



A Geographical Appraisal of the Haldia Industrial Region, West Bengal

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Abstract

Location of any industrial activity is always influenced by a number of factors; it may be economic, social, historical, political and so on. When one industry is located in a particular place, it attracts more entrepreneurs who establish other industries there because of availability of common infrastructure like power, transport, finance, labour etc. Thus such a region develops more while the other regions remain backward. To overcome such regional imbalance regarding industrial as well as economic development, Planning Commission of India recommended for decentralization of industries. This means, an industry is scattered in different regions of the country. The Fourth plan (1969-1974) puts greater emphasis on the industrial dispersal through a preferential treatment of industrially backward areas. Specific financial and tax concessions were also offered to encourage movement of industries to 'backward areas'/'no industry' districts. Accordingly, State Government also adopted a mission to facilitate geographic dispersal of investment activities across the state; particularly in lesser industrially developed regions of the state. Midnapur district of West Bengal was considered as 'industrially backward' as per the criteria setting by the Planning Commission. Under the supervision of planning cell of Town and Country Planning Department of West Bengal, a development draft plan for Haldia industrial complex was formulated. Today, Haldia is one of the largest industrial townships of Eastern India. Present study makes an attempt to explore the nature and causes of industrial dispersal with Haldia as a case study.

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Introduction

Several models on industrial location assumed that the entrepreneur often seeks to maximize his income but in practice actual pattern of location departs from the economically optimum location for a variety of reasons. In India since independence, the pattern of location of industrial activity is not merely guided by market forces but also by deliberate public intervention. There is a general tend to set up all types of industries in an area where they are able to enjoy some common infrastructure already developed in. Such regional concentration appears to have continued near to the growth centre for a long time by which certain imbalances are created. Dispersal of industries is therefore is essential to bring about decongestion. The need to correct the imbalance in the pattern of industrial location was felt by the Central Government. Respective state governments also made vigorous effort giving the preferences in favour of industrially backward areas. In pre-independence era, the

industrial growth of West Bengal was centred around Howra, Kolkata, Asansol and Barrackpore due to road and rail connectivity, nearness to raw materials and availability of labour nearby. Construction of Haldia port provides the base upon which present industrial development lies. Opening of IOC refinery in 1975 definitely added additional magnetic force to this region.

Objectives

The following objectives have been taken in to consideration for the study:

1. To identify the factors determining the regional industrial growth
2. To examine the regional industrial structure and
3. To review the growth profile of industries.

Study Area

Geographically Haldia is located in an area enclosed by 22°03'43.93"N and 22°04'53.00"N latitudes and

88°07'53.15"E and 88°09'03.61"E longitudes. It is about 77 km away from Kolkata in the Purba (East) Medinipur district of West Bengal, near the confluence of two rivers, Hooghly and Haldi. Haldia is best known for its port and industrial activity. With the establishment of Haldia port, a large number of industries promoted by leading industrial houses came in which have shaped Haldia as what it is today.

Database and Methodology

The study is based on secondary data. Maps and related information are obtained from various published and unpublished sources which include annual reports of different years of Haldia Development Authority, Haldia Municipality and some leading industrial houses. Statistical data are collected from District Census Handbook published by Bureau of Statistical Information and Planning, Govt. of West Bengal and quarterly bulletins of Directorate of Industry, Govt. of West Bengal. The relevant data and information are then organized, classified, tabulated and analysis with the help of suitable statistical and cartographic techniques and finally represented by maps and cartograms.

Industrial Growth in Haldia

Industry occupies an important place in the economy complex of each economic region in the country. Consequent upon the industrial decentralization policy of the West Bengal government, Haldia industrial complex came into existence through vigorous effort and efficient industrial planning. The mutual relationships among several economic, social and physical factors help in the expedient organizing of an industrial complex. The specific combination of factors influencing its development also determines the character of formation of the industrial complex. The rate of industrial development in any region has been influenced by a number of factors. Haldia is not sited within the mineral rich regions of India; it is the port which acts as the triggering factor for its industrial development.

