

Position and problem of chemical industry in Bihar

Virendra Kumar*

I. Abstract:- Indian chemical and petrochemical industry now ranks twelfth in the world. The Indian chemical industry contributes 35 percent of India's gross domestic products. The total investment in Indian chemical sector is approximately US 60 billion dollar generating an employment of 1 million. Currently per capita consumption of chemical products in India is about 1/10th of that of the world average. Now India is a leading contributor in chemical industrial market. The states like Gujarat, Maharashtra, Tamilnadu, and West Bengal are more successful in this field than Bihar.

An ample use of chemical products in any industry indicates its diversity and excellence in production process. Present day civilization is solely dependent on chemical products. Without fluent supply of industrial chemicals such as Sulphuric acid, Soda ash, Caustic soda, Chlorine, Nitric acid, the industries like textile, petro-chemicals, paper, coal-chemicals, soap, drugs and medicines, sugar, chemical fertilizers, insecticides, plastics became inexistent. The location of chemical industries mainly depending on knowledge of science and technology, capital and steady market. With the help of these three factors and availability of natural raw materials Gujarat and Maharashtra are able to capture the first two positions in chemical production in India. The state like Bihar needs enormous efforts to reach there.

Bihar has a unique location specific advantage because of its proximity to the vast markets of eastern and northern India, access to ports such as Kolkata and Haldia and to raw material sources and mineral reserves from the neighbouring states. Bihar is primarily an agrarian state and is one of the largest producers of vegetables and fruits in India. Bihar is endowed with water resources both ground and surface water— Bihar receives an average rainfall of 1009 mm each year. Ganga is the main river that flows through the state, joined by tributaries that originate in the Himalayas. Some of the other major rivers are Saryu, Gandak, Budhi Gandak, Bagmati, Kamla and Mahananda. The state

*Research Scholar Deptt. Of Commerce, B.R.A. Bihar University, Muzaffarpur

has a large base of cost effective, industrial labour, making it an ideal destination for a wide range of industries. Food processing, dairy, manufacturing, healthcare are some of the fastest growing industries in the state. The State has planned initiatives for the development of other sectors such as agricultural implements and small machine manufacturing, tourism, information technology, renewable energy etc.

II. Positions of Chemical Industries in Bihar-The erstwhile state of Bihar was bifurcated in November, 2000, and the present Bihar does not have any mineral resources. The state also lost the important industrial sector that went to present Jharkhand. Therefore, Bihar has got only an agricultural sector to rely upon. The base of Bihar's agriculture is its fertile soil and abundant water resources, particularly ground water. Because of its favourable agro-climatic conditions, Bihar produces a variety of crops, vegetables and fruits. Recently, the state is producing flower on a large scale for its domestic and outside market. The state government is stressing for higher agricultural growth with a variety of interventions for technological change. Agriculture Road Map II contains a number of programmes for ensuring higher productivity in agriculture. A strong monitoring system has been put in place to ensure effective implementation of those programmes. The rise in productivity has led to higher rate of growth of GSDP during the last decade. This rise has also led to higher generation of agricultural surplus during the recent years. This surplus has got invested in secondary and tertiary sectors, helping them to grow at high rates.

The growth of an economy is largely dependent on the growth of its enterprises sector which includes both secondary (industrial) and tertiary (services) activities. This is because, with increase in income, the demand for non-agricultural goods and services keeps on growing, resulting in higher growth of the enterprises sector. This expected pattern is also visible in Bihar. As was discussed in Chapter I, during the last 5 years, while the overall Bihar economy has grown at 7.6 percent, the secondary sector has grown at 8.4 percent and the tertiary sector has recorded an even higher growth rate of 10.4 percent. Although the pace is rather slow, this implies a structural change of the Bihar's economy. From (Table 1), presenting the yearly growth rate of the secondary sector in the recent years, one observes that it has varied considerably from (-) 13.1 percent in 2012-13 to 30.6 percent in 2013-14. This variation is also observed for all the four sub-sectors mining/quarrying, manufacturing, construction, and electricity/water supply/gas.

