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Geo-Economic Analysis of Resource Development in Hooghly District, West Bengal, India

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Abstract:
"Resource are the bases of both security and opulence; they are the foundations of power and wealth. They affect man's destiny in war and peace alike" (Zimmermann, 1951). Resource development all over the world has, unfortunately, been far away from optimum. Fast expanding human population and the ever-growing demand for food, clothing and shelter have brought about great stress on resources which are mostly finite. The study of resources, their exploitation, utilization and development process is an important aspect for the development of any region. The paper attempts to discuss in this context to get the ideas before undertaking the present study.

Keywords: *Resource, Opulence, optimum, exploitation*

1. Introduction

The study of resource development helps to understand the relationship between man and his activities." The word resource does not refer to a thing or substance but to a function which a thing or substance may perform or to an operation in which it may take part namely the function or operation of attaining a given end such as satisfying a want". (Zimmerman, 1933)

People have been manipulating the physical environment to satisfy their needs, this process is called resource development. Typically, resources cannot be consumed in their original form, but rather through resource development they must be processed into more usable commodities. In the words of Mitchell" resource development represents the actual exploitation or use of a resource during the transformation of neutral staff into a commodity or service to serve human needs and aspirations". (Mitchell)

Growing size in the modern world has created high demand for various types of resources which has brought about a great stress on resources.

The study of resources, their exploitation, utilization and development process is an important aspect for the development of any region.

2. Study Area

The district Hooghly is located in between 23° 01´ 20"N to 22° 39´32"N and 87 °30´ 20" E to 88° 30´ 15" E. The total area of this district is 3149 sq.km. (1216sq. mile) which is 3.55 percent of the total geographical area of the state.

The boundary of Hooghly district is covered by the Hooghly river (sharing with Nadia in the east & north 24 parganas in the south-east) in the east, Bardhaman in the north. Howrah in the south, Paschim Medinipur in the west, Bankura in the north – west. It has 4 sub – division, 18 development blocks, 12 municipalities, 23 police stations, 210-grampanchayat. (Map -1)