Since inception, Haldia dock complex continued to increase its capacity in all spheres like construction of new berths and jetties, acquisition of new cargo handling equipment and promoting the growth of industries. The strategic location, good connectivity, availability of land and labour constitute additional advantages for Haldia. Industrial infrastructure is basically defined as physical framework of facilities through which goods and services are provided to the industrialists.

An adequate infrastructure is needed both to increase the productivity of domestic industry and attract to Foreign Direct Investment in even a backward region. Haldia development authority made sincere effort to shape Haldia with world class infrastructure. The nature of the infrastructure in the regions is as

follows:

1. Physical Infrastructure:

(a) Land: For setting of large scale industrial plants, a good amount of land is available in newly developed town. Haldia development authority is primarily responsible for acquiring the land and making it available to the industrialists. An area of over 16,000 acres land is being developed by HDA in 2012-13.

(b) Water: HDA has constructed 30 MGD water supply plant at Geonkhali near Haldia, where water from the river Hooghly is treated and supplied to both domestic and industrial consumers. Haldia municipality also provides piped water supply round the clock. Construction and commissioning of an underground reservoir, pump house and pipeline network is under work.

2. Economic Infrastructure

(a) Electricity: A 132 KV substation ensures uninterrupted supply from the Kolaghat Thermal Power Plant 50 km away from Haldia. The West Bengal State Electricity Board has two substations at Chiranjibpur and Basudevapur. HDA has two substations at Kshudiramnagar and Dighasipur. Hooghly Met coke and Power Company set up a 60 MW captive power plant at Haldia. CESC also has proposed to establish 100 MW thermal power plant for which land has already been allotted.

(b) Transport: Haldia is accessible both by roadways and railways. National Highway- 41 connects the port city with NH-6 (Kolkata Mumbai Road) at Kolaghat. A state Highway also effectively serves different parts of downtown and the industrial area. The proposed bridge at Raichak Kukrahati will significantly improve connectivity with Kolkata and also extending northward connectivity to Haldia with Kolkata Airport and NH-34 leading to North Bengal and North east India. The South Eastern Railway connects Haldia with Kolkata and rest of the country via Panskura. The Haldia port is well connected with the Railways and a huge bulk and container cargo is exported and imported through railway network.

(c) Port: Haldia port provides the base for industries in Haldia. There are about twelve berths with various cargo handling facilities in the dock complex. Moreover, the industrial belt is well connected through navigable rivers and canals. Presently, ferry service is available between Kukrahati-Raichak and Kukrahati-Diamond harbor.

(d) Telecommunication: The latest telecom services and postal facilities are present in Haldia. Optical fibre is gradually replacing the traditional cable networks. BSNL, Reliance and such other companies have already launched their cellular phone services there.

Haldia Development Authority assists the entrepreneurs in obtaining telecom and fax connections on a priority basis.

(e) Banking: Several Public Sector Banks and other public financial institutions including LIC, GIC, Gramin Bank operate in the area and have branches in Haldia. Many banks such as SBI, PNB, HDFC etc operate in the area and have branches in Haldia. Some of these banks have also installed ATMs in the city at selected locations.

(f) Tax Benefit: Haldia, which falls in East Midnapore district, is placed in 'b' category under section 80-1A of IT Act. As a result, there will be full exemption from Income Tax for 3 years and 30% exemption for 5 years. Projects at Haldia will also be eligible for certain sales tax concessions.

3. Social Infrastructure

(a) Housing: Haldia has a well defined residential zone in the Southeastern part of the municipality. The companies and organizations like Kolkata Port Trust, IOC, HFC, Electrosteel, Haldia Petrochemicals, Mitsubishi have housing complexes of their own. HDA has constructed many housing complexes and flats for companies and individuals and provide them on lease or rent.

