

**HUMAN DEVELOPMENT INDEX OF GOKULPUR VILLAGE,
DAKSHIN DINAJPUR, WEST BENGAL**

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ABSTRACT

The Human Development Index (HDI) is a composite index published annually by the UN Human Development Report Office, since 1990, which is designed to measure “human well being” in different countries. The first Human Development Report introduced a new way of measuring development by combining indicators of life expectancy, educational attainment and income into a composite human development index, the HDI. The HDI sets a minimum and a maximum for each dimension, called goalposts, and expressed as a value between 0 and 1. Human Development Index (HDI) may be considered as a determinant of a people’s living standards and people’s potential to have longer and healthier life, to be educated, to achieve everything required, to work and to fully participate in the social processes. HDI provides a normalized measure the extent of human development and deprivation as well, in respect of three basic dimensions of human life namely longevity, education and standard of living which are highly valued in themselves. The Human Development index (HDI) is overall well accepted as a summary measure of human development (HD) achievements. It is transparent, simple to calculate and interpret, and it serves the purpose - to summarize the performance of the countries on the three dimensions of HD: standard of living, health, and education. Human development is considered as one of the core areas of interest in development economics.

Key Words: Human development, Education, Economy and Society.

Introduction

Human Development Index (HDI) may be considered as a determinant of a people's living standards and people's potential to have longer and healthier life, to be educated, to achieve everything required, to work and to fully participate in the social processes. The HDI represents a broader definition of well-being. Human development is defined as "expanding the choices people have to lead lives that they value" (Human Development Report, 2001). HDI provides a normalized measure the extent of human development and deprivation as well, in respect of three basic dimensions of human life namely longevity, education and standard of living which are highly valued in themselves. The Human Development Index (HDI) is a composite index published annually by the UN Human Development Report Office, since 1990, which is designed to measure "human well being" in different countries.

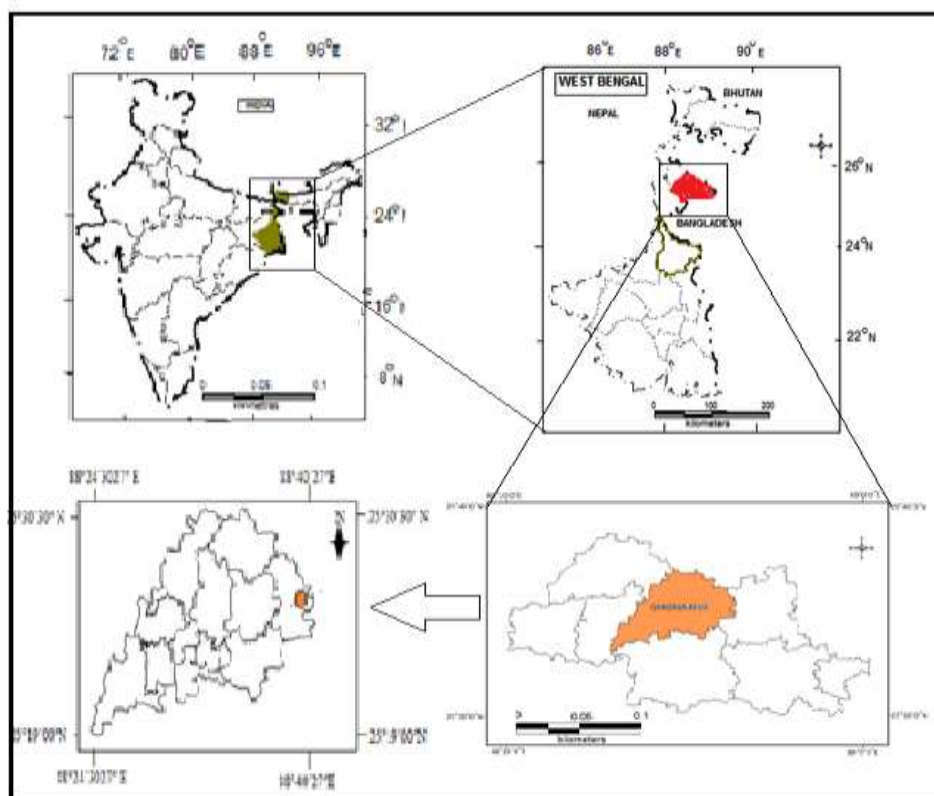
The Human Development Index (HDI) was created by the Pakistani economist **Mahbub-Ul- Haque** and the Indian economist **Amartya Sen** in 1990 and was published by the United Nations Development Programme. "The basic objective of development", wrote Mahbub ul Haq in the first Human Development Report in 1990 "is to create an enabling environment in which people can enjoy long, healthy and creative lives." As Amartya Sen has written: "Development can be seen as a process of expanding the real freedoms that people enjoy. The first Human Development Report introduced a new way of measuring development by combining indicators of life expectancy, educational attainment and income into a composite human development index, the HDI.

