



Munich Personal RePEc Archive

Economic backwardness of Uttar Dinajpur : a block level analysis

Roy, Chandan

Kaliyaganj College, West Bengal, India

26 May 2011

Online at <https://mpra.ub.uni-muenchen.de/40376/>
MPRA Paper No. 40376, posted 31 Jul 2012 14:09 UTC

Economic Backwardness of Uttar Dinajpur: A Block Level Analysis

Chandan Roy

Assistant Professor in Economics

Kaliyaganj College

Kaliyaganj, Uttar Dinajpur

1. Introduction

Economic prosperity of a state depends upon the numbers of economic opportunities available to the inhabitants of the state. On one hand it hinges upon the geographical advantages that include both natural bounties and location-specific conveniences. On the other hand it requires an entrepreneurial approach both from the ends of public and private sectors to exploit those resources. Historical evidences witnessed that districts of North Bengal have long been deprived from providing adequate support and security in successive planning and other thrust policies. Location related disadvantages and poor infrastructure compared to their southern counterparts keep these districts in perennial stages of underdevelopment. Uttar Dinajpur shares the same kind of economic misfortunes along with other districts. The district came into existence on 1992, after the bifurcation of erstwhile West Dinajpur District. The district is one of the most backward in the state and within the district also the degrees of backwardness varies across the blocks in terms of different economic indicators. The inhabitants of the district depend mostly on agriculture for their survival and economic livelihood.

1.1 Objective: My objective in this paper is to primarily portray the present economic situations of the districts reflecting the economic potentials of the districts also. Then my intention is to address few multidimensional development issues across different blocks of the district and thereby expressing need of few specific policies to restructure the development process of the district as a whole. At the end, I wish to find out whether there lies any factor of hindrance for which development efforts fail to convert into desirable output. If the input-output conversion factor is low and varied across sub-district level, then no matter what major efforts are endeavored to escalate the district development rate the ultimate outcome would be dismal. Therefore a meaningful exploration has been attempted in the concluding section of this paper.

1.2 Methodology: Past Studies on development indicators [Banerjee and Ray (1998), Bhattacharya(1998), IMAR (2002)] have helped me to choose three broad development indicators to capture the economic backwardness at sub district level.

- I. Demographic Attributes;
2. Livelihood Indicators;

3. Infrastructure Indicators;

Data matrices have been prepared on the basis of the latest available data set, including UDDHDR (2010). Under the broad development indicators few sub indicators are chosen to capture the development impact and thereby to trace out block level regional backwardness in specific sector.

As block level time series data is not available, therefore, no serious comparison of development indicator over time has been attempted. In stead of analyzing through a rigorous econometric exercise, the analysis of this paper is confined within construction of a scale free Composite Index and its degree of comparison across different blocks of the district.

The chosen sub indicators under Demographic Attributes are as follows:

- (i) Population Growth;
- (ii) Population Density;
- (iii) Sex Ratio;
- (iv) Literacy Rate;

The chosen sub-indicators under Livelihood Indicator are as follows:

- (i) Net Cultivating Area per Agricultural Worker,
- (ii) Cultivator to Agricultural Labour Ratio;
- (iii) Percentage of HHI workers;
- (iv) Rice Yield ;
- (v) NREGS Beneficiaries;

The third broad dimension of development that is considered in this study, is related to development of infrastructure, which can be captured through following sub indicators:

- (i) Percentage of Villages connected by pucca roads;
- (ii) Number of Health Centers per 1000 persons;
- (iii) Number of Hospital Beds available per 1000 persons;
- (iv) Number of Primary & Upper Primary Schools per 1000 persons;

(v) Teacher- Pupil Ratio;

The Composite Index constructed to capture the block-level disparities in development, is as follows:

$$CI = \frac{\sum_{i=1}^N x_i}{N \bar{x}}, \quad \text{where } CI \geq 1$$

Where, $\sum_{i=1}^N x_i$ = Block Level variable in ith-indicator

\bar{x} = District Average in ith-indicator

N = Number of Indicators used at Block Level

It must however be emphasized that composite indices at two points of time are not directly comparable, since the indicators used at a point of time would be different from the other depending on the availability of the comparable data. However, within these constraints some broad conclusion based on the ranking of the blocks have been endeavoured.

