusing on the urban metropolitan areas will not lead to achievement of the broader aim of sustaining growth and development. Assam is a State where a major part of the population still resides in the rural areas and only a small proportion of the population lives in the urban areas. Thus, it becomes quite essential to focus on the rural areas and the development that has taken place in the rural areas in Assam. In this study an index is developed to assess the level of rural development in Assam over the two time points 2011 and 2018. The study found that certain development has taken place so far but the pace of development is not up to the mark.

**Keywords:** Rural development, rural areas, sustained growth, index.

## Introduction:

In a country where majority of the population still resides in the rural areas, rural development becomes quite essential. India is a country with a major portion of the population is still rural dominated. The development process no doubt has speed up over the years but still much progress is yet to be achieved. Focusing on the urban metropolitan areas merely will not lead to better fruits for the country if rural areas development is not taken under consideration. The development of the rural areas includes a large number of aspects such as agricultural, health, employment avenues, poverty reduction, promotion of equality, sustaining incomes, etc. A number of programmes and policies were taken up by the government to uplift the rural areas in India.

Assam is one of the States from the North-Eastern part of the country. Among the eight States of North-Eastern States viz. Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Tripura and Sikkim, Assam is one of the developed States. The State of Assam is predominantly rural dominated. A major part of the population still resides in the rural areas. The people in the rural areas are mostly dependent on agriculture and allied activities. Most of the methods used are traditional in nature which in turn retards the level of production and hence income. Low income in turn leads to poverty (Basumatary, 2016)

Thus, in this paper an attempt was made to focus on the development levels prevailing in the rural areas of Assam by considering some of the indicators. The indicators chosen were limited because of data availability constraints. The purpose of the study is to focus on the rural development over the years in Assam so that policies can be taken according to improve the development levels in the study area.

### Review of Literature:

Studies on rural development are not new. A number of papers were already done to assess the rural development considering different perspectives. Some of the studies are mentioned here: Raheja (2015), Basumatary (2016), Yakanna (2017), Das (2018), Rao (2019), Nedumarn & Manida (2020), etc. Many studies were conducted till now on different parts of India and India as a whole but only a few studies were done till now on Assam. So, the present paper focuses on assessing the development in the rural areas of Assam.

### Objectives:

- a) To assess the development in the rural areas among the districts of rural Assam on the basis of selected indicators.
- b) To classify the districts on the basis of the computed indices of rural development.
- c) To suggest measures to uplift the situation of rural areas of Assam.

### Data and Methodology:

The study is based on secondary data collected from different sources. These sources are- Directorate of Economics and Statistics, Government of India, Census Report 2011, Indiastat, NER databank, etc.

In order to assess the rural development among the districts of Assam the following indicators are considered:

- a) Percentage of Net Sown area to Net Cropped area
- b) Cropping intensity
- c) Percentage of Net Irrigated area to Net Sown area
- d) Per Capita Net State Domestic Product
- e) Literacy Rate
- f) Infant mortality rate
- g) Per Capita Availability of Power (kilo watt hour)
- h) Population per bank branch
- i) Hospitals per lakh populations
- j) Hospital beds per lakh populations
- k) Educational Institutions per 10000 students
- l) Teacher-Student Ratio

In this study the Wroclaw Taxonomic Technique is used to assess the level of rural development among the different districts. The method is discussed below:

Firstly, we have computed the level of development through the following steps:

Let,  $[X_{ij}]$  be the data matrix giving the values of the variables of  $i_{th}$  districts and the  $j_{th}$  indicator where  $i = 1, 2, \dots, n$  districts and  $j=1,2,3,\dots,k$  (no. of indicators). Since the units of measurement of the variables considered are not uniform, for combined analysis  $[X_{ij}]$  is transformed to the matrix of standardized indicators  $[Z_{ij}]$  as follows:

$$Z_{ij} = \frac{X_{ij} - \overline{X_j}}{s_j} \dots\dots\dots (1)$$

Where  $\overline{X_j}$  = mean of the  $j_{th}$  indicator and  $s_j$  = the standard deviation of the  $j_{th}$  indicators.

From  $[Z_{ij}]$ , identify the optimal value of each indicator. The optimal value will be either the maximum value or the minimum value depending upon the direction of the impact of the indicator on the level of development. For obtaining the level of development ( $C_i$ ) of the  $i^{th}$  districts of Assam, first calculate the square root of the deviations of the individual value of a transformed variate from the best value. In other words, we calculate  $P_{ij}$  as:

$$P_{ij} = (Z_{ij} - Z_{0j})^2 \dots\dots\dots(2)$$

Where,  $Z_{0j}$  = optimal value.