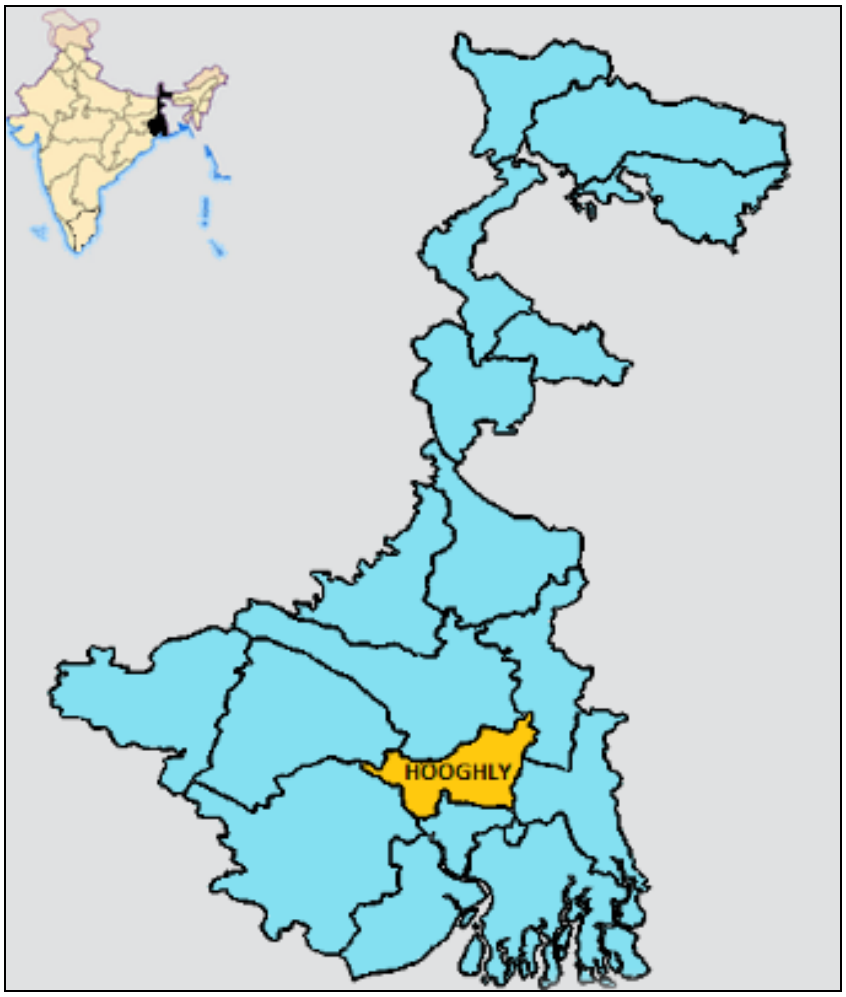

Figure 1: Location Map of Hooghly District (Map not to scale)

2.1. Objectives of the Study

This study not only discuss the developable resources but also intends to find out the present condition and future prospects of resource.

The main objectives of this dissertation is to:

i. To analyse the physical setting and infrastructural facilities for development & utilization of resource.
ii. To evaluate the present level of resource development.
iii. To analyse the availability and uses of land, water, soil & human resources.
iv. To describe the agricultural development.
v. To show the favourable environment condition of industrialization of this district.
vi. To assess the future prospects of resource development.

Hooghly district is quite rich in various types of neutral resources. Hooghly is one of the most economically developed district in West Bengal. It is rich zone both in agricultural and industry. Most of the land of the district is alluvial type of soil that is fertile for agriculture. The district has some good facilities for industrial development. If the development is possible of the district the regional balance of the state should be a good sign of our national economy.

3. Data Source & Methodology

The study is based on from both primary and secondary data sources. The primary data have been collected through observation & secondary data have been collected from the various government and private sources. Some statistical information on this level are not published. West Bengal District Gazetteers (2001), Census of India (2001 & 2011) , District Human Development Report (2011) , Government of West Bengal – Office of the Additional District Magistrate , District land & Land Reforms Officer, and District Statistical Handbook (2011 & 2012) are the main source of secondary data.

First at the pre- field stage the study of different books, plan for collection of different data from different offices and visit almost of all the blocks was so important to collect the primary data. After Collecting the of all data I have tried to prepare this paper to show the physical setting, examines appraisal and uses of resource.

3.1. Physical & Cultural Settings

3.1.1. Physical Settings:

History: Hooghly district is one of the districts of the state of west Bengal in India. It can be alternatively spelt Hooghly or Hugli.

The district of Hooghly derived its name from the town of Hooghly situated on the west bank of Hooghly river about 40 k.m north to Kolkata.

Relief features:

Relief features are one of the most important factors of resource development. The district is a completely flat land with no place having more than an elevation of 200mt.

According to genesis and evolution of landforms, the district can broadly have divided into two divisions i.e.;

i. Old alluvial plains to the west of river Dwarakeswar
ii. The monotonous level alluvial plains in the east which can be further divided intoa. Natural levee b. Meander floor plainc. Alluvial plain.

Drainage: The district is rich in natural drainage lines. the total length of the drainage in Hooghly district is 461. 83k.m. Damodar, Dwarakeswar, Hooghly, Mundeswari and Saraswati are the main rivers of Hooghly district. The others tributaries are Sankari, Ghea,Kunti,Dankuni –khal and Baidyabati khal etc.(table-1)

River	Length in k .m
Bhagirathi	72.0
Damodar	30.40
Mundeswari	41.60
Darakeswar	46.40
Sankari	17.60
Ghea- kunti	59.56
Dankntia	31.03
Kana – julkia	24.15
Saraswati	31.21
Cut – kunti channel	11.00
Dankuni khal	10.60
Ghuhgir khal	9.80
Baidyabati khal	9.50
Ilsurah kedarmoti	66.98

Table 1: River in Hooghly district
Source: Department of irrigation, Govt. of West Bengal

Bhagirathi: Hooghly (Bhagirathi) is the principal river of the district, flows *the eastern part of the district about 72.0k.m.*

Damodar: It originates from Chota Nagpur plateau. The total length of the river in Hooghly district is 30.4 k.m.

