

## Competitive Exams: Changes in Production Structure of the Economy

As an economy grows, its production structure changes. It moves from agriculture towards manufacturing and structure changes. It moves from agriculture towards manufacturing and services. It is understandable. You might have noticed that relatively well-off families spend proportionately less on food items and more on manufactured items. You may also note in your family that, as income increases, expenditure on items other than food increases more than proportionately. But, you should note that normally absolute amount of expenditure does not, broadly speaking, decline; in fact, increases but less than proportionately. It implies that production structure should shift away from agriculture. Moreover, many agricultural products, which used to directly reach the households, will now reach after some processing and through long channel of distribution. Bread, noodles, sauces and juices are good examples. It means activities of manufacturing and trade will increase. So, let us see how the production structure has changed.

We know that hundreds of thousands of activities are always in operation in any modern economy. Many activities emerge and some of them die down; some of them even re-emerge, may be, in a modified form. But, it is difficult to discuss in terms of each single item. We often aggregate them on the basis of similarity of products or nature of activities.

Our Central Statistical Organisation uses nine broad categories, called sectors. Six of them are further subdivided in two/three/four subcategories. Industry as a sector does not occur in it; industry is accommodated in 'mining (and quarrying), manufac-turing and electricity' In total, there are 18 categories, sectors and sub-sectors, in which total economic activity of the country is presented in the National Accounts Statistics.

There are, however, two three-fold classifications in which economists discuss changes in production structure. One is agriculture, manufacturing/industry, and services and the other is primary, secondary and tertiary. Besides cultivation of crops, agriculture includes livestock and animal husbandry. But forestry and logging and fishing are clubbed with agriculture to make a broad sector of 'agriculture, forestry and fishing' If we add the sector of mining and quarrying to this sector, we can call it 'primary sector' as these activities are associated with nature.

The manufacturing sector is further subdivided into registered and unregistered manufacturing, depending upon whether manufacturing units are registered under Factories Act 1948. Industry may include manufacturing and mining and quarrying. On the other hand, if we club the sectors of electricity, gas and water supply and construction with manufacturing, we can call it 'secondary' sector.

This is just a matter of convention. There may be differences between countries and within a country changes in classification may occur over time. We did not have exactly the same classification always. While new products gain entry with each major revision of national accounts, some swapping of activities is possible. For example, earlier LPG gas was included in the sector of electricity, gas and water supply, now it is part of manufacturing. While we shall highlight some salient features of production structure or composition of output, it would be interesting for you to do your own exercises and develop your own views on contributions of different sectors.

## **Absolute Contribution of Different Sectors**

It is easy to see that agriculture production has been continuously on increase and has increased about fourfold. Since our Table does not include all the years, we do not find any drop in agricultural production. There are many periods when agricultural production actually fell. Whenever we notice a fall in the gross domestic product, a major reason is likely to be a fall in agricultural production as its contribution to GDP had been substantial. We were most severely hit in agriculture in the consecutive years of 1965 – 66 and 1966 – 67. These years, however, gave us green revolution. We are now quite comfortable with the overall performance of agriculture. Yet, we had had two-three years of setback in each of the decade. We should remember that agriculture gives us food, milk and meat and gives to industry the raw material needed particularly for consumer goods industries. Compared to agriculture, other sectors included in primary sectors are small; the contribution of primary sector is found to have risen only four times.

Manufacturing which contributed about Rs. 12, 500 crore in 1950 – 51, contributed to the tune of Rs. 2, 00, 000 crore in 1999 – 2000, almost sixteen-fold increase over the period. Annual construction activity also rose ten times. Construction does not mean only houses but also roads and railway lines, dams, and canals, bridges and flyovers, etc. And also huts. Electricity, gas and water supply were in nascent stage in the wee hours of Independence, contributing less than Rs. 500 crore at 1993 – 94 prices. Its contribution rose 60 times in 50 years. Overall contribution of the secondary sector rose fifteen-fold.

Trade along with hotel and restaurant business rose fourteen-fold over the period while transport along with storage and communication rose eighteen-fold. Financial and business services including insurance and real estate also rose fifteen times while community, social and personal services, including public administration and defence rose only eleven-fold. Thus, in the second half of the twentieth century while the contribution of primary sector to GDP rose to four fold that of secondary and tertiary sectors rose by fifteen fold each.

## **Relative Contribution of Different Sectors**

Relative contribution of a sector depends on its own performance as well as that of other sectors. As a result, despite positive contribution, a sector may lose relative position. Thus, while agriculture contributed 50 per cent to the making of GDP in 1950 – 51, it contributes less than

25 per cent at the close of the century despite four-fold increase in its output. The contribution of primary sector came down from close to 60 per cent to less than 30 per cent over the period.

