

## **MICRO LEVEL STUDY ON TRENDS IN THE CHANGING POPULATION OF BISHNUPUR DISTRICT, MANIPUR FROM 1971 TO 2011**

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### **ABSTRACT**

The World population in a day grows by 2,50,000 of which 19% of this population is contributed by India alone. According to the recent population projections of the UN, India is likely to overtake China during 2045-50 [1]. It is a frightening forecast as more population means additional problems for us. It is asserted that rapid population growth adversely impacts employment situation, land-man ratio and standard of living. It also results in food shortage and import of food grains and usually prevents change in occupational distribution of a backward economy due to the study on trends in the changing population of Manipur and particularly in Bishnupur District is necessary. This paper attempts to have a brief study on the trends in the changing population of Bishnupur District, Manipur during the period from 1971 to 2011 Censuses.

**Keywords:** Bishnupur District, Backward, Census, Decade, Manipur, Normal, Equation, Period, Trend.

### **INTRODUCTION**

Literally speaking, population studies means studies concerned with population. Population studies are concerned not only with population variables but also with the relationship between population changes and other variables-Social, Economic, Political, Biological, Genetic Geographical and the like [2]. The problem of population is very crucial at present. According to Dr. V. K.R. V. Rao, "Population should not be treated merely as a quantitative phenomenon or just an essay in numbers, but it is the quality of the population that is most relevant both as a factor of growth and number have to be treated in terms of the effect that have on quality either by way of deterioration or improvement". The population of the developing countries has increased at a rapid pace because while on the one hand death rates fell steeply, birth rates continued to remain at a high level. It has happened as same in the Bishnupur District. The large and rapidly growing population has become a major hurdle in any region. The study of

population is assuming increasingly more importance significance not only in India but all over the world. Thus, an analytical study on the trends in the changing population of this region signifies the urgent need.

### **OBJECTIVE OF THE STUDY**

1. To analyse the trend in the changing population of Bishnupur District, Manipur for the period from 1971 to 2011 Censuses.

### **STUDY AREA**

Bishnupur District is a socially and an economically backward district of Manipur. Bishnupur District came into existence on the 25<sup>th</sup> May 1983 [3]. It lies in the South West of Manipur Central Valley area. The total geographical area is 496 Sq.kms. It is the smallest district in Manipur with a population of 2,37,399 persons according to 2011 Census as against 1,08,306 persons in 1971 Census. The density of population is 479 per sq.km., in 2011 Census as against 204 per sq.km., in 1971 Census. Today, increasing population is more living in

poverty, facing unemployment, suffers from ill health and hindrance to the development of the economy. Thus, these are happening as same in the study area.

### **METHODOLOGY OF THE STUDY**

The present study depends on secondary data. These data are collected from the statistical data published by Department of Economics and Statistics, Government of Manipur published from 1980 to 2016, Censuses data of India – 1981, 1991, 2001 and 2011. Data available from different sources as books, newspapers, journals, reports published by Government and non-government organization are also consulted.

### **DISCUSSION AND RESULTS**

Since 1971, Population of Manipur has been continuously increasing and has more than doubled itself during the forty year period, 1971 to 2011, whereas the population of the district also more than doubled itself during the corresponding period. The population and area of Bishnupur District over the Censuses have been increased rapidly as can be seen in the Table No.1.

**Table No. 1: Decennial Population Growth Rate, Area and Density of Population of Bishnupur District from 1971 to 2011 Censuses**

<i>Census</i>	<i>Population</i>	<i>Decadal Variation</i>	<i>Decadal Growth Rate (%)</i>	<i>Area in Sq.Km</i>	<i>Density of Population (in Sq.Km)</i>
(1)	(2)	(3)	(4)	(5)	(6)
1971	1,08,306	-----	-----	530	204
1981	1,41,150	32,844	30.33	530	266
1991	1,80,773	39,623	28.07	496	364
2001	2,08,368	27,595	15.26	496	420
2011	2,37,399	29,031	13.93	496	479

Sources : 1. Govt. of Manipur, (1985) : Statistical Handbook of Manipur : Directorate of Eco.& Stat.  
 2. Govt.of Manipur, (2016) : Economic Survey of Manipur : Directorate of Eco. and Stat.

In order to analyse the data from Table No.1, let us first use the figures of 108.31 in thousand units for the population of 1,08,306 in respect of the district according to 1971 Census for reference. Thus, population figures for the last four decade in the district will be placed census wise from the population for 1971 as 108.31, 1981 as 141.15, 1991 as 180.77, 2001 as 208.36 and 2011 as 237.39 to show the population trend of four decades. So, the average population from 1971 to 2011 was equal to 175.196 thousands ( $875.98 \div 5$ ).

Let us fit the data to a straight line trend by the method of least squares.

**Table No. 2: Population Equation**

$(X=1971-1991=-20/10=-2 \text{ and so on})$

$(Y = \text{Population in Thousands})$

<i>Sl. No.</i>	<i>Census</i>	<i>X</i>	<i>X<sup>2</sup></i>	<i>Y</i>	<i>XY</i>
(1)	(2)	(3)	(4)	(5)	(6)
1.	1971	-2	4	108.31	- 216.62
2.	1981	-1	1	141.15	- 141.15
3.	1991	0	0	180.77	0
4	2001	+1	1	208.36	+ 208.36
5.	2011	+2	4	237.39	+ 474.78
6.		$\Sigma X=0$	$\Sigma X^2 =10$	$\Sigma Y = 875.98$	$\Sigma XY= 325.37$

We have to solve to normal equations as written below:

$$\begin{aligned}\Sigma y &= N a + b \Sigma x \\ \Sigma xy &= a \Sigma x + b \Sigma x^2\end{aligned}$$

Using the fact that  $X = 0$ , Now, substituting the appropriate values from the Table No.2 in the normal equation, we obtain:

$$\begin{aligned}875.98 &= 5.a + b.0 \\ 325.37 &= a. 0 + b. 10\end{aligned}$$

Hence,  $a = 875.98/5 = 175.196$

$$b = 325.37/10 = 32.537$$

The equation of straight line trend is:

$$\begin{aligned}Y &= a + bx \\ \text{or } Y_c &= 175.196 + 32.537. X.\end{aligned}$$

So, by the trend value, the expected population in 2021 Census is:

$$Y_c = 175.196 + 32.537.X.$$

Substituting  $X=3$  in the fitting equation, we get.

$$\begin{aligned}Y_c &= 175.196 + 32.537 \times 3 \\ &= 175.196 + 96.611 \\ &= 271.807 \text{ thousands}\end{aligned}$$

Similarly in 2031 Census, population is expected to increase to:

$$\begin{aligned}Y_c &= 175.196 + 32.537 \times 4 \\ &= 175.196 + 130.148 \\ &= 305.344 \text{ thousands.}\end{aligned}$$

Thus, population of Bishnupur District is likely to near double again during the thirty years period (1991 to 2021). The growth of population retards agricultural development as the number of landless workers increases and their wages fall. Thus, per-capita productivity reduces the propensity to save and invest. As a result, the use of improved techniques and other improvements on land are not possible. Capital formation in agriculture suffers and the economy is bogged down to the subsistence level. Thus, a rapidly increasing population plunges the

economy into mass unemployment and underemployment. The proportion of workers to total population rises. But in the absence of complementary resources, it is not possible to provide more job facilities. Moreover, as the labour force increases in relation to land, capital, and other resources, complementary factors available per worker decline, and as a result, unemployment and underemployment increase with a rapidly increasing population.

## **SUGGESTIONS**

Rapidly growing population necessitates large investments in social infrastructure and diverts resources from directly productive assets. Owing to scarcity of resources, it is not possible to provide educational, health, medical, transport and housing facilities to the entire population. To meet such challenges arising from increasing population, the following suggestions are required:-

1. To encourage the Industrial development based on local resources and for giving gainful employment to these vast army of unemployed and underemployed.
2. Agriculture is to be modernized and developed.
3. Infrastructural facility of the industries in the district need to be increased to start demand based industries.
4. Just to expand job facilities to these unemployed and underemployed people growing up with a rapidly increasing population, it is necessary to encourage some suitable small scale and household industries in the district.
5. For the purpose of fishing and other allied industries in the Loktak lake to give part-time and full-time employment to the people.
6. Fishing boat and net making industries may also be encouraged in some villages to meet the demand of the fishing population of the area.
7. To delay marriage, awareness of family planning, improve medical facilities, eradicate poverty and education for all are necessary to curb the increasing population in the district.

## **CONCLUSION**

Moreover, the above analysis, it is observed that the present trend of population in the district is necessary for development and fuller utilization of human resources. They are needed on both the supply and demand sides i.e., on the side of population education and family planning (or welfare) on the one hand and economic progress or increased food production on the other. While growth of population should slacken its pace to enable food production to overtake it, production on its part must take rapid strides not only to overtake increasing population but also to outstrip it.

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