(b) Education: Some of the leading schools and educational institutions in the country such as St. Xaviers, Assembly of God Church, Kendriya Vidyalaya etc have their branches in Haldia. There are also institutions of higher learning like the Haldia Institute of Technology, Meghnad Saha Polytechnic Institute, Central Institute of Plastic Engineering Technology, Haldia law College, Marine Engineering College, Hotel Management Institutions etc. There is also an Industrial Training Centre which ensures availability of technically trained manpower.

(c) Health: The city is well equipped with medical facilities to take care of emergencies, routine check-ups, chronic and complex cases. There are Port hospital, 200 bed Sub divisional hospital as well as 100 bed eye care centers, dental College, primary health care centres and clinics and nursing homes comparable to those in large urban centers.

Over the last two decades or so, several companies have set their plants here and many more are at various stages of implementation. West Bengal Govt. gives some benefits to the entrepreneurs for setting up industries at Haldia. The subsidies are available in the form of State capital investment subsidy, interest subsidy, waiver of electricity, additional employment, refund of stamp duty and registration fee, subsidy for conversion for use of piped gas, subsidy for quality improvement in small sectors, additional

incentives in selected sectors, service related activities, units in SEZ, mega projects, special projects etc.

Industries in Haldia

(A) *Chemical Industry*: The Chemical Industry comprises the companies that produce industrial chemicals. Chemicals are used to make a wide variety of consumer goods as well as thousands inputs to agriculture, manufacturing, construction and service industries. The chemical industry itself consumes 26% of its own output. The reasons for growth of chemical industry in and around Haldia are the port through which a large South East Asian market can be captured, the presence of oil refinery, an all-time availability of water and supply of labourers. The industries that are clearly related to chemical industry include petroleum, glass, paint, ink, sealant, adhesive and food processing manufacturers.

(b) *Petroleum Industry*: The petroleum industry is involved in the global processes of exploration, extraction, refining, transporting (often with oil tankers and pipe lines) and marketing petroleum products. The largest volume products of the industries are fuel oil and gasoline (petrol). Petroleum is also the raw material for many chemical products including pharmaceuticals, solvents, fertilizers, pesticides and plastics. Crude petroleum is imported through Haldia Dock and sent to IOC refinery plant at Haldia. Nearness to port, availability of land and easy access to large domestic as well as international market favour to flourish petroleum industry in Haldia.

(c) *Petrochemical and Downstream Industries*: With the establishment of Haldia Petrochemicals Complex, the planning of the State government for 'downstream growth zone's has been initiated. In this process, dispersal of activities to cover all possible areas of the State will be given priority. West Bengal accounts for almost 4% of India's production of petroleum products and 13% of India's polymer production. The production has almost doubled in the last decade. Crude throughput at Haldia refinery increased to 5,502 million tones and its capacity utilization increased to 91.7% during 2005-06. The total number of HPL downstream industries set up during the period January, 1998 to December 2005 stands at 773 out of which 705 in West Bengal. Of the 705 units set up in the State, 674 are Small Scale Units, 94 are medium Scale and 5 are large scale units.

(d) *Food-processing Industry*: The abundant supply of fruit and vegetables and cheaper labour source allow the state a competitive edge in food processing industry. The State will help in establishing appropriate linkages between growers and processing units. The Govt. has set up food parks to enable small and medium food and beverage units and to use capital intensive common

facilities such as storage, ware house, quality control laboratories, effluent treatment plant etc. In addition, strategic geographic location of Haldia port ensures close proximity to markets in Europe, Far East, South East and West Asia. West Bengal received the approval of eight food parks in 2006-07 including one at Haldia.