The share of manufacturing in GDP has gradually risen from 9 per cent to 17 per cent over the period. The share of electricity, gas and water supply, which was hardly one third of one per cent rose to close to 2.5 per cent. The activity of construction, despite good rise in absolute terms, is considered to be slackening; during the first twenty years, while the share rose from 4 per cent to 6 per cent, during the last thirty years it fell back to 5 per cent. Secondary sector as a whole raised its contribution from about 14 per cent to more than 24 per cent. The secondary sector is closely contesting the primary sector as far as its contribution to the GDP is concerned. Let us look at the tertiary sector. The share of contribution of activities of trade, hotel and restaurant business rose from 8 – 9 per cent to 14 – 15 per cent while that of transport, storage and communication rose from 3.3 per cent to 7.3 per cent over half the century. The contribution of financial and business services increased from 6.7 per cent to 12.7 per cent while that of community and personal services increased from 9.4 to 13.4 per cent. It may be noted that, among the sectors within tertiary sector, in 1950 – 51, the contribution of community and social services dominated the scene but it gradually gave way to trade but in the nineties sector of financial and business services emerged as close contestant. However, it may be pointed out that public administration and defence, which contributed to the tune of 3 per cent in 1950 – 51, are now contributing more than 6 per cent. Within the broad category of community and social services, the share of public administration and defence has risen from  $\frac{1}{3}$  to  $\frac{1}{2}$  over the period

## **Growth of Different Sectors**

we can also derive a table giving us the rate of growth of different sectors. We have computed only compound annual growth rates (Table 3.7). We should take these rates with a pinch of salt as they crucially depend upon initial and final figures. Roughly speaking, agricultural situation during sixties and seventies can be said to be bad as the rates of growth fell below that of population. Foodgrains dominate in our agriculture and we cannot afford to import it. Even if we import some agricultural produce, being a large country, we ought to produce enough foodgrains ourselves. During the nineties, the growth of foodgrains production is somewhat slackening. So long as it does not create bottleneck for raw material for industry and supply of foodgrains does not fall short of domestic demand, we can afford a little lower growth rate in future. The rate of growth of primary sector has always been lower than that of secondary and tertiary sectors, which is a major reason for decline in its share.

Manufacturing sector activity grew at twice the rate of agriculture. The seventies were bad for all sectors. Electricity, gas and water supply accorded a very low rate of growth of 4 per cent per annum during the seventies. So was the case with construction. Secondary sector as a whole did pretty well during the eighties, better than during the nineties.

The nineties belong to the tertiary sector, which grew at the rate of 7.8 per cent per annum. All service sectors are growing faster in the nineties than they did in the eighties wherein

performance was better than that in the seventies in terms of growth. There are, one can see, a couple of exceptions to this observation.

The overall movement seems to be away from primary/agricultural complex to secondary and tertiary sectors. The drop in the share of agriculture is shared between secondary and tertiary sectors; and as time passes the share of tertiary sectors is increasing faster than the share of secondary sectors.

## **Changes by Other Segregations of Production**

Three important divisions of activities are often discussed by scholars so far as production structure is concerned. One is the division regarding location of activities, location being divided between rural and urban areas. The second is on the basis of ownership of production establishments, division being made between public and private. The third one is about organised and unorganised sectors.

## **Division between Rural and Urban Areas**

Agriculture is the industry of the country-side and manufacturing is the industry of the town, said Adam Smith, father of Economics. As a habitation diversifies its economic activities, it changes its status from rural to urban at some point meeting certain definitional marks. In India, in last fifty years, the number of towns has increased from 2800 to 3600 and population living in them has increased from a little over 6 crore to 26 crore. The proportion of population living in urban habitation is now well over 25 per cent, which in 1950 – 51 used to be around 16 per cent. On the other hand, the number of villages is now about six lakh and a village may have more than one hamlet. The number of rural habitations is over 10 lakh. Not only agricultural and pastoral activities are carried out in rural habitations, manufacturing (handicrafts), trade (retail), transportation (bullock carts and tractors) are also part of rural activities and rural folk benefit from them.

We do not have regular annual series of production output of the activities according to rural-urban division. The CSO has made available such a division for the years 1970 – 71, 1980 – 81 and 1993 – 94 but only at current prices and for net domestic product. With the help of these figures, we gather some broad idea about the shift in activities. From the perusal of these statistics, one would notice that in 1970 – 71 only 62.5 per cent net domestic product was generated in the rural area where more than 80 per cent population resided (and worked) while in the urban area population residing (and working) was less, 20 per cent, the net domestic product generated was 37.5 per cent.