Dwarakeswar: It is a major river in the western part of West Bengal. It originates from Tilboni hill in puruliya district and passes through Hooghly district. The total length of the river in Hooghly district is 46.4 k.m.

Geology: Geology, the entire district is established with alluvium. Sub-surface lithologies down to a depth of 150mt from surface consist mainly of slit, clay and sand of different grades varying from fine to coarse. The eastern parts are clayey and deep; while the western part of the district are loamy.

Climate: Hooghly district has a Tropical Savana climate.

Temperature-The district does not suffer from the extreme of temperature which remains with in favourable range for cropping and other resource use. The annual mean temperature is 26.8 c although mean temperature range from 16 c to 33 c and maximum temperature in Hooghly often exceed 38 c.

Rainfall-Rainfall is the most important factor which directly affect the cropping pattern and the nature & sequence of agricultural operation. Maximum rainfall occurs during the monsoon in august and the average annual total rainfall is above 1500mm.

3.1.2. Infra - Structural Facilities:

It is a comprehensive term covering such items as transport and communication systems, health and education services etc.

Tranport: Tranport plays an important role in economic development. Road, railways and waterways are the major means of transport in the district. National highway 57 k.m, State highway 234 k.m, District road 313k.m,1210 k.m of other district road, 8169k.m of village roads and 447.6 k.m of Prime minister's Gramin Sarak Yojana road covered the road communication of this district.

The railway communication of the district especially all the suburban area is very developed. Bandel is the railway headquarter of the district. There are four junction of Hooghly and these are; Bandel junction, Dankuni junction, Kamarkundu junction and Seoraphuli junction. The railway of the district is under Howrah division.

There are so many block in this district covered by waterways. Hooghly, Damodar and Darakeswar rivers connected the different blocks by waterways.

Power resource:"Power is an important source of energy and it influences the economic life of a country in many ways".

Hooghly district occupies a preeminent position in power generation. It has a large scale development of electricity and thus plays an important role in the country. The Bandel thermal power stations with in the district & Vikdas thermal power station can be a boon for the proposed industries for Hooghly. In this district upto the report of 31st march 2012 all mouzas are electrified. The supply of electricity by West Bengal state board(WBSEB).

The total consumption of electricity by different sectors is 1541161 thousand K.W.H(table 2) Consumption of electricity by different sectors in the district of Hooghly 2011-12

Sectors	Domestic	Commercial	Industrial	Public light	Agricultural irrigation	Public water works & sewage pump	Railway traction	Miscellaneous
Consumption of electricity thousand(K.W.H)	539470	113405	745940	6351	102328	16017	1131	16519

Table 2

Source: Division Engineers, W.B.S.E.D.C.L, Chandannagore, Serampore, Arambag, Mogra, Singur- Haripal, Tarakeswar.

Education**:** Education is the one of the key components of human development. Education plays an important role in the economic development of an area as it helps in the development of the resources. According to 2011 census 82.55 percent of the population was literate which is greater than to the state average (77. 08%). There is spatial variation of literacy in the different blocks of the district. The number of primary schools are 3028, middle schools are 61, high schools

Health services:"Good health is a state of physical and mental well being necessary to live a meaningful, pleasant and productive life"(David byrne). Health and nutrition are the two main thrust areas for human resource development. Good health is most essential for human power. There are 60 primary health centre (PHC)162 sub-health centres & 6 sadar hospital in the district (2011 census). Most of the PHC are located in sadar sub –division.

Banking services**:** The growth of banking is related to the rise in the level of economic development. It is an important indicator of economic growth of any region.There are 192 commercial and 33 gramin bank at the end of December 2011.The average population served by an office of commercial and gramin bank works out to be 17111 persons.

3.2. Resource Dimensions & Use

3.2.1. Water Resource

Water is an essential resource for human life. Supply of fresh drinking water and development resources for irrigation and industrial purpose an important aspect of any development plan. The primary source of water is precipitation.