Table 1: Annual Growth Rate of Secondary Sector in Bihar at 2011-12 prices

Sectors	Annual Growth Rate			
	2012-13	2013-14	2014-15	2015-16
1. Mining & Quarrying	8.94	540.62	-54.64	9.38
2. Manufacturing	-33.76	94.49	0.62	24.41
3. Construction	-5.22	6.46	0.82	5.49
4. Electricity/Water Supply / Gas	9.80	2.76	33.42	15.13
Total Secondary Sector	-13.14	30.62	1.86	13.38
Total GSDP	3.93	4.98	13.02	7.14

Source : Directorate of Economics and Statistics, GOB

The level of industrialisation in Bihar is still very low and the contribution of this sector to the state's GSDP stands at below 20 percent, compared to the national average of above 30 percent (Table 2). Indeed, this ratio is the lowest in Bihar; for Chhattisgarh, Gujarat, Jharkhand and Odisha, the ratios are all above 40 percent. Since the contribution of the industrial sector to GSDP in Bihar stands nearly unaltered at 19 percent, it is obvious that whatever modest structural change that Bihar's economy has shown in recent years is due to the higher growth rate of its tertiary sector.

III. Employment Chemical Industries in Bihar-From Table 5, one can notice that the total employment in the large industries (covered by ASI) in Bihar in 2013-14 was 1.14 lakh, which accounts for less than 1 percent of the total employment across all states at 135.38 lakh. The industrial employment not only implies higher productivity of workers, it also means larger employment opportunities for workers who were earlier employed in low-productivity agriculture. Unfortunately, Bihar is yet to reach that stage of industrial development where substantial transfer of agricultural workers is possible, freeing its rural economy of large under-employed workers. The annual wages for workers in Bihar is only Rs. 99.40 thousand, less than half of the national average of Rs. 202.36 thousand. This wage level is indeed the lowest among all the states in India. There could be two reasons for such low level of wages industrial workers in Bihar first, the technological base of the industries in Bihar is comparatively lower and hence the skill level of its workers is also lower and, secondly, the high rate of unemployment in Bihar which exerts obvious downward pressure on wage rates.

IV. Nature of chemical industry in different states of India:-

Though the chemical industry is spread over the country, there is relatively a high concentration along the west coast of Gujarat. Gujarat contributes about 53 percent of the total chemical production in the country, followed by Maharashtra, contributing 9 percent. The other major chemical producing states include Uttar Pradesh, Tamilnadu and Madhya Pradesh. In the case of heavy chemicals, especially inorganic chemicals, availability of fuel is a determining factor, and therefore there is a tendency of these companies to concentrate around power plant. Due to the regional concentration of chemical companies in certain products, logistics costs for the industry have tended to become a significant position of total costs.

Particulars Description of Existing Infrastructure Industrial Land

A. Bihar is one of the largest states of the country in terms of land area. Its total geographical area is around 93.6lakh hectares. Because of its topographical nature, the proportion of total land put to agricultural use is high as compared to other states of India. Out of the total land area of the state, around 57% is under agriculture. Looking at the facts that agriculture is the mainstay of the economy and that the population of the state needs land for residential and other uses, it has been a challenge for the government to be able to carve out land for industrial uses or to convert open lands to industrial lands.

B. BIADA is the key agency for allotting lands/ industrial plots to the prospective units in Bihar. BIADA has four regional offices at Patna, Darbhanga, Muzaffarpur and Bhagalpur. At present, there are 50 Industrial Areas (IA)/ Industrial Estates (IE)/ Large Industrial Estates (LIE)/ Growth Centres (GC)/ Mega Industrial Parks (MIP) under the purview of BIADA.

C. Up to Dec. 2015, BIADA had acquired a total of 5851 acres of land, of which 3324 acres has been allotted to the investors. After allocating the land for infrastructure, 182 acres of vacant land is available at various industrial areas. BIADA to preferably allot lands to manufacturing units.

D. BIADA allots the land in an industrial area after developing necessary infrastructure like roads, power, water and drainage facilities, etc. As on Dec. 2015, 1544 industrial units were in operation in various industrial areas.