The index value of unity would indicate the district average, while values above and below the value one would indicate positive and negative divergence from the district average in respective development dimension. This would at a time reflect block-level development disparities and concentration of development efforts in major blocks.

2. Historic Background of Underdevelopment

The district Uttar Dinajpur came into existence on 1st April, 1992, after the bifurcation of erstwhile West Dinajpur District. The earlier and undivided West Dinajpur district came into existence in August 1947, with the partition of Bengal. The British, at the time of withdrawing their reign from India, ordered the Partition of India. The province of Bengal was dissected into two parts in accordance with that partition. The dividing line passed through the district Dinajpur, the portion lying to the west of the line was named as West Dinajpur

There is no sufficiently satisfactory evidence available so far regarding the name of the district. However, the most popular belief behind the origin of this nomenclature was from the famous Bengal Chieftain namely, Raja Danujmardana. As a matter of fact historical evidence suggests, Danujmardana Dev was the title of Raja Ganesh, who became the King of Gaur in the early part of 15th Century. Another relatively unpopular myth regarding the origin of the name of the district circles round the description about the economic conditions of the inhabitants of this place. They say Dinajpur has been coined from “Dinajanpur”, which in Bengali means “Place of Poverty-stricken People”. In fact inhabitants of this district used to suffer from natural calamities, like drought, flood, famine as well as from deterioration of the laws and order situation of the then Bengal.

In 1905, Dinajpur was included in the new province of Eastern Bengal and Assam. In 1912, it became district of Bengal. In August 1947, it ultimately ceased to exist as undivided Dinajpur, as it was divided into two parts and thus West Dinajpur came into existence. The district consisted two sub divisions (i) Raiganj Sub Division, (ii) Sadar Balurghat subdivision and ten police stations namely, (1) Balurghat, (2) Kumarganj, (3) Gangarampur, (4) Tapan, (5) Raiganj, (6) Hemtabad, (7) Bansihari, (8) Kushmundi, (9) Kaliyaganj, (10) Itahar;

After bifurcation of the district in 1992, Uttar Dinajpur consists of two sub divisions Raiganj and Islampur. Raiganj is the district head quarter including four blocks under it, Raiganj, Hemtabad, Kaliyaganj, Itahar. Islampur subdivision was merged with the erstwhile West Dinajpur in 1959 after carving out it from Bihar. Islampur subdivision includes five development Blocks in it, namely, Chopra, Islampur, Goalpokher I, Goalpokher II, Karandighi. The districts thus consists of 9 development Blocks, 3 Municipalities (Dalkhola, Raiganj, Kaliyaganj) and nine police stations

The present economic situation designates Uttar Dinajpur among the least developed districts in West Bengal as well as in India, with high level of illiteracy; low-health care and livelihood access and wide spread rural poverty. Although it is a predominantly agricultural district, rapid population escalation restricts the absorption of new rural work force into farm based employment, while low level of urbanization restrains the growth of the non-farm sector.

3. Block-Level Analysis on Development & Backwardness

Uttar Dinajpur district has ranked 16th among nineteen districts of West Bengal in terms of overall size and 17th in terms of over all population of the state. The district remains rural with an urbanization rate of just over 12 percent, while the state average rate of urbanization is 28 percent. Development situations of the district are greatly influenced by the demographic attributes and livelihood opportunities, though significance of infrastructure sector in the perspective of socio economic development can never be undermined.

3.1 Demographic Attributes

(i) *Population Growth:* Uttar Dinajpur is the fastest growing district in terms of population, which is assumed to be largely influenced by internal and external migration. Internal migrants came from the neighbouring state like Bihar and neighbouring districts like Malda, Darjeeling. The historical back ground reveals that post partition had led a continuous flow of migrants from Indo-Bangladesh border and Uttar Dinajpur district was no exception owing to its long international border. However, migration led population growth represents availability of better economic opportunities. Therefore it is a positive indicator of development.

The disaggregate analysis has revealed that Uttar Dinajpur experienced 28.72% population growth in 1991-2001, while the state average growth rate was 17.84. Chopra, Goalpokhar-II, Karandighi experienced higher rate of population growth than the district average.