Rainfall-The district receives a mean annual rainfall 1500mm of which about 80 percent occurred in the period extending from May to October. So it is necessary that proper assessment and conservation of this vital resource be done for the development of the district.

Surface stream-About one third of the annual rain water flows on the surface through small and big streams. The district is drained mostly by Damodar, Darakeswar and Hooghly river.

Ground water-:" Water that occupies pores and soil below the surface and above the near of impermeable materials is called ground water" (R.M.Lodha).

Water utilization: - Water, a basic necessity for all forms of life and a critical element of man's development activities, has multiple and competitive uses"(White,1976).

In Hooghly district, irrigation, industrial& domestic uses are three major uses of water.

Irrigation-Among the uses of water for productive purposes, irrigation stands first in the district. About 209.49 thousand hectares of cropped area was irrigated in 2010-11, which is 42.9 percent of the total cropped area.

Sources of irrigation:

Canal-Canal is the most important source of irrigation. About 45.8 percent of the irrigated area receives water through canals.

Tank-Tank is another important source of irrigation in the district. The contribution of tanks in irrigation is16.4 percent.

Other source-About 38.8 percent of irrigated area is accounted for by other sources of irrigation including river lift scheme, open dug well and shallow tube well.
Drinking purpose and industrial uses: The district has a population of 5520389 (census 2011). So the demand of drinking water is very high. A huge quantity of water resource using in industry of this district.
Others uses of water: They may include such minor uses as fishery and inland navigation. According to the "District statistical handbook 2011" about 23094 hectares net area available for pisciculture. There is much scope for the development of fish culture in the reservoirs and tanks.

3.2.2. Forest Resource

Forest are one of the renewable resources which may increase or decrease with time depending on natural conditions and the rate of exploitation. Tropical forests are found in the district. According to the records of the forest department the total forest area as per 2011-12 is 299.41 hectare, (including reserve forest. Protected forest and un-classed state forest). The portion of forests in the district 0.10% which is lower than the to the state percentage of 13.38. The total amount of revenue collected from forest is 5592000 R.s. (2011-12 report)
Reserved forests: The reserved forests cover an area of 211.93 hectare which is 70 per cent of the total forest area of the district.
Protected forests: The protected forests cover an area of 77.26 hectare which is 25.8 percent of the total forest area of the district.
Un-classed state forest: More than 5 percent of the total forests of the district are un-classed state forest.
Apart from the social forestry, small patches of forest land are located at Arambag range (chandur forest) and Goghat -1 (Bhadur forest) in Hooghly district. This forest area is richly endowed with variety of teak species as well as Bamboo,Akashmoni,Arjun and Mennjiri, etc. Total amount of forest land is 853.60 acres distributed over three blocks like Arambag,Goghat -1 and Goghat -2. In terms of past history, it is observed that long back these areas were under Sal or riverine species crop.
The forest region under plantation extends over three types of areas; these are;
a) Areas which are on the river bank, have sandy soil, are subject to inundation, as well as dry patch, high soil temperature during summer.
b) Areas which are exposed to large scale inundation during rains, mostly in pardra and bhadur.
c)Highlands with established crops of teak or other different species in areas like pardra and bhadur mouza.

3.2.3. Land and Livestock Resources

Soil is the most important and ubiquitous resource of the earth. The soil of Hooghly district is fertile, therefore the development of agriculture practice increasing day by day. The soils of Hooghly district are classified into three; these are as follows;

Clayey soil-belongs to 64.84(000ha)area which is 29 percent of the total area of the district.

Clayey loam soil-The proportion of 36 percent of area is under clayey loam soil generally found in the eastern part of the district.

Loamy soil-Such type of soil located in eastern and western part of the district. The soil is very much fertile.