E. The State Government has given approval to setting up of industrial units in parks that have industrial plots available for allotment to investors. These are:

- a. Pristine Mega Food Park: The Park is coming up in Khagaria district. It is spread over an area of 98 acres. The park is likely to be operational by this financial year.
- b. Punraser Jute Park: This is the country's only jute park. It is situated in Purnea district. It is spread over an area of 44.30 acres. The park is operational at present.
- c. IT, ITeS and Electronic Manufacturing Park: The State Government has earmarked around 100 acres in Rajgir and 25 Acres in Bihta (Patna) for an IT, ITeS and Electronic Manufacturing Park.
- d. Leather Cluster: It is situated in Muzaffarpur with about 11 acres of land.
- e. Garment Manufacturing Park: It is situated in Bihta (Patna) having 25 acres of land.

All these parks have well developed infra structural facilities for setting up of an industrial unit.

Power

- A. The installed power capacity in Bihar was 3704.63 MW in March, 2015. Out of this, 83.5 percent is coal based thermal power, 14.12 percent is hydro power, and the remaining 2.3 percent is renewable energy.
- B. In terms of ownership, central sector has the largest share, i.e. 77.9%, followed by the private sector/ IPPs (14.7%) and the state sector (7.4%).
- C. The State Government has entered into short term, medium term and long term contracts for power purchases so that power availability does not remain a problem for the state. Due to increased availability of power, the per capita consumption of power in Bihar has risen from 145 kWh in 2012-13 to 203 kWh in 2014-15, implying a growth of about 40% in two years, which is the highest among states in the country.
- D. There are 13 minor hydel projects that are currently operational the state, with a total installed capacity of 54.3 MW. Presently, Bihar State Hydroelectric Power Corporation (BSHPC) is also engaged in exploring the possibilities of bringing up more such minor hydel power projects in the state. There are 17 schemes under which exploration work is in progress.

Road

- (a) At present, the total road length in Bihar is around 2.26 lakh km. Out of this, the total length of NH is around 4595 km. Approximately 68% of NHs are double and multiple lane roads and the rest 32% single and intermediate lane roads.
- (b) The total length of the State Highways (SH) in Bihar is around 4253 km. Out of this approx. 65% is double-lane, 20% is single lane and 15% is intermediate-lane road.

(c) The state has a vast network of district roads also. The total length of Major District Roads (MDR) in the state is around 10,634 km with a major portion (54%) having a width of 3.75 meters. Out of the total length of MDR, 4897 km have been converted into intermediate or 2-lane width. Those roads which are yet to be converted into wider roads, have undergone surface renewal or repair work. The State Government is making endeavours to upgrade 5175 km of MDR to a minimum standard of intermediate lane with 5.50 meters width.

(d) At present, the state has around 2.07 lakh Km. of rural roads. All the rural roads are being gradually upgraded to pucca roads, under different schemes like Mukhya Mantri Gram Sampark Yojana, Pradhan Mantri Gram Sadak Yojana and Grameen Tola Sampark Nischay Yojna.

I. "Aao Bihar" Yojana is a flagship scheme of the Government of Bihar to facilitate private buyers and sellers of land in respect of setting up of industrial units in the state. The scheme was launched in 2011.

a. Under this scheme any person/ group of persons, who own 2 acres or more land and want to sell their land for establishment of industries or institutions, can enlist their land details on the "Aao Bihar" Portal. The information shall be made available to prospective buyers on the website. Entrepreneurs interested in buying land can locate the land on the portal. The State Government through its machinery shall help the entrepreneur to verify the title and ownership of the land so as to enable the buyer to buy the land.

b. The role of govt. would be that of a facilitator only. It would not have any role in fixing the rates of the land and in the allotment of the land.

Towards strengthening the support infrastructure, the policy includes allotment of vacant industrial land for priority sector projects, establishment of new industrial area and expansion of existing ones, recovery of land from sick/closed units, promotion of private participation for increased availability of industrial land, establishment of air cargo complex, upgradation of facilities at container freight terminal, increasing the supply of quality/reliable power, establishment of gas pipeline framework, promotion of MSME clusters, and promotion of private industrial parks. After careful considerations, the policy has identified the following 10 sectors as the priority sectors for industrial development of Bihar (i) Food Processing, (ii) Tourism, (iii) Small Machine Manufacturing, (iv) IT, ITeS, Electrical and Electronic Hardware Manufacturing, (v) Textile, (vi) Plastic and Rubber, (vii) Renewable Energy, (viii) Healthcare, (ix) Leather, and (x) Technical Education. The above list of sectors, however, is only indicative and the state government may suitably revise the list from time to time.