(ii) *Population Density:* Uttar Dinajpur ranks 10th among other districts of West Bengal and 2nd among the North Bengal districts in terms of population density. In 2001, the average population density of the district stands at 778 / sq km, while the state average is 904 / sq km. Islampur, Karandighi and Raiganj block shows the greater amount of population density compared to the district average. It reflects better living opportunities have attracted people over other regions to concentrate over this place. One

striking feature of observation is Karandighi shows high population density with highest population growth during the last decade, while Chopra exhibits lowest population density with substantially high population growth

(iii) *Sex Ratio*: This measures the number of women availability per thousand of male population and represents a gender dimension of development, which is conducive to development. Sex Ratio is fairly stable in the district (942 in 2001) compared to the state average (932 in 2001). Itahar block shows the highest ratio followed by Karandighi and Islampur, while Chopra remains the worst performer.

(iv) *Literacy Rate* : This is another major indicator which acts as a catalyst of development. This has been found to aggravate modernization of agriculture, better earning capabilities, reducing mortality rate and raising school enrolment of children. However, the average literacy rate of the district is at a very abnormally low level and dismal performance of three blocks, namely Goalpokhar-I, Goalpokhar –II and Karandighi has outweighed the achievement of other blocks. Hemtabad and Kaliyaganj are the excellent performing blocks in this category.

Construction of C I on Demographic Attributes : On the basis of the above indicators Composite Index of development attributes across blocks have been constructed and the blocks have been ranked according to their corresponding CI scores. Raiganj topped the list followed by Karandighi, while two bottom rankers are Goalpokhar- I and Itahar.

Table :1 Demographic Attributes of Uttar Dinajpur

Blocks	Population Growth	Population Density	Sex Ratio	Literacy Rate
	1991-2001	2001	2001	2001
Chopra	34.58	589	938	43.3
Islampur	27.94	854	947	38.9
Goalpokhar-I	26.47	703	941	31.6
Goalpokhar-II	34.48	703	940	34.1
Karandighi	38.57	824	947	37.6
Raiganj	23.14	1106	938	51.5

Hemtabad	24.87	620	942	56.7
Kaliyaganj	26.46	763	943	54.1
Itahar	10.03	688	960	47.4
Uttar Dinajpur	28.72	778	942	47.9
West Bengal	17.84	904	934	68.64

Source: UDHDR(2010), Census -2001.

**Table :2 Composite Index of Demographic Attributes of Uttar Dinajpur
(scale free)**

Blocks	Population Growth	Population Density	Sex Ratio	Literacy Rate	Total Score	Average Score	Rank
	1991-2001	2001	2001	2001			
Chopra	1.20	0.76	0.99	0.90	3.85	0.96	5
Islampur	0.96	1.09	1.00	0.81	3.86	0.97	4
Goalpokhar-I	0.93	0.90	0.99	0.66	3.48	0.87	8
Goalpokhar-II	1.20	0.90	0.99	0.71	3.80	0.95	7
Karandighi	1.34	1.06	1.01	0.78	4.19	1.05	2
Raiganj	0.81	1.42	0.99	1.08	4.30	1.08	1
Hemtabad	0.87	0.79	0.99	1.18	3.83	0.95	6
Kaliyaganj	0.92	0.98	1.00	1.13	4.03	1.01	3
Itahar	0.35	0.88	1.02	0.99	3.24	0.81	9

3.2 Livelihood Indicator

- (i) *Net cultivable land per agricultural labour*: This means pressure on land and represents a positive dimension in development. Decline in ratio would indirectly indicate incidence of disguised employment, which has a negative dimension in the process of development. The district average ratio in this indicator is 0.37, where blocks like Raiganj, Itahar, Kaliyaganj show excessive pressure of agricultural workers on land.

- (ii) *Cultivator to agricultural labour ratio*: It represents an impact of land distribution in favour of cultivator and would have a positive impact on productivity. The district average ratio is 0.75, where Goalpokhar-I is the best performing block followed by Raiganj and Kaliyaganj. Better implementation of land reforms desirably brings higher productivity and higher agricultural income. Karandighi is the poorest performing block in the district.
- (iii) *Rice Yields*: As rice is assumed to be the principal food grain, rice yield can be represented as an indicator of income potential and there by contributing a positive impact on development. Karandighi, Hemtabad, Raiganj blocks are among good performers, while Goalpokhar-II and Chopra are the bottom rankers.
- (iv) *Percentage of HHI (House-Hold Industry) workers*: It denotes the strength of dependence on secondary sector. Higher ratios of this indicator represent higher level of development. Karandighi block is the best performing block in this category , while Goalpokhar-I and Chopra are worse performing blocks.
- (v) *NREGS (National Rural Employment Guarantee Scheme)*: NREGS was launched in district on 2006 as a flagship rural employment intervention programme, where there is a gross mismatch between the size of rural workforce and the available opportunities for regular rural wage work. The district ranks 13th in terms of the number of issuance of job-cards. Raiganj block contains the highest number of NREGS beneficiaries, followed by Goalpokhar I and Itahar. Hemtabad, Kaliyaganj, Goalpokhar II are neglected blocks where the percentage of beneficiaries are far below than the district average.