Landuse: Land is necessary for human survival because it provides man with living space with food and with a number of raw materials which are used in satisfaction of his wants. Based on the classification scheme of the "Directorate of agriculture govt .of W.B"landuse of the area may be divided into following; (Table – 3)

Land use	**Area in thousand hectares(2011-12)**
Forest	0.53
Area under non agricultural use	96.61
uncultivated Barren &land	0.17
Permanent pastures & grazing land	0.03
Cultivated wasteland	1.47
Net sown area	211.27
Current fallow land	0.71

Table 3

Source: Directorate of agriculture, W.B

The distribution of forest in this district is dispersed. The area under non –agricultural use includes water, settlement, rail-roads and industrial areas. Barren and uncultivated category are included infertile land. Cultivable waste land includes such lands which are cultivable but not actually cultivated due to socio-economic limitations. Current fallow land category includes all those lands which are under temporarily out of it for a period of not less than one year and not more than five years.
Net sown area is the actual physical area under crops .Hooghly district is one of the most widely cultivated areas of the state.
Cropping pattern: Agriculture of Hooghly district is on subsistence type. The principal crops in the Hooghly districts are paddy, wheat, potato, jute, chilies, oil seeds and ginger. fruits and vegetables are also cash crops of the districts. It covers 66.29 thousand hectares of area. The main vegetables are produced in the districts are tomato, cabbage, cauliflower, peas, brinjal, onion, ladies finger and radish.

Livestock resource: The total livestock population of the district is 1865685.of these animals 451252(24.1%) are cows,75123(4.02%) bulls and bullocks,434460(23.2%) young stock,31301(1.6%)buffaloes and 873549(46.8%) are other livestock. The district is developed in poultry farming. The total poultry population of the district is 3116070(table -4).

Category	Cows	Bull & bullocks	Young stock	Buffaloes	Sheep	Goats	Pigs	Other live - stock	Poultry population
No. of population	451252	75123	434460	31301	5497	759716	29060	79276	3116070

Table 4: Live- stock & poultry population in the district Hooghly, 2007
Source: Live – stock census report, Govt of W. B

3.2.4. Human Resource

Productive power of man is considered as human resource. This productive power in addition to physical ability, includes knowledge, skill, creative abilities, experience and attitudes."Man plays a unique role in the overall scheme of resource development" (Zimmerman). According to State Human Development Report (SHDR) Hooghly district rank 6th among 18thdistrict of west Bengal in HDI index.

Distribution of population-The total population of the district is 5520389 which are distributed in 18th development blocks over an area 3149 sq. km with regard to total population.

Distribution of population are divided into two; Rural population & Urban population. The total no. of male population is 2814653 and female population is 2705736.The no. of male and female population lived in rural areas is 3390646(61.42%).the rest 2129749(38.58%) lived in an urban areas mainly Serampore and Chandannagore sub- division.

Higher concentration of rural population in Hooghly district is due to extensive fertile agricultural land.

Density of population-The relation between population and natural resource in the simplest form may be expressed by the man –land ratio called density. The density of population in Hooghly district is 1753/sq. k.m which is more than the state population density (1029/sq. k.m). There is marked spatial variation in the density of population. The highest density of population found in Serampore sub-division (3479/sq. k.m) and lowest density of population is found in Arambag sub –division. There are many factors are responsible for the variation of density of population; such as agricultural, industrial development and the problem of flood in major areas of khanakul-1 ,khanakul-2 and Arambag sub- division.

Occupational structure: Analysis of the occupational structure of population forms an important component of human resource assessment.

The working population of the district has been grouped in two broad categories; total workers (39.01%) & non-workers (60. 99%).Total workers included cultivators (12.06%), agricultural labourers(27.10%), household workers (5.19%) and other workers (55.65%)(table-5).

Distribution of population over different categories of workers (number) & non-workers in the district Hooghly,2011

Sub - division	Total workers	Cultivators	Agricultural labourers	Household workers	Other workers	Non-workers
Sadar sub-division	700721	82685	270518	26828	320690	956797
Chandannagor	428460	51081	89685	21678	266016	698716
Serampore	551235	24649	51375	36518	43869	918614
Arambag	472454	101265	171802	26804	172583	792148
District total	215280	259680	583380	111828	1197982	3366275

Table 5
Source: Census of india,2011

3.2.4.1. Literacy

According to the census of 2001, literacy has been defined as the ability to read, write with understanding. Literacy and education are the most dominant dimensions affecting quality of human resources in terms of knowledge and skill. The overall percentage of literacy rate in Hooghly district is 81.80 which is higher than the average of the state (77.07%).