(e) *Edible Oil Industry*: The particular reason for setting up such a plant at Haldia is only to take the advantage of Haldia port. A sizable quantity of crude edible oil can be imported from South East Asia and in same way the finished products can be sent into the large world market. Adani Wilmar Ltd started their project at Haldia in 2005 while M/s. Ambo Agro Products Limited with total investment of Rs 36.50 crore initiated the project two years before i.e. 2003. Both the projects are for manufacturing refined edible oil where a large number of people get employed.

(f) *Biodiesel Industry*: Bio diesel is an agro based fuel substitute and can be made from both virgin or used vegetable oils (edible and non edible) and also from animal fats. In West Bengal, bio-diesel is yet to be popularized. Emami group of companies set up a bio-diesel plant at Haldia. Jatropa plant whose oil seeds are used can easily be cultivated even on barren lands. IOC oil refinery and Haldia Petrochemical exist nearby from where the diesel can be brought for blending, adds advantage to the plant.

(g) *IT and IT-enabled Industries*: The Govt. of West Bengal has adopted several measures to spread the IT infrastructure right across the state. The West Bengal Govt. is planning to develop Tier II cities like Haldia, Durgapur and Siliguri and also sub urban areas around Kolkata as next IT hubs for building strong electronics industry and with a view to enhancing exports, two schemes viz. Electronic Hardware Technology Park (EHTP) and Software Technology Park (STP) are in operation. One such Software Technology park was established in Haldia. After getting approval on January, 2006, Haldia Development Authority (HDA) allotted 2.5 acres land to IT Deptt, Govt. of West Bengal for establishing STP near city centre in Haldia along NH41. Within a year, the building was completed and STP started operation since July, 2007. The existing industries at Haldia make Rs. 25 crore out sourcing works which can be operated from STP now. There are engineering colleges like Meghnad Saha Institute of Technology, Haldia Institute of Technology from where highly skilled personnel could easily be obtained. Haldia port is nearby.

(h) *Ship-building Industry*: In West Bengal, in recent times two private companies, Apeejay Shipping Ltd. and Euclix Shipyard Pvt. Ltd. purchased the land from HDA to build shipyards in Kukrahati (Haldia) along the river Hooghly for large and small ships respectively. The presence of Haldia Dock Complex (HDC) nearby acts

as a triggering factor for setting up such industry in Haldia. Haldia is a fast growing industrial town with petrochemical and oil refineries and HDC provide the facilities to handle all types of traffic and bulk cargo. As more and more ships visit the port, there is increased demand for ship repairs. It is expected that these two companies would be able to employ the local people at large scale both as skilled and unskilled labors.

(i) *Automobile Industry*: In Haldia along with other industries automotive manufacturing plant is also found. M/S Ural India Ltd completed their plant and production started from the year 2006. The production capacity is 500 vehicles per annum. Easy access to raw materials such as iron and steel, state's strong tradition of engineering industries, proximity to Haldia port, good transportation and communication network and easy availability of skilled labour are some of the factors that favour the growth of this industry in Haldia.

(j) *Logistic Hub*: The logistic hub is one of the several major public private partnership (PPP) projects being implemented by Haldia Development Authority (HDA). This is the second logistic hub in the state. The Eredence Group is investing up to 420 million rupees for a 50 % stake in a joint venture company, Apeejay Infra-Logistics Pvt. Ltd, to develop a large integrated Logistic Park in Haldia, West Bengal which is a growing trading port and commercial hub for the Eastern Indian city of Kolkata. It is planning to have enough infrastructure in place so that the area can be developed into a world class export hub. This will offer greater employment potentials for nearly 1 lakh people. When this Integrated Logistic hub is in operation it will solve all the problems related to logistic hub. Through this logistic hub, West Bengal may come into forefront regarding industrialization in Asia

(h) *Sugar refinery*: Karnataka based Shree Renuka Sugar Ltd. has set up refinery plant at Haldia at investments of Rs.250 crore and employ 200 people. The project was implemented in two phases. The first phase has completed and started operation since June 2008. The company officials stated that they selected Haldia as the location in view of strategic benefit that it offers with the port and good transportation by rail and road.