The HDI sets a minimum and a maximum for each dimension, called goalposts, and expressed as a value between 0 and 1. The Human Development index (HDI) is overall well accepted as a summary measure of human development (HD) achievements. It is transparent, simple to calculate and interpret, and it serves the purpose - to summarize the performance of the countries on the three dimensions of HD: standard of living, health, and education (Kovacevic M., 2009). Human development is considered as one of the core areas of interest in development economics. It says that human development can be regarded as expansion in people real freedoms that they enjoy. However, one of the most important indices among them is Human development index or HDI (Al-Hilani H., 2012). The index combines measures of life expectancy, school enrolment, literacy, and income to provide a broader-based measure of well-being and development than income alone (Engineer M., 2008).

Study Area

The Gokulpur village is located to the North-West of the Balurghat, the head quarter of Dakshin Dinajpur District. The geographical location of this village is confined within the latitudes of $25^{\circ}26'30''$ N to $25^{\circ}32'30''$ N and longitudes of $88^{\circ}24'27''$ E to $88^{\circ}40'27''$ E in the police-station and subdivision of Gangarampur, Dist- Dakshin Dinajpur, West Bengal. The JL no. of this Mouza is 68. The surrounding village of this Mouza are Sitahar, Bhabanipur and Srirampur and the JL no of these Mouza are 65, 67, and 63 respectively.

LOCATION MAP



Statement of the problems

The main problems of the study area are Poor economic condition as most of the people is engaged with agriculture and maximum pupils work as labour, communication facilities are underdeveloped in the village, literacy rate is also very low, lacks of school facility, only one primary school has been identified, health facilities are not available, only

one medical store can be seen over there and also Government employment facilities are very poor in condition and dependency ratio is very high.

Objectives

Following objectives have been selected for the research work, these are - to study the socio-economic condition of the inhabitants of the Village, to determine the factors responsible for the human disparity in socio-economic life in the study area, to find out and analyze the household wise Human Development Index and to suggest for human development of Gokulpur Village.

Database and Methodology

The present study is based on the primary data collection through the direct field investigation. The field investigation has been conducted with a well designed questionnaire. A direct interview has been conducted with a person from each sampled household of the Village. Sampled households were selected on the basis of random sampling technique. A total of 50 households were selected from 405 households on the basis of 12 percent sampling size. The present work has been accomplished with both quantitative as well as qualitative techniques. Among the quantitative techniques, both simple and standard statistical techniques have been applied to gather the facts. Simple percentage technique has been used to analyze the socio-cultural and economic status of the households of the study area. To find out the HDI value of Gokulpur village have been used following formula,

Published on 4 November 2010 (and updated on 10 June 2011), starting with the 2010 Human Development Report the HDI combines three dimensions:

1. A long and healthy life: Life expectancy at birth
2. Education index: Mean years of schooling and Expected years of schooling
3. A decent standard of living: GNI per capita (PPP US\$)

In its 2010 Human Development Report, the UNDP began using a new method of calculating the HDI. The following three indices are used:

$$1. \text{ Life Expectancy Rate (LER)} = \frac{\text{LE} - 20}{82.3 - 20}$$

$$2. \text{ Education Index (EI)} = \frac{\sqrt{\text{MYSI EYSI}}}{\text{MYSI EYSI}}$$

0.951

$$2.1 \text{ Mean Year of Schooling Index (MYSI)} = \frac{\text{MYS}}{13.2}$$

$$2.2 \text{ Expected Years of Schooling Index (EYSI)} = \frac{\text{EYS}}{20.6}$$

$$3. \text{ Income Index (II)} = \frac{\ln(\text{GNIPC}) - \ln(100)}{\ln(107,721) - \ln(100)}$$

Finally, the HDI is the geometric mean of the previous three normalized indices:

$$\text{HDI} = \sqrt[3]{\text{LEI} \cdot \text{EI} \cdot \text{II}}$$

LE: Life expectancy at birth

MYS: Mean years of schooling (Years that a 25-year-old person or older has spent in schools)

EYS: Expected years of schooling (Years that a 5-year-old child will spend with his education in his whole life)

GNIPC: Gross national income at purchasing power parity per capita.