Construction of C I on Livelihood Indicators:

Scale free CI on Livelihood Indicator induce me to infer that regional disparities are present across the blocks at substantial level. Karandighi block tops the list of livelihood opportunity index followed by Goalpokhar-I and Raiganj, while Hemtabad and Islampur are two bottom ranking blocks.

Table 3: Livelihood Indicators of Uttar Dinajpur

Blocks	NCA/ AW (sq km)	Cultivator/AL	Rice Yield (kg/ha)	% of HHI Workers	NREGS Beneficiaries
	2001	2001	2001	2001	2008
Chopra	0.58	0.89	1895	1.5	45686
Islampur	0.43	0.86	1784	1.6	41808
Goalpokhar-I	0.34	1.07	2331	4.8	52723
Goalpokhar-II	0.47	0,61	2456	2.7	40715
Karandighi	0.35	0.56	2823	9.8	49425
Raiganj	0.32	0.64	2497	2.3	63259
Hemtabad	0.43	0.62	2608	2.0	26211
Kaliyaganj	0.33	0.93	2264	2.4	39672
Itahar	0.32	0.72	2330	3.1	49891
Uttar Dinajpur(Average)	0.37	0.75	2368	3.7	45710

Source: UDHDR(2010), Census -2001.

Table :4 Composite Index of Livelihood Indicators of Uttar Dinajpur (scale free)

Blocks	NCA/ AW (sq km)	Cultivator /AL	Rice Yield (kg/ha)	% of HHI Workers	NREGS Beneficiaries	Total Score	Average Score	Rank
	2001	2001	2001	2001	2008			
Chopra	1.57	1.19	0.80	0.41	0.99	4.96	0.99	4
Islampur	1.16	1.15	0.75	0.43	0.91	4.40	0,88	8
Goalpokar-I	0.92	1.43	0.98	1.29	1.15	5.57	1.11	2

Goalpokhar-II	1.27	0.81	1.03	0.73	0.89	4.73	0.95	5.5
Karandighi	0.95	0.75	1.19	2.65	1.08	6.62	1.32	1
Raiganj	0.86	0.85	1.05	0.62	1.43	5.01	1.00	3
Hemtabad	1.16	0.83	1.10	0.54	0.57	4.20	0.84	9
Kaliyaganj	0.89	1.24	0.96	0.65	0.87	4.61	0.92	7
Itahar	0.86	0.96	0.98	0.84	1.09	4.73	0.95	5

3.3 Infrastructure Indicators

(i) Number of Health Centers: This indicator represents a higher medical facilities to the inhabitants, which is definitely a positive dimension of development. Itahar and Goalpokhar blocks have maximum number of health centers, including sub canter.

(ii) Number of Hospital Beds/ 1000 persons: Against the current WHO norm of 3-Hospital Bed Availability per 1000 persons, the national targeting is 1. But the district average was far below than that level, i.e., 0.17. Raiganj provides the maximum number of hospital beds per thousand population, while Karandighi stands the worst performing block.

(iii) Number of Schools (primary + upper-primary)/ 1000 persons: This is a positive indicator of development. Hematabad block excels in this category, followed by Kaliyaganj, while Goalpokhar –I is the worst performing block.

(iv) Teacher-Pupil Ratio: This ratio represents a positive dimension of development. Against the national norm of 40 pupil-teacher ratio (i.e., 0.025 Teacher-Pupil Ratio), the district average is 66 PTR (i.e., 0.015 TPR). Kaliyaganj, Raiganj and Hemtabad blocks are good performing blocks in this category, while Goalpokhar-I, Goalpokhar-II and Chopra are bottom rankers.