Industrial Growth in Haldia

Haldia has been rapidly emerging as an industrial town of West Bengal. Presently, there are about 388 industrial units with an estimated investment of about Rs. 108 billion where 45000 people are directly employed and nearly its double are indirectly employed. The industrialisation process in Haldia is closely associated with the development of Haldia port. The approval for Haldia port was received in early 1960s and the port started its function from February, 1977. The state government has decided to set up some industries

like petro-chemical and oil refinery to take the advantage of port. Accordingly, the govt offered a lucrative package of incentives and facilities to the prospective entrepreneurs so that they would become interested to setting up industries in Haldia. As a result, within two decades, Haldia has transformed from an important port city to the most coveted industrial destination in eastern India as well as gateway to south East Asia.

The Indian oil corporation (IOC) set up their eleventh refinery in Haldia in 1975. Refinery supplies the raw materials for other plants too. Swal Corporation is one of such factory which came up in 1979. Tata Chemicals Ltd. set up their plant in 1979 and started the production within two years. They produce Industrial phosphate and Acids which again used as raw materials for other industries. Exide Industries found themselves in Haldia in 1980-81. Undoubtedly, Haldia refinery and port was the big pull of investment. The focused areas of industrial growth during period (1990-2000) were Petrochemicals, Electronics, Information Technology, Food and Vegetation Processing, Medical plants, Chemicals and Pharmaceuticals, Mineral based industry, Gems and Jewellery, Biotech, Jute etc. Ruchi Saya Company started production of edible oil from 1999. Tata Chemical and South Asian Petro chemicals opened their units at Haldia during this time.

During the period from January 1998 to December 2001, a total number of 492 Haldia Petrochemicals Downstream Industries have been set up. Plastic and Polymer has observed an attractive rate of growth of Haldia Petrochemical downstream industries and State Govt. provides constant support. Industrialization in Haldia gets momentum from 2000 onwards. West Bengal Incentive Scheme which provides several benefits to the entrepreneurs applicable for all large /small scale sectors has come into effect on and from April 1, 2004. Haldia Development Authority (HDA) was entrusted to coordinate for all statutory clearances (Single Window Clearance) and approval process thus became very easy. On One side several new projects came into being and on the other side the industries which already

existed made expansion of the units. Indian Oil Corporation Ltd. (IOC), IOC Petronas Ltd, Manaksia Ltd, South Asian Petrochemicals Ltd expanded their units, while Marcus Oils Chemicals Private Ltd, Sanjana Cryogenic Storages Ltd, RDB Rasayans, Adani Wilmar Ltd. Reliance Industries Ltd, Hindustan Unilever Ltd opened up new plants in Haldia. These all are the assets of any industrial town.

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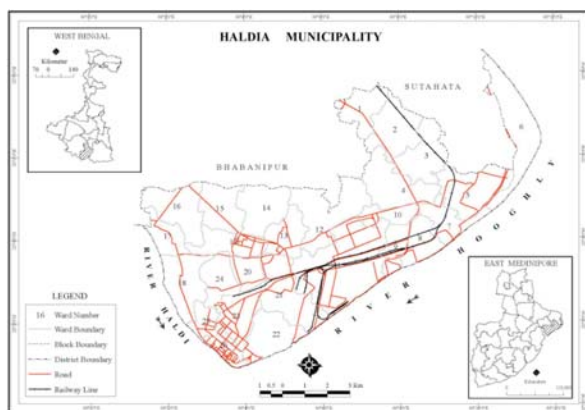


