CHAPTER - VIII

INDUSTRIAL STRUCTURE OF A BACKWARD DISTRICT OF WEST BENGAL (BIRBHUM)

Industrial structure mirrors the result of various changes in national and subnational economics stemming from the influence of such forces as the application of advances in technical knowledge and the differential responses of demand to change in both productive capacity and per capita real incomes. Changes in industrial structure reflect concommitant changes in the location and size of industries and firms and associated scholar, qualitative and distributional changes in population.

Industrial structure adds a significant dimension to the structure of Birbhum District, of the modern economic growth, the high rates of increasing population and product have been associated with marked - shifts in the series of various industries - in total output and in total productive resources used. This is hardly surprising if population grows, its ratio to land and other natural resources changes with difference consequences for different industries if total and per capita product grow investment and improvement in the equality products resources, the impact on different industries is not likely to be the same. The distinctive feature of modern economic growth is not the shifts in the long term proportions of industries in product and resources - proportions referred to

here as industrial structure but rather the rapidity of these shifts and their striking magnitude when calculated over the decades.

The existing industrial structure of District is the result of constant growth over a long period. There has been both qualitative and quantative growh in District. This growth has not been uniform over space both horizontal and vertical organisation have been considered . The spatial distributional pattern, the component of the pattern and types of their industries have been examined.

As industrial growth is here related to the growth of towns, the nature and extent of these relationship is also considered. Finally the industrial structure have been summarised through factor analysis and the degree of industrialisation is also be noted.

The magnitude of the changes can be seen in Table Here we distinguish three major sectors : agriculture, together with such related industries as fisheries, forestry, and trapping; industry proper-mining, manufacturing construction, power and light utilities, transportation and communication, and service - trade, finance, real estate, personal, business, domestic, professional and government. This grouping of many narrower divisions is, like all broad classifications, subject to criticism, for each of the three main groups covers industries that differ with respect to the raw materials employed, the productive

operation performed and the final product delivered, as well as other aspects that distinguish one industry from another. In some other broad classification mining is combined with agriculture on the ground that it too is an extractive "Prymary", industry; but we have preferred to put it under industry because of the large scale of its productive unit, its close connection with manufacturing and the distinctive trend in its share in product and resources.

On the basis of data for fewer countries - a comprehensive review of the trends in industrial structure for the aggregate is possible only with the broad groupings.

The contribution of each sector is measured by relating either net product originating or product gross of current consumption of fixed capital to the appropriate countrywide product total. Product originating, in term, is derived either by subtracting from the current cross product of each industry the costs represented by payments to other industries (e.g. in agriculture the payments the fertilizers, pesticides, etc. purchased manufacturing) or by adding the return to factors engaged in the industry (wages, and salaries, entrepreneurial incomes, returns on assets invested, etc.). The calculations are made separately for the many detailed industries, and the net totals are aggregated by the three major sectors; consequently, the net product originating in a sector is net of purchases by one industry from another within the

same sector. In short the only duplication conceptually permitted is in gross product in which current consumption of fixed capital is not deducted.

By examining the long term movement in the structure of the industries sector we can ascertain the secular shifts, if any, in the composition of the industries sectors.

First mining was always a relatively small subdivisions of the industries sector. When it loomed large in what was an empty if rapidly growing country and its shares in the sector total products and labour force tended to decline.

Second, the share of manufacturing, including or excluding elective power, gas and water in the total product of the industries sector rose.

Third, the share of transportation and communication in product apparently reflects differential price movements. The price of transportation and communication services must have declined drastically probably more than the prices of many other goods.

Since manufacturing is among the most rapidly growing subsectors in the course of modern economic growth and its share in total, product in most developed countries is almost a third, great interest attaches to trends in its structure - in the distribution of its output and resources among the various branches. The rise in the share

of metal products was not the result of a greater emphasis on investment goods it was due to substantial part to the substitution of metals for other materials within final household consumption and within export.

The service sector comprises a variety of economic activities, ranging from professional pursuits demanding high skill and large investment in training to domestic service and other unskilled personal services, from activities with large investment such as, residential house to those requiring no material capital from persuits closely connected with the private market such as trade, banking and related financial and business services to government activities, including defences in which market considerations unlimited.