Thus, per capita net domestic product in the urban area was 2.45 times that in the rural area. When we look at the data for 1993 – 94, we gather that while population proportion in rural area has reduced by about 6.7 per cent points, its contribution to net domestic product has reduced by 8.6 per cent points but just the reverse could be said to be the case with the urban area. But the loss of 6.7 points in 80.2 points is not the same as gain of 6.7 points in 19.8 points. Therefore, net accretions to the two areas on per capita basis show that per capita net domestic product in the urban area is 2.39 times that in the rural area. Though this ratio is not

deteriorating over time, it is high enough to make people move to urban areas even if unemployment rate is somewhat higher in urban areas.

### Division between Public Sector and Private Sector

Ever since there has been the state, there has been public sector. But the presence of public sector in production, beyond public administration and control, was very little before Independence. It has been increasing over time as we pursued a policy of state intervention in various sectors for variety of reasons. There is not one broad sector of economic activities where public sector is altogether absent. We have firm data on contribution of public sector in different production sectors since 1960 – 61. A cursory look suggests that the importance of public sector had been on increase with the passage of time in practically all sectors. The share of public sector, which was barely 9 per cent even in 1960 – 61, has increased close to 27 per cent though of late the speed of rise has slackened.

Public administration is purely a public sector activity and in fishing, it has just shown its presence. In agriculture its presence has increased but it predominantly seems to be irrigation as this activity is accounted for within the sector of agriculture. Its contribution in forestry and logging sector is drastically reducing. Most of the mining activity is under public sector and it is now around 80 per cent. Even in the sector of manufacturing its share has gradually increased from around 7 per cent in 1960 – 61 to around 20 per cent in 1998 – 99. The share in construction activity has increased from less than 5 per cent in 1960 – 61 to almost 16 per cent in 1998 – 99.

It is in trade that public sector has withdrawn since 1980 – 81 when it participated to an extent of 8.5 per cent. Its role in transport has also plummeted to some extent yet it plays a great role. The railways are completely with the Government of India. In road transport, state corporations play a significant role at least in passenger transport. In financial sector too, the presence of public sector rose significantly; it rose from 6.5 per cent in 1960 – 61 to 17 per cent thanks due to nationalisation of 14 major banks. A further dose of nationalisation in 1975 – 76 led to its further rise to 27 per cent by 1980 – 81. Even 6.5 per cent in 1960 – 61 should owe a great deal to the nationalisation of Imperial Bank as the State Bank of India.

### **Division between Organised and Unorganised Sectors**

Organised sector includes all public sector establishments and private sector establishments registered under one or the other act, such as Company Act, Factory Act, Societies Act or Cooperative Act, etc. They are supposed to maintain accounts. Net domestic product was found divided between organised sector and unorganised sector in 25: 75 ratio in 1960 – 61. With passage of time, the proportion of organised sector went on increasing, with some fluctuation, and reached around 30 per cent by 1980 – 81. Since then, its share has been rising and it is expected to be around 40 per cent by the close of the century. Within organized sector, manufacturing accounts for 40 per cent and community and personal services, 30 per cent while trade and finance may account for 25 per cent.

## **Industrial Structure of Employment**

All able-bodied persons should work. Children should not be allowed to work. Old, sick and infirm should not be permitted to work. Even if production is almost mechanised, there is a man behind the machine. People who are employed and people who employ as well as people who are self-employed are all treated as workers. Their numerical strength is known as work force. People who are willing to work at the prevailing wage rate but are not employed, are treated as unemployed. Despite the general feeling that a large number of people are unemployed, the percentage of people who are unemployed is not very large (However, in the composition of the unemployed, a large number comes from the educated lot). The reason is that poor people cannot afford to be unemployed.

They work on somebody else's farm, shop or factory or engage themselves in some or the other activity on their own account. We should, however, remember that statistics used by us do not include people engaged in activities carried out in homes and hearths by the members of the family/household. The proportion of people working in total population in our country is around 40 per cent. This proportion is higher in the case of male members and those living in villages. There is a variety of ways in which employment data is presented. One classification is sectoral (or industrial) and the other is occupational. They are made for each of basic four categories, viz. rural male, rural female, urban male and urban female. Employment data is available from the census as well as the NSS. The census data for 2001 is not yet available in as much detail as we need them in this chapter. We opt for the NSS data. However, comparable NSS data is available from 1972 – 73 only at an interval of five years.