Fig. 1: Location of the Study Area



Fig. 2: Landuse Map of the Study Area

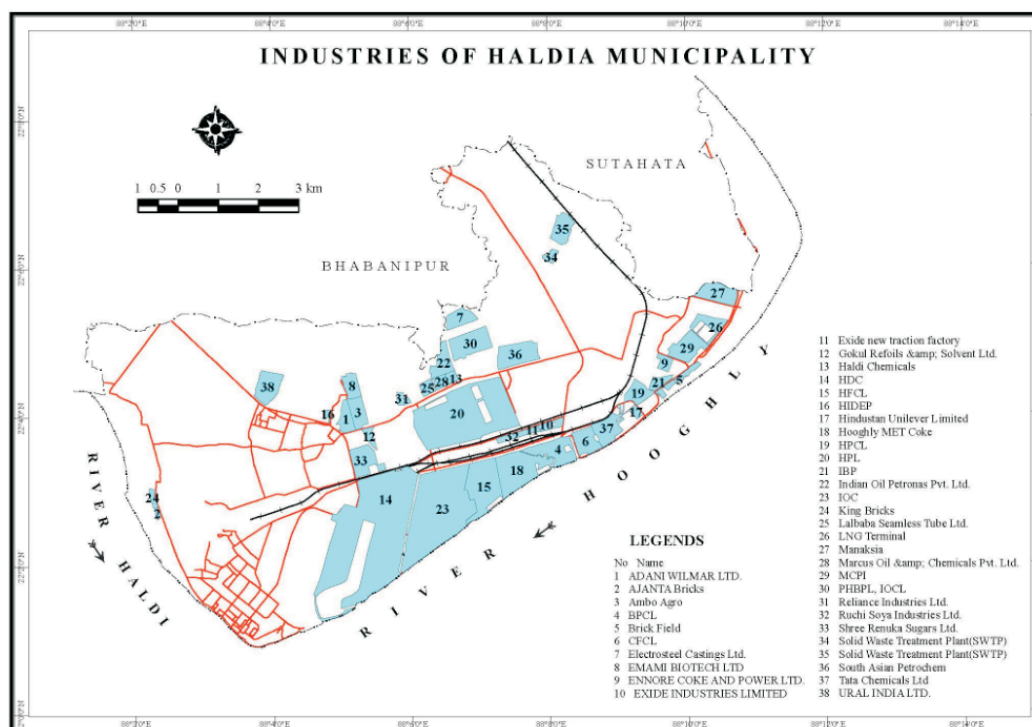


Fig. 3: Location of Industries in the Study Area

Table – 1: Year-wise set up of Major Industries in Haldia

SI No	Name of Industry	Year	SI No	Name of Industry	Year
1	Indian Oil Corporation	1975	16	South Asian Petrochemicals Ltd	2003
2	Tata Chemicals	1977	17	Marcus Oils & Chemicals Pvt Ltd	2003
3	Haldia Dock Complex	1979	18	Sanjana Cryogenic Storages Ltd	2003
4	Swal Corporation	1979	19	Reliance Industries Limited	2004
5	Hindustan Unilever Ltd	1979	20	Adani Wilmar Ltd.	2004
6	Exide Industries	1981	21	IBP Co. Ltd. Haldia	2005
7	Petrocarbon & Chemicals Ltd	1985	22	Hindustan Petroleum	2005
8	Consolidated Fibres and Chemicals	1992	23	Manaksia Ltd	2005
9	Shamon Ispat Ltd	1996	24	R.D.B. Rasayans Ltd	2005
10	Haldia -Barauni Crude Oil Pipeline	1999	25	Electrosteel Castings Ltd	2006
11	Bharat Petroleum Corporation Ltd	1999	26	URAL India Ltd.	2006
12	MCC PTA Indian Corpn. Pvt. Ltd	2000	27	Ambo Agro Products Ltd	2006
13	Haldia Petrochemicals Ltd	2000	28	Hooghly Met Coke & Power Co	2006
14	IOC Petronas Ltd, Haldia	2001	29	Emami Biotech	2007
15	Ruchi Soya Industries Ltd.	2002	30	Renuka Sugar Refinery	2009

Source: Haldia Development Authority, 2009



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