

CHAPTER-VIII

CONCLUDING OBSERVATIONS, POLICY IMPLICATIONS AND SUGGESTIONS

The present chapter is mainly an exercise in recapitulating the main findings of our study.

Agricultural Sector :

The changing scenario in agricultural sector in the state as well as in its constituent regions unfolds interesting facts about growth and nature of regional disparities in crop husbandry. No doubt, the state has made rapid strides on the agricultural front. The same could be said about its constituent regions also. However, regional disparities in productivity of the selected crops and per capita as well as per hectare gross income from agricultural output, inspite of having downward trend, continue to exist.

During the period of our study, we observe a perceptible change in the cropping pattern throughout the state. On the basis of the distribution of area and production of various crops we find regional dispersal in the cultivation of finer foodgrains - rice and wheat - and commercial crops like oilseeds; and increased regional concentration in case of coarse grains - Jowar and Bajra - and commercial crops like sugarcane and cotton.

The regional dispersal in the cultivation of rice, wheat and oilseeds is attributed to the fact that these crops are economically lucrative and, if necessary inputs are made available, would be cultivated throughout the state. (The regional concentration in the cultivation of coarse-grains has gone up in areas which not only lack adequate irrigation facilities but also suffer from deficient and erratic rainfall. The cultivation of these crops in area with sufficient irrigation facilities - canal and tubewell - irrigation has given way to crops which are economically more lucrative. The concentration of cultivation of commercial crops like cotton and sugarcane, economic considerations apart, is constrained by the nature of the soil and conducive agro-climatic conditions.)

The area, production and productivity of finer foodgrains - rice and wheat - have shown upward trend in all the regions of the state. Despite a fall in the relative shares of regions I and II in area as well as in production of rice and wheat, the area covering these traditionally rice and wheat growing regions still continue to be the concentration area for the cultivation of finer foodgrains. However, faster rate of growth of area and production in regions III and IV marks regional dispersal in the cultivation of finer foodgrains in the state which marks a fall in regional disparities both in area and production of finer foodgrains during the period 1966-67 to 1989-90. This is indicated by the slide in the values of

CV in area and production of rice and wheat in the state.

The changes in regional productivity differential over time, a more reliable indicator of growth disparities, corroborate an inverted U-shaped regional disparities curve in case of rice in the state. So the behaviour of the value of C.V. in productivity of rice over time corroborates Kuznets' concentration-cycle hypothesis which implies inverted U-shaped regional disparities curve. The downward trend in regional disparities could be attributed to improved irrigation facilities, use of HYVs seeds suited to different agro-climatic conditions and improved informational level of the farmers in the traditionally non-rice growing areas of the state.

Regional disparities in area, production and productivity of coarse-grains - Jowar and Bajra - have shown upward trend. Increase in regional disparities in area, production and productivity of coarse-grains has no serious economic implications, rather it simply shows that cropping pattern has undergone a change in desired direction in the relatively developed areas, whereas, in absence of suitable conditions including irrigation facilities, coarse-grains still hold fort in absence of scope for change in cropping pattern on the lines as in developed regions.

So the cultivation of coarse-grains remained concentrated in relatively agricultural backward regions III and IV. Infact, continued predominance of cultivation of coarse-grains in area consisting of regions III and IV of the state has been out of compulsion rather than choice.

Area under coarse-grains - Jowar and Bajra - has been on the decline throughout the state which shows change in cropping pattern in the state. The cultivation of coarse-grains has lost its charm and consequently area under coarse-grains is being transferred to rice and commercial crops like cotton and sugarcane being economically more lucrative. Such a shift in cropping pattern could be taken as a progressive shift in crop husbandry.

The regional disparities in area, production and productivity in case of commercial crops - Cotton, Sugarcane and Oilseeds - except in case of productivity of oilseeds have widened. Increase in regional disparities in area, production and productivity of commercial crops could mainly be attributed to specificity of agro-climatic conditions in different regions to different commercial crops.

Regional disparities also exist, infact, are increasing in per hectare gross income and per capita gross value of agricultural output in the state. Increasing disparities in both per hectare gross income and per capita gross value of agricultural output could mainly be attributed to

input use differentials on the one hand and other factors, such as agro-climatic conditions, resource base and nature of technical changes, influencing emerging cropping pattern in the state.

Comparatively higher per hectare input use, to large extent explain higher returns from crop-husbandry in region I as compared to other regions of the state.

Industrial Sector :

The changing industrial scenario in the state as well as in its constituent regions also brings to light some interesting facts about the growth and the nature of regional disparities in industrial activities. The development on the industrial front, though, as generally felt, is not as impressive as that on agricultural front, yet achievements are not mean by any standard. However, regional disparities in industrial activities as reflected in unequal regional distribution of registered working factories and industrial work-force as well as in per capita value added in manufacturing continue to be significantly high.

On the basis of the distribution of registered working factories and industrial work-force we observe high degree of industrial concentration in regions I and IV. During the period of our study, i.e., from 1966-67 to 1989-90 the relative share of regions I and IV taken together jumped up from 70.57% to 76.78% in case of registered working

factories and from 75.27% to 80.69% in case of industrial work force. This is the outcome of faster rate of growth of industrial activities in these two regions vis-a-vis that in the remaining two relatively industrially backward regions, i.e., regions II and III.

The higher growth rate in already advanced regions has, obviously, further widened the regional disparities as is evident from the increase in the value of C.V. from 48.12% to 55.54% in case of registered working factories and from 52.62% to 74.32% in case of industrial work-force during the period under study. The faster rate of growth of industrial activities in these region (mainly in region IV) could be attributed to signals provided by the market forces. Close proximity to Delhi a developed industrial centre and business beside being national capital; and fast developing Noida and Ghaziabad; distinct advantages of being early starters; and greater beneficiaries of industry-friendly policies of the state government.

In case of growth of registered working factories, our study finds that there has been a distinct levelling tendency ^{within} between relatively advanced regions (I & IV) and ^{within} between relatively backward regions (II & III) in the state. But the gap between relatively developed and backward regions tends to widen.

We do not find any such levelling tendency as far as regional distribution of industrial work-force is concerned.

The behaviour of regional disparities in per capita value added in manufacturing tells a different story. The regional disparities kept on moving upward. But since then, as is evident from the continuous downward slide in the value of C.V. in per capita value added, the regional disparities have been on the decline. Despite perceptible tendency in C.V. to fall, its value continues to be fairly high, signifying that disparities in per-capita value added in manufacturing are still on the higher side.

Any way the behaviour of C.V. in per-capita value added in manufacturing seems to be consistent with Kuznet's hypothesis of inverted U-