Commerce, that is trade and finance accounts for over four tenth of the total output and labour force of the sector implying a share in the countrywide total of some 14 to 15 per cent.

Capital invested in the services sector is dominated by residential housing and government capital.

The industrial structure of national output the productive resources is a key aspect of an economy in the process of growth because it permits us to absence the impact of the advance in technological knowledge, the differential response of demand to increased productive ca acity and rise in per capita income, and the shifts in
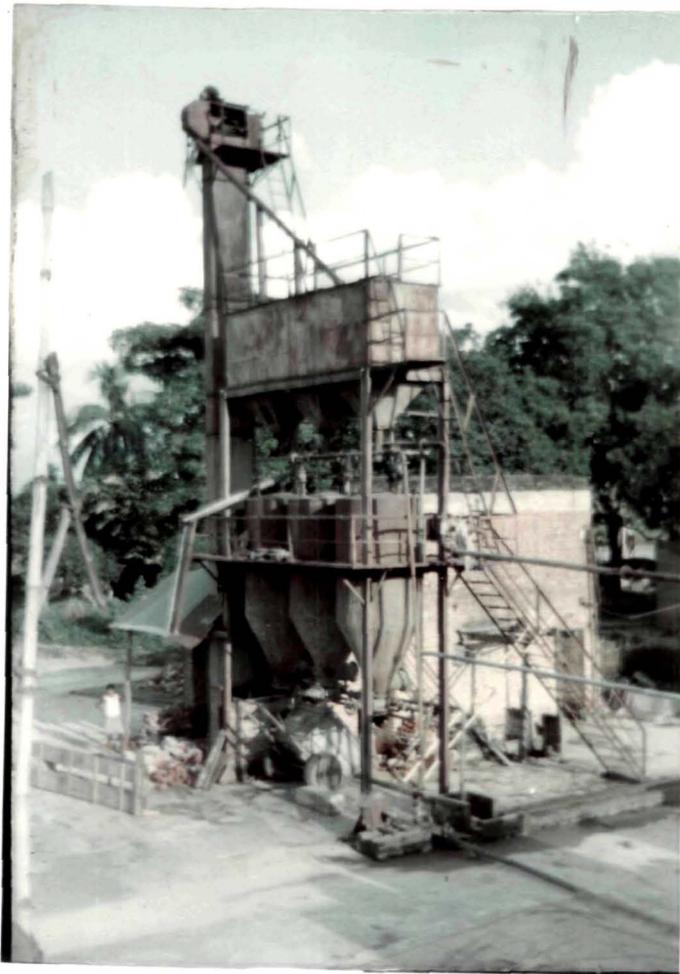
the size and location of groups in society associated with
the different industries are distinguished from each other
by the raw-materials that they use by the productive process
in which they engage (and hence by the technological con-
straint on size of plant) by the skill-mixed of the
labour-force by the capital intensity etc. imposed by the
specific production process employed and by the finished
product and hence by the market that is being served.
Indeed an industry is defined by these characteristics of
materials process and product and a marked change in one
often by not necessary accompanied by changes in the others,
is usually a basis for distinguishing and eefining a new
industry. In economic society where positions in the process
of growth are also subject to different paterns of move-
ment.

Since an industry is a complex that reflex determi-
ning factors on the production - supply an output - demands
sides an adequate account of cause and consequences of
trends in industrial structure will also constitute an
account of much of the economic growth process. This is
all the more true the greater the details in distinguishing
industries and the more comprehensive the account of the
technological constraints on the production side and of
the specific responses on the demand side.

Some conclusions have been suggested with respect
to the downward trends in the share of the agriculture
sector in countrywide output, labour force and capital and
the market rise in productivity in the sector as a necessary
condition of modern economic growth. The upward trend in
the share of industrial sector is particularly manufac-
turing and transport and communication - in national out-
put and the market rise in productivity that limited the
absorption of labour (and probably of capital) in a sector.

The consequences increasing urbanization, grow-
ing size of producing establishment and of corporate
units that control them, and shifts in the labour force
from independent and entrepreneural status towards
employees status from emphasis on white colour 2 killo
among others can only be mentioned here and not treated
in detail even though white faniter they have been measured
and analysed. Many of this trends will be noted again in
connection with the structural aspects of economic growth
upon which they bear most directly.