For each  $i$  and  $j$ , Pattern of Development ( $C_i$ ) is given by

$$C_i = \left[ \frac{\sum_{j=1}^k P_{ij}}{CV_j} \right]^{1/2} \dots\dots\dots (3)$$

Where,  $(CV)_j$  = coefficient of variation of  $X_{ij}$  for  $j^{th}$  indicators.

Therefore, Composite index of development is given by-

$$D_i = C_i / C \dots\dots\dots (4)$$

Where,  $C = \bar{C} + 3s_i$

Where  $\bar{C}$  = mean of  $C_i$  and  $s_i$  = standard deviation of  $C_i$ .

The closer  $D_i$  is to 0 the more developed the district is and closer it is to 1 the less developed the district. In order to classify the districts into different levels of development we assume that the districts having composite indices less than or equal to (mean-standard deviation) are highly developed and districts having a composite indices greater than (mean + standard deviation) are low developed. In the same way, districts with composite indices in between (mean) and (mean-standard deviation) are middle level developed and the districts with composite indices between (mean) and (mean + standard deviation) are developing.

This method was used by Arief (1982) and Olhan (2012).

**Findings and Discussion:**

Table I below represents the composite indices of rural development among the different districts of rural Assam.

**Table 1:** Rural Development Index and Rank of the different districts of Assam

Districts	Rural Development Index	Rank
Kokrajhar	0.95	24
Dhubri	0.79	20
Goalpara	0.73	19
Berpeta	0.83	21
Morigaon	0.72	18
Nagaon	0.49	10
Sonitpur	0.43	9
Lakhimpur	0.34	7

Dhemaji	0.53	11
Tinsukia	0.33	6
Dibrugarh	0.29	5
Sivasagar	0.26	4
Jorhat	0.24	3
Golaghat	0.21	2
Karbi Anglong	0.69	17
Dima Hasao	0.65	14
Cachar	0.59	12
Karimganj	0.87	22
Hailakandi	0.68	16
Bongaigaon	0.38	8
Chirang	0.73	19
Kamrup	0.21	2
Kamrup Metro	0.19	1
Nalbari	0.38	8
Baksha	0.60	13
Darrang	0.88	23
Uladguri	0.67	15

**Source:** Authors own computation.

The composite indices of rural development range in between 0.19 to 0.95. As mentioned earlier if the index score moves towards 0 it represents the better performance of the district and the index score close to 1 represents the low performance of the district. In the table I above, we found that the Kamrup Metro district was found to be the best performer in the rural development index with an index score of 0.19. On the other hand, Kokrajhar was found to be the worst performer district in the rural development index with an index score of 0.95.

The districts are classified under different categories which are presented with the help of table 2 below.

**Table 2:** Different Levels of Development among the districts of Assam

Category	No. of Districts
Highly developed (<0.24)	7
Middle level developed (0.24-0.59)	3
Developing (0.59-0.75)	10
Low developed (>0.75)	6

**Source:** Computed by the Authors.

In table 2, it is found that in the highly developed category only 7 districts viz. Tinsukia, Dibrugarh, Nalbari, Jorhat, Kamrup, Kamrup Metro, and Golaghat. Three districts viz. Sonitpur, Lakimpur, Sivasagar was found to be in the middle developed category. 10 districts viz. Udalguri, Goalpara, Morigaon, Nagaon, Dhemaji, Berpeta, Dima Hasao, Cachar, Baksha and Darrang were found to be in the developing category. Kokrajhar, Karbi Anglong, Karimganj and Dhubri were found in the low developed category.

#### **Conclusion and Recommendations:**

From the above analysis it was found that the levels of rural development are not satisfactory in Assam a major part of the State are still under the developing stage. From the analysis it was found that only 7 districts were found to be in the highly developed category, while 3 districts were found to be in under middle level developed Stage, 10 districts were found in the developing stage and 6 districts were found under the low developed stage. The development levels of the rural areas are not satisfactory. The need of the time is to invest strategically in field specific lines so that the outcome can be achieved by the larger masses. Policies and programmes must be taken to uplift the different aspects of development of the rural areas such as health, education, etc.

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