Table 1 Demographic profile of the study area

Name of the Village	Total Population	Total Male	Total Female	Total Household	Sample Household	Sample Population
Gokulpur Village	2177	1151	1026	405	50	294

Source: Census of India 2011, Gokulpur Village, Dakshin Dinajpur, West Bengal

Demographic Structure

Table 2 Income Group Wise Demographic Structure of Gokulpur Village, 2014

Income Group	Population		
	Male	Female	Total
<500	47.83	52.17	100
500-1000	53.16	46.84	100
1000-1500	60.00	40.00	100
1500-2000	48.98	51.02	100
>2000	44.44	55.56	100

Source: Field Survey, 2014

Table 2 reveals that the distribution of demographic structure of Gokulpur Village. It has been counted that 47.83 percent male and 52.17 percent female population which belong to under the income group of less than less than 500. On the other hand highest percentage of male (60 percent) and lowest percentage of female (40 percent) population belongs to the income group of 1000-1500. Highest percentage of female population (55.56 percent) and lowest percentage of male population (44.44 percent) belongs to the income group of more than 2000. It have been also identify that the 53.16 percent male and 46.84 percent female population belongs to under the income group of 500-1000 and 48.98 percent male and 51.02 percent female population belongs to under the income group of 1500-2000.

Age Structure

Table:3 Age-group Wise Distribution of Population Among the Sampled Households, Gokulpur Village, 2014

Income Group	Age Group				Total
	0-6	6-14	14-59	>59	
<500	8.70	24.43	60.87	6.00	100
500-1000	10.13	21.52	64.56	3.79	100
1000-1500	16.92	15.38	60.00	7.70	100
1500-2000	10.20	18.37	67.35	4.08	100
>2000	8.89	6.67	68.88	15.56	100

Source: Field Survey, 2014

Table 3 depicts the age-group wise distribution of population of sampled household of Gokulpur Village. It have been counted that the highest percentage (68.88 percent) of population belongs to the age group of 14-59, which come under the income group of more than 2000 and 60 percent of population belongs to the same age group and come under the income group of 1000-1500. On the other hand lowest percentage of population (3.79 percent) belongs to the age group of more than 59, which come under the income group of 500-1000 and 15.56 percent of population belong to the same age groups of which come under the income group of more than 2000. In the age group of 6-14, highest percentage of population (24.43 percent) belong to the income group of less than 500 and lowest percentage of population (6.67 percent) come under the income group of more than 2000. Highest

percentage of child (16.92 percent) comes under the income group of 1000-1500, on the other hand lowest percentage of child (8.70 percent) come under the income group of less than 500. By the close observation of this table 3 it have been conclude that the area is having major percentage of populations belongs to the age group of 14-59.

Table: 4 Literacy Rate of Population Among the Sampled Households, Gokulpur Village, 2014

Income Group	Literate	Illiterate	Total
<500	90.48	9.52	100
500-1000	78.57	21.43	100
1000-1500	88.46	11.54	100
1500-2000	100	00.00	100
>2000	100	00.00	100

Source: Field Survey, 2014

Table 4 reveals the literacy rate of Gokulpur Village among the sampled household. It have been identify that the highest percentage of literate population (100 percent) belong to the income group of 1500-2000 and more than 2000, on the other hand lowest percentage of literate population (78.57 percent) come under the income group of 500-1000. Highest percentage of illiterate population (21.43 percent) comes under the income group of 500-1000. So, it have been concluded that literacy rate of Gokulpur Village is very good in the compare to the literacy rate of West Bengal.

Table: 5 Level of Education of the Population Among the Sampled Households, Gokulpur Village, 2014

Income Group	Primary	Secondary	Higher Secondary	Graduation	Post Graduation	Total
<500	73.68	18.43	7.89	0	0	100
500-1000	65.45	27.28	7.27	0	0	100
1000-1500	45.65	36.97	13.04	2.17	2.17	100
1500-2000	42.22	46.67	11.11	0	0	100
>2000	27.91	34.88	9.30	13.95	13.95	100

Source: Field Survey, 2014

The table 5 reveals that the level of education status of Gokulpur Village. It have been counted that the highest percentage of students (73.68 percent) belong to the primary level and come under the income group of less than 500, on the other hand lowest percentage of students (27.91 percent) belong to the same level and come under the income group of more

than 2000. In the secondary level highest percentage of students (46.67 percent) come under the income group of 1500-2000 and lowest percentage of students (18.43 percent) come under the income group of less than 500. In the higher secondary level highest percentage of students (13.04 percent) come under the income group of 1500-2000 and lowest percentage of students (7.27 percent) come under the income group of less than 500-1000. Only 13.95 percent of students belong to both graduation and post graduation level which come under the income group of more than 2000 and 2.17 percent of students which belong to the same level and come under the income group of 1000-1500. So, suitable facility should be providing for the study of higher level.