There is a variation in literacy rate in Hooghly district. The highest literacy rate (91.10%) found in Chinsurah block & lowest one (75.14%) found inPolba – Dadpur block. (table-6)

Sub- division	Rural male	Rural female	Urban male	Urban female	Total male	Total female
Chuchurah	82.39	69.46	90.08	81.87	84.84	73.37
Chandannagore	86.28	74.70	90.43	82.13	88.03	77.76
Serampur	86.46	75.90	90.95	84.67	89.78	82.31
Arambah	85.66	71.90	86.96	75.00	85.73	72.07
District total	84.78	72.09	90.51	83.12	87.03	76.36

Table 6: Percentage of literacy by sex in rural & urban areas in the district Hooghly, 2011
Source: Census of India, 2011

The literacy rates also vary widely with age, sex & rural to urban areas. The male literate population in Hooghly district is 87.03 percent, where the female literacy rate is 76.36 percent.

3.2.4.2. Industries

Industrialization is an important part of resource development. It is most important aspect of resource.

Hooghly district has been famous for agro-based industries .The large scale industries of the district were established after independence. The industries of the district may be divided in the following categories;

i. Agro –based industries
ii. Forest based industries
iii. Livestock based industries
iv. Chemical industries
v. Local demand based industries
vi. Others industries

During the year of 2011-12 the number of micro and small industrial unit is 3440 and the total employment in these enterprises amounts to 41793 persons. The total no. of employment in large and medium industries is 100597. Industries in any region flourish if that region has a past legacy of developed industrial establishment or if that region provides requisite infrastructural facilities like rail and road connectivity, water and electricity supply, availability of suitable workforce, proximity to potential markets etc. Hooghly district satisfying most of these features becomes one of the industrially developed district in west Bengal.

Industrial history-Historically industrialization in the Hooghly district can be traced back to 17^{th} and 18^{th} centuries from when different industrial units came in to existence with the development of various European settlements along the river Bhagirathi, namely Chinsurah, Chandarnagore, Serampore, Hooghly and saptagram. The traditional industries in the district were silk and cotton, handloom weaving, chikanembroidery, brass & bell – metal manufacture, bricks and tiles, rural oil pressing, indigo and manufacturing hook etc.

Later on large scale modern industrial units,like different jute and cotton mills, thermal power plant, Hindustan motors, Dunlop rubber industry Tribeni tissues, J.K steel plant and Hindustan National Glass manufacturing company and Angus works (manufacturing railway wagon companies) have been set up mainly the municipal areas of Konnagar, Rishra, Serampore, Champdani, Hooghly, Chinsurah and Bansberia.

Actual industrialization in Hooghly- According to UNDP the selected indicators of actual state of industrialization in the district are;

a. Proportion of household industry workers to total workers.
b. Employment in micro & small scale Enterprises (MSSE).
c. Total production of units covered by khadi and village industries board.

The district of Hooghly ranked many pioneer industries such as the first jute factory in India was established at Rishra and paper industry at Serampore. The district is rich in agro –based industries like cold storage, rice mill and saw mill.

Large scale industries/public sector undertaking are as bellows;

Sl NO. Name of the unit

i. Aditya Birla Insulators
ii. B.D casting L.t.d
iii. Calcutta spring L.t.d
iv. Downstream units of HPL
v. Himadri chemicals & industries L.t.d
vi. J.P floor mills pvt L.t.d
vii. J.K steel
viii. Tribeni Tissues
ix. Kusum Industries
x. Tirupati ferro alloy udyog (p) L.t.d

Medium scale industries are as belows;

Sl NO. Name of the unit

i. Mother dairy
ii. Angus works
iii. Bhusan industries L.t.d
iv. Anmol biscuits L.t.d
v. Oriental trimex L.t.d
vi. Hooghly ispat L.td
vii. Jaya biscuits L.t.d
viii. Eastern paper mill
ix. The general industries L.t.d

3.3. Problems, Prospects & Planning

3.3.1. Levels of Resource Development:

"Resource development represents the actual exploitation or use of a resource during the transformation of neutral stuff into a commodity or service to serve human needs and aspirations" (Mitchell,1979).