They are mentioned here only to trace the wide
of the trends in industrial structure which should be kept
in mind when we discuss the other aspects of economic
growth. They provide the important links in the inter-
relation between production, distribution and use of
national product in the course of its rapid growth in
modern times.

The essential argument of structural theory is that industry creates a specific demand for labour-power; this demand changes when under pressure associated with macroeconomic fluctuations, organisational restructuring and labour process changes are initiated. The resultant changes in the level and character of labour demand lead to changes in investment patterns, including plant closings, relocations and new plant establishment to take advantage of more appropriate labour supplies. Thus spatial organisation is mediated primarily through changes in the nature of industrial capital.

Industries response to the uneven distribution of the requirement of production creats typical areal or regional roles or a 'special division of labour'. The effect of locational processes is tailed primarily in terms of labour processes that are grouped in a given area.

However, this factor of production have been distributed through the prior activities of industries. The growth of industrial systems means that the "structuring of space grows more and more important as fixed capital investment become more and more important to the process of living " (Survey 1973).

Some features of the economic structure of under-developed countries, which are : (i) industrial origin of product and attachment of labour force; (2) type of enterprise and distribution of product by factor shares and by size of income; (4) allocation of product between consumption and capital investment and the structure of the former component, (5) degree of participation in foreign trade.

Four features of the industrial structure of product and labour force in the underdeveloped countries merit explicit attention - (1) the relatively high share of agriculture and related branches (forestry, hunting and fishing) - the A Sector; and the relatively low share of the extended industry sector (mining, manufacturing, construction, water, energy, transport and communication) and M+ sector, (3) the share of the services group; comprising trade, finance and real estate, personal business and professional services and Government - the S Sector; (4) the relatively wide inequality in sectoral product per worker.

The major manufactures in underdeveloped countries are foods and textiles, which together account for over half of total value added; the next two in importance are chemicals and metal manufactures which together account for over a fifth. The structure is distinctly different from that of manufactures in developed countries where metal products alone for over a quarter.

The first group were industries that restructure
for defensive reaso ns such as product obsolence, forcing
them to cut costs. They reorganise production through
intensification, partial standardization or a shift to
mass production techniques. The second group restructures
to achieve scale advantages in production either in a growth
sector or the capital good producer for a growth sector.

In comparison a major percentage of working popula-
tion in agricultural purposes than that of minor percentage
of population workers are engaged in industrial workers.
In all of the police stations of Birbhum district that
higher percentage of industrial workers are in Rampurhat
and Mutaroi, in the rest of the police station the per-
centage of household population varies from 2% to 7%.

From the occupation structurewe get a relation
concentration or dispersion of industrial workers in all
industries which have been based on location quotient :

19.35	—	14.86
5.87	—	4.52
5.35	—	4.12
5.87	—	4.52
8.81	—	6.78
52.88	—	40.68
13.00	—	10.00
117.00		85.48

The location quotient for specific major industries in relation to Hooghly district as a whole. Here the agro-based forest based and chemicals etc. have LQ share unity which indicates finally that the region is self-sufficient industrially used is developed here to cater the internal markets.

From the figure it becomes clear that primary activities of industrial structure is prominent in this district. To qualify relationship between the total population and industrial population of Birbhum district measuring some mathematical methods the degree of relationship Karl Pearson's is mostly   From this formula the degree of co-relation which measure the linear co-relation between X, Y.

After that use the Spearman Product Market Co-relation, obtained correlation co-efficient 0.4 means that only 16% of the variation is explained classification of industries and % of total workers employed.

From the table it shows that according to correlation industrial graphs ranks for least diversity, the agro-based industries are prominent there so that indicates the maximum population dominant in Agro-based factors and Bol ur, Sainthia, Labhpur, Ahmadpur Police Stations for the development of industrial activities prominent there than that of another backward police stations.

Co-efficient of linkage is 0.90 according to formula
$1 - \frac{d}{100}$ So the co-efficient of localisation and co-effi-
cient of linkage analysis the degree of concentration
and relation between the industries and among the industries
respectively.

Following the different formula, index of local
specialisation of particular industries and they are
ranked according to this local speciality.

where	local employment in
	industry
	local total industrial
	employment
	regional employment in
	industry
	regional total industrial
	employment.