(vi) Percentages of Villages connected by paved roads: This indicator is conducive to development as it helps in raising income, living conditions, education and so on. Raiganj, Chopra, Itahar blocks have scored better than the district average, while Goalpokhar-II and Hemtabad are poor performing blocks.

Construction of CI on Infrastructure Indicators

CI on infrastructure indicators reveals a block level disparity in respective infrastructure component. Blocks under Raiganj sub-division provide better infrastructure facilities , while blocks under Islampur subdivision perform worse due to low level of infrastructure facilities available in Karandighi, Goalpokar-I and Goalpokhar-II.

Table 5: Infrastructure Indicators of Uttar Dinajpur

Blocks	Health Centers/ 1000 persons	Hospital Beds / 1000 persons	Schools / 1000 persons	Teachers / pupils	% of villages connected by paved roads
	2004	2004	2004	2004	1991
Chopra	0.16	0.08	0.63	0.012	0.93
Islampur	0.12	0.28	0.52	0.013	0.86
Goalpokar-I	0.17	0.06	0.48	0.117	0.93
Goalpokhar-II	0.15	0.07	0.56	0.012	0.79
Karandighi	0.14	0.09	0.43	0.013	0.82
Raiganj	0.11	0.48	0.52	0.020	0.89
Hemtabad	0.17	0.17	0.78	0.019	0.75
Kaliyaganj	0.13	0.32	0.71	0.021	0.94
Itahar	0.17	0.10	0.71	0.018	0.91
Uttar Dinajpur(Average)	0.14	0.17	0.495	0.015	0.88

Source: UDHDR(2010), Census -2001.

Table 6: Composite Index of Infrastructure Indicators of Uttar Dinajpur (scale free)

Blocks	Health Centers/ 1000 persons	Hospital Beds / 1000 persons	Schools / 1000 persons	Teachers / pupils	% of villages connected by paved roads	Total Score	Average Score	Rank
	2004	2004	2004	2004	1991			
Chopra	1.14	0.47	1.28	0.78	1.05	4.72	0.94	6
Islampur	0.88	1.29	1.05	0.84	0.98	5.04	1.01	5
Goalpokhar-I	1.19	0.35	0.97	0.78	1.06	4.35	0.87	8
Goalpokhar-II	1.07	0.53	1.12	0.78	0.89	4.39	0.88	7
Karandighi	1.02	0.53	0.87	0.87	0.93	4.22	0.84	9
Raiganj	0.81	1.94	1.05	1.35	1.01	6.17	1.23	3
Hemtabad	1.18	1.41	1.58	1.29	0.85	6.31	1.26	1
Kaliyaganj	0.95	1.41	1.43	1.42	1.07	6.28	1.25	2
Itahar	1.22	0.53	1.44	1.18	1.01	5.38	1.08	4

4. Weak Development Conversion Ratio

The preceding section was dealt with the process of development of the district where the inbuilt disparities exist within the very nature of development efforts, while in this section we are eager to find out the Input-Output Conversion Ratio (Development Conversion Ratio) in development process. Rapid development of a region must have the prerequisite of high development conversion ratio. Poor Correlation between Input Variables and Output Variables of any region also marks the degrees of backwardness of the region which reinforces its inability to convert effectively investments and inputs into viable outcomes and outputs.

Primarily, we may conceptualize the notion of Input Variables and Output Variables within the following available data variable of the district at regional level and then we intend to find out the Rank correlation between input and out variables in different segments. Another objective of this section is also to find out the input-output conversion ratio of the development parameters across the sub district level to uncover the hidden hindrance factors in the pace of development.

Input Variables:

We have chosen three input variables which can be treated as representative variable of physical infrastructure, health and education, the three key sectors in development contribution.

- (i) Percentage of Area covered under irrigation: This indicates the connectivity of the water source to different farmland across the blocks. Though agriculture is supposed to be the mainstay of livelihoods in the district, the availability of year round opportunity is critically dependent on access to irrigation and the resulting ability of the farmers to bring tracts of farmland under year round cultivation.
- (ii) Number of Health Centers (including hospitals): Health is assumed to be one of the most significant social infrastructure which raises human capital in the path of sustainable development. Solidarity of a nation depends upon the health situations of its inhabitants. Number of health centers can be treated as a representative input variable.
- (iii) Number of Schools: It is another significant most development indicator in the path of progress. After the launching of Right to Education, the government has to priorities the issues in order to ensure education of the human capital of the state. Education is related to better earning, better way of living, better method of agriculture and so on. The district has been declared as the lowest literate district even in the recent census-2011, therefore adequate attention needs to be provided regarding this issue.

Output Variable

- (i) Work Participation Rate: Worker to population ratio or Work Participation Rate is attached here as a corresponding output variable of percentage of area under irrigation at sub-district level. Rate of work participation in Uttar Dinajpur is marginally higher compared to state average. However the degree of livelihood dependence on agriculture is much higher than the state average. Thus Output –Input ratio can explain the degrees of performance across blocks of the state.
- (ii) Number of Patients successfully discharged (excluding deaths) : This can be taken as an output variable of health issues against the number of Sub Health Centers and Block Primary Health Centers across the blocks. Number of health centers are expected to increase the number of successful patient discharges from those centres. Therefore a strong association between this input and out variable is expected to exist.
- (iii) Number of Children attending Schools: Against the number of schools (primary and upper primary) , the number of children attending the school can be considered as the primary output in education development sector, though children attending school is also influenced by a major factors like education level of guardians, poverty level, road infrastructure, sex of the children and so on. To read the conversion ratio in education sector we would consider Number of students in the schools as corresponding out variable of number of schools.

Table7: Input- Output Matrix in Development Paradigm

Blocks	Input Variables			Output Variables		
	% of Irrigation Access	Number of centers (SHC + BPHC)	Schools (Primary - Upper Primary)	Work Partici- pation Rate	Patients Discharged From SHC + BPHC	No. of Children Attending Schools (P + UP)
Chopra	60.0	38	154	31.4	4144	55146
Islampur	58.0	41	172	32.8	13657	48812
Goalpokhar-I	55.0	44	126	44.2	1680	36190
Goalpokhar-II	61.0	37	137	33.3	923	43873
Karandighi	68.0	50	151	40.7	3975	50663

Raiganj	63.0	62	283	41.6	21538	68030
Hemtabad	81.0	21	99	40.4	2844	26615
Kaliyaganj	67.0	34	180	45.3	10069	39877
Itahar	69.0	46	192	46.4	3516	47177

Source: Census, 2001, UDHDR 2010,

Descriptive Statistics on Health Index

	Mean	Std. Deviation	C.O.V.	N
HEALTHC	41.4444	11.3370	27.35	9
PATNTDIS	6932.8889	6861.5933	98.97	9

Correlations

		HEALTHC	PATNTDIS
HEALTHC	Pearson Correlation	1.000	.546
	Sig. (2-tailed)	.	.128
	N	9	9
PATNTDIS	Pearson Correlation	.546	1.000
	Sig. (2-tailed)	.128	.
	N	9	9

The statistical summary on Health variables reveal a high degree of variation of output variables (cov= 98.97) across the blocks compared to its corresponding input variables (27.35). This reveals the medical services/ facilities are not equally available in all blocks even if the variation in number of health centre is less. However, the number of health centers and patient discharge show an insignificant association between each other, which on other hand implies that the degree of conversion is weak in this sector.

Descriptive Statistics on Education Sector

	Mean	Std. Deviation	C.O.V.	N
SCHOOLS	166.0000	52.3163	31.52	9
STUDENT S	46264.777	11797.272	25.5	9
	8	3		

Correlations

	SCHOOLS	STUDENT S
SCHOOLS	1.000	
STUDENT S		1.000

SCHOOLS	Pearson	1.000	.833
	Correlation		
	Sig. (2-tailed)	.	.005
	N	9	9
STUDENT	Pearson	.833	1.000
	S Correlation		
	Sig. (2-tailed)	.005	.
	N	9	9

** Correlation is significant at the 0.01 level (2-tailed).

The descriptive summary of statistics on Health Indicators reveals that the degree of association is quite significant between number of schools and children attending the school. Therefore the conversion ratio is quite strong in this sector, perhaps due to efforts of Sarba Sikhsha Mission in respective sector. However, the variation in school establishment is more across the blocks than the number of students attending the schools.

Descriptive Statistics on Irrigation and Work Participation Rate

	Mean	Std. Deviation	N
IRRIGTN	64.6667	7.7298	9
WPR	39.5667	5.6888	9

Correlations		IRRIGTN	WPR
IRRIGTN	Pearson	1.000	.337
	Correlation		
	Sig. (2-tailed)	.	.376
	N	9	9
WPR	Pearson	.337	1.000
	Correlation		
	Sig. (2-tailed)	.376	.
	N	9	9

Since the bulk of work participation in the district depends on agriculture, therefore access in irrigation can act as a major input variable in WPR. However the degree of association is very weak between these two variables, implying degree of access in irrigation has hardly any influence in work participation in agriculture. This is an alarming deduction, however and also reveals a weak conversion ratio in agrarian sector.

5. Way Ahead

An overall development effort is no longer playing a significant role in either elevation of the district development rate or reducing regional disparities. It has been observed that the over all backwardness of the district is attributed to the dismal performances of different blocks over different development parameters. Sometimes commendable progress of few blocks is being out- weighed by the extremely miserable performances of one or two blocks. Therefore, it calls for an area specific and parameter specific development efforts. The development conversion ratios are also quite weak and presence of variations is observed in different input out indicators of Infrastructure sector, too. Unless the development ratio can be strengthened the beneficial impact of the policies cannot be percolated in every section of the society. Within the limited scope of analysis this paper intends to suggest some block specific policy recommendation as follow:

- Chopra:
- (i) Land Reforms to be revamped as well as agricultural productivity;
 - (ii) Literacy Rate to be augmented including Teachers-Pupils Ratio;
 - (iii) Number of Hospital beds to be improved;
- Islampur:
- (i) Literacy Rate, which is substantially low, needs to be improved significantly
 - (ii) Agricultural productivity has to be raised;
 - (iii) Health facilities to be increased raising the number of health centers and sub-centers;
 - (iv) Teacher-pupil ratio needs to be raised
 - (v) Manufacturing sector and physical infrastructure to be developed with greater thrust;
- Goalpokhar-I
- (i) Literacy rate (lowest in the district) has to be increased with greater efforts;

- (ii) Agricultural productivity needs to be raised;
 - (iii) Hospital beds to be increased;
- Goalpokhar-II
- (i) Literacy rate, number of schools and teacher-pupil ratio need to be increased to reduce the education level backwardness;
 - (ii) Manufacturing sector to be developed;
 - (iii) More employment opportunities to be created;
 - (iv) Hospital beds to be raised;
 - (v) More village approaching paved roads to be constructed;
- Karandighi:
- (i) Literacy rate to be raised;
 - (ii) Hospital beds to be increased;
- Raiganj
- (i) Health Centers and Sub Centers to be raised, as the population density is quite high in this block.
-
- (ii) More manufacturing sectors to be generated;
- Hemtabad:
- (i) More livelihood opportunities to be created;
 - (ii) Manufacturing sectors to be created;
 - (iii) Physical infrastructure to developed;
- Kaliyaganj;
- (i) More manufacturing Sectors needs to be generated;
 - (ii) Number of NREGS beneficiaries to be raised;
- Itahar:
- (i) More livelihood opportunities to be created;
 - (ii) Heath infrastructure to be consolidated;
 - (iii) Education infrastructure needs to be revamped.

Thus development requires a diversified process of growth to reduce the block level disparities in different development parameters and strong degrees of cohesion between input and output variables in different spheres of development. Otherwise the rapid progress of the district through development ladder would remain a pipe dream.

References:

BAE&S (2004): District Statistical handbook for Uttar Dinajpur, Bureau of Applied Economics & Statistics, Government of West Bengal, 2004

Banerjee Sarmila and S.Ray, (1998), On Construction of District Development Index in West Bengal, Economic and Political Weekly, XXXIII, November 21-27/December 4, pp.3019-3026.

Bhattacharya, Basabi (1998) Urbanisation and Human Development in West Bengal, A District Level Study and Comparison with Inter-state Variation, Economic and Political Weekly, XXXIII, November 21-27/December 4, pp.3027-3032

IAMR (2002): Report on Comparative Backwardness on North Bengal Region, A study sponsored by Planning Commission, GOI, Institute of Applied Manpower Research, November, 2002.

UDDHDR (2010): Uttar Dinajpur District Human Development Report, HRDCC, Development & Planning Department, Government of West Bengal, 2010.