The levels of resource development for the different blocks in the district have been determined through some variables. These variables **are;**

i. Food grain production hectares or area of cultivable land.
ii. Irrigated area in percent.
iii. Exploitation of ground water in percent.
iv. Number of industrial units
v. Number of persons engaged in industries.
vi. Literacy rate,
vii. Communication systems
viii. Rural and urban areas,
ix. Health status
x. Non –agricultural workers and Sustainable development programme.

3.3.2. Problems of Resource Development:

There are so many problems in Hooghly district for the development of resources;

Flood-Almost in every year the district is affected by flood in major areas of khanakul-I, khanakul-II, Arambag sub-division and Tarakeswar blocks .Specially khanakul-I,khanakul-II remain water logged for a long days due to heavy rainfall as well as due to discharge of DVC water thorough Damodar, Mundeswari, Darakeswar rivers only for their topography.

The miserable flood situation in this district causes miseries to the local people increasing the death toll of both human beings as well as animal population every year.

River bank erosion- One of the most commonplace problems related to environment hazard in alluvial river bank erosion associated with meandering or braided river system. The irrigation systems in Hooghly has developed mainly on the basis of five rivers like Bhagirathi., Damodar, Mundeswari, Darakeswar and sankari. A number of areas of Hooghly district have been exposed as vulnerable to bank erosion of any these rivers. Itis observed that khanakul is the most affected p.s by erosion in both banks of Mundeswari and Darakeswar river. Several places of Pursurah, Arambag, Jangipara Jamalpur and Ghatal p.s are the other greatly affected regions by erosion of any of the aforesaid rivers except Bhagirathi.

There are so many impacts found by bank erosion;

a. Ecological issues,loss of habitat& biodiversity
b. Loss of infrastructure and poverty
c. Other physiological, socio – cultural & economic charges.

Arsenic pollution in ground water-For the last twenty years arsenic pollution in ground water has become a matter of grave concern.It is naturally occurring geological phenomenon that is found in different depths in different concentration underground. Usually over exploitation of ground water is deemed to be the factor behind arsenic pollution. The Balagarh block of Hooghly district is affected by arsenic pollution. The problem of groundwater pollution by arsenic is found in the inter-fluvial region of the Bhagirathi Hooghly river of west Bengal. Principal source of arsenic is the arsenic sulphides mineral deposited along with clay, peat with iron in the relevant environment. In several places of Balagarh block of Hooghly district, arsenic contamination in tube well water has been detected at levels and above the aforesaid permissible limit. The list of such places is indicated below.(Table – 7)

Village Name	Depth (m)	Arsenic mg / l	Chloride mg / l
Sultanpur	21.35	0.08	21.28
Badhagachi	21.35	0.12	28.37
Aid kismet	12.30	0.17	10.64
Arji guptipara	30.50	0.06	14.18
Paigachi	48.80	0.17	10.64

Table 7
Source: Executive engineer,
Hooghly division, P.H.E,2009

Problems of solid waste-With proliferation of economic activities and spread of the culture of consumerism arises the environmental problem relating to proper disposal of huge industrial and municipal wastes. This include discharge of waste from living and industry as well as bio- medical waste matters that are broadly associated with spill – over effects of urbanization and population growth.

In Hooghly 12 municipalities have been faces solid waste problems.

Sewerage and sanitation -Serampore is one of few municipalities having the record of earlier implementation of the sewerage system during the first part of eighty. About 60 percent of the total municipal area is having the sewerage network and the rest 40 percent needs to be done in comprehensive manner.