Measurement of Human Development Index

The United Nations Development programme (UNDP) has defined Human Development as a process of enlarging people's choices. This depends not only on income but also on other social indicators like life expectancy, education, literacy and other provisions. The most critical of these wide ranging choices are to live a long and healthy life, to be educated and to have access to resource needed for a decent standard of living. Additional choices include political freedom, granted human rights and personal self-respect. The well being of the people are reflected in a range of social outcomes from among which the Human Development Report focuses on indicators of longevity, literacy and per-capita income. The UNDP classifies each country into one of three development bins: Low human development for HDI scores between 0.0 and 0.5, medium human development for HDI scores between 0.5 and 0.8 and high human development for HDI scores between 0.8 and 1.0.

The Human Development Index of 50 sampled households is calculated by using new method of the HDI.

Table: 6 Table showing the Human Development Index of Sampled Household of Gokulpur Village, 2014.

HOUSEHOLD CODE	LIFE EXPECTANCY INDEX (LEI)	EDUCATION INDEX (EI)	INCOME INDEX (II)	COMPOSITE MEAN (HDI)
01	0.690	0.947	0.495	0.686
02	0.722	0.634	0.279	0.504
03	0.562	0.645	0.479	0.558
04	0.674	0.605	0.289	0.490
05	0.819	0.703	0.343	0.582

06	0.562	0.520	0.330	0.459
07	0.883	0.433	0.281	0.475
08	0.706	0.891	0.473	0.668
09	0.562	1.479	0.388	0.685
10	0.321	0.600	0.429	0.436
11	0.321	0.779	0.289	0.417
12	0.353	0.524	0.279	0.372
13	0.514	0.695	0.231	0.435
14	0.482	0.575	0.231	0.400
15	0.321	0.565	0.330	0.391
16	0.128	0.543	0.289	0.272
17	0.514	0.349	0.231	0.346
18	0.177	0.605	0.429	0.358
19	0.883	0.605	0.461	0.627
20	0.161	0.844	0.199	0.300
21	0.642	0.605	0.502	0.580
22	0.128	0.579	0.262	0.269
23	0.562	0.429	0.429	0.469
24	0.754	0.637	0.356	0.555
25	0.529	0.319	0.470	0.430
26	0.722	0.318	0.257	0.389
27	0.722	0.676	0.231	0.483
28	1.364	0.514	0.257	0.565
29	0.401	0.318	0.215	0.302
30	0.562	0.184	0.257	0.298
31	0.626	0.225	0.240	0.323
32	0.787	0.210	0.270	0.355
33	0.161	0.349	0.231	0.235
34	0.353	0.233	0.266	0.280
35	0.514	0.240	0.335	0.346
36	0.562	0.225	0.231	0.308
37	0.594	0.552	0.257	0.438
38	0.754	0.884	0.435	0.662
39	0.401	0.807	0.429	0.518
40	0.674	0.779	0.389	0.589
41	0.674	0.780	0.406	0.598
42	0.401	0.713	0.436	0.500
43	0.241	0.811	0.397	0.427
44	0.562	0.843	0.422	0.585
45	0.385	0.647	0.378	0.455
46	0.562	0.811	0.443	0.587
47	0.241	0.855	0.397	0.434
48	0.193	0.875	0.367	0.396
49	0.626	0.824	0.406	0.594

50	0.674	0.758	0.406	0.592
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From the above calculated HDI value of 50 sampled household of Gokulpur village it can be concluded that the height HDI value is 0.686 and the lowest value is 0.235. the Human Development Index of India is **0.554** and the HDI value of west Bengal is 0.492 but in this village 67.50% of the sampled household has less than 0.5 HDI value and only 32.50% of the sampled household has HDI value above 0.5 but not more than 0.7. Though the per capita income is not so good but for the average education index and in some cases for the high life expectancy the HDI value come out in these type. In the case of 28 no household per capita income is very low but for the maximum life expectancy there come out a average HDI value .As the maximum percentage household have lower HDI value than the West Bengal and India so it can be easily concluded that this village is not developed like the belonging state and country.

Conclusion

Apart from the discussion, it has been concluded that the Human Development Index of Gokulpur village is not very good, as far as the Human Development Index indicators i.e., Health, Education and Income. Health condition and educational qualification of Gokulpur Village is very poor. By the combining all three indicators (i.e., Health, Education and Income) of Human Development, have got the HDI value (composite mean). The maximum value of HDI found in the HH-code 1 which is 0.686 whereas the minimum value of HDI found the HH-code 33 which is 0.235. For the overcome this condition should be maintain some important suggestions and recommendations such as, Govt. should take proper steps for the development of the Gokulpur Village, to be establish Govt. Hospital and Medical Store in the Village, implementation of rational management of natural resources (Water, land, energy etc.), development of transport systems which are environmental and accessible to all, advancement of environmental/social education and education for the health, provide more educational opportunities, technical and vocational training for the people of Gokulpur Village and road condition is very bad, so communication should be maintain by the Government for overall infrastructure should be developed for the Gokulpur Village.

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