Poverty-The growing economic opportunities of the people are found to be inversely related to the level and extent of economic deprivation and poverty. Three measures of poverty namely B.P.L poverty, human poverty & the modified capability measures of poverty clearly establish the inverse relationship between livelihood opportunity at the sub- district level and the incidence of poverty. But livelihood opportunities are limited. Overall 21.61% of the households of the district are under B.P.L category. Antodaya Anna Yojana, AnnapurnaAnna yojana have introduced to feed the B.P.L families to emancipate them from hunger. But unfortunately the achievement in this regard is far below the target.

Others problem- Inspite of having a strong foundation of education in the district, still around 20 percent of the population of the district is illiterate. Health hazards is another dimension of weakness of the district in socio-economic aspects of development. Several diseases like diarrhea. T.B a major problem in some parts of Chinsurah – Mogra and Chanditala-I block.

3.3.3. Planning & Prospects for Future Development of Resource

Planning for the future prospects of resource development is a difficult matter because all the planning I to be done on the basis of present and past and it is not visible that what sudden changes are to

Major area of strength of the district is its fertile soil and diversified agriculture. The agro-climatic conditions of the district are suitable for multiple crops which are grown throughout the year. Given the fertile alluvial soil of the district and along with irrigation facilities multiple crops are grown in Arambag, Haripal and Tarakeswar block. “Chandramukhi” potato is abundantly grown in Chandarnagar, Arambag and Tarakeswar of this district. Potato based industry is under consideration. There is an ample opportunity for the development of agro-based industry in the district.

Name of the prospective agro-base industries are as follows; Rice mill, Cold storage, Cattle feed/ poultry feed, bekari, Jam, jelly, potato powder, Tomato concentrate, dairy plant/Milk products and Squash & syrup.

Weaving is an important traditional industry in Hooghly. There are a number of weavers, co-operatives which often function along the line of sub contracting. In this district “Dhaniakhali” handloom series is famous in India and abroad. Cottage and small scale industry constitutes a major segment of the districts economy. It provides maximum employment opportunities next to agriculture. It is required to plan especially by government for textiles industries especially of silk and Baluchari sari of Dhaniakhali and Begampur.

Poultry farming of Arambag block is also the opportunity for employment in this district. More over the famous electrical decoration industry of Chandernagore is very popular all over India and in abroad too. So there is a great opportunity for the employment of young generation in this district.

The another opportunity for the resource developed of this district of its location .The district is only 40k.m away from the state capital and well connected by railway, road, water communication services. In near future Bishnupur and its adjacent areas will also be included in railway map of this district.

The forest resource of Arambag and Goghat areas has always been remarkable .From these areas medicinal flora and fauna various forest products are exported to the home and other state also. These areas have good potentiality to develop the Ayurveda products and forest products also. This may generate several employment opportunities for these purposes. Research and planning is necessary for this purposes by government.

There is much scope for the development of fish culture in the reservoirs and tanks.

Hooghly is a culturally affluent district in West Bengal. The important tourist destinations of the district are ‘Muslim Imam-Bara’ ‘Bandel church’, ‘Hansweshwar Temple’, birth place of Sarat Chandra Chattopadhay, Tarakeswar temple. So cultural tourism has a good potentiality for the future development of the district.

There is much scope for the development of film industry from is aesthetic environment.

It is require developing the infrastructure especially by water conservation projects, supply of good quality of drinking water for the measurement of arsenic pollution. Solid waste management in the municipal areas and a proper planning to reduce river erosion and taken steps for the human development index by the governmental planning.

The man power planning in the district should aim not only to create jobs but also to improve them qualitatively. An integrated approach is necessary for resource development in the district.

4. Conclusion

Concluding remarks-Through this discussion I want to explain the resource development prospect of these districts by different means. The district has tremendous potentialities in the development of cultural tourism that are expected to create a far impact on human resource development .I will hope that the suggestions present status and favourable geographical and other socio-economical conditions should be encourage the development of resource in this districts. This should be a future socio-economic development tern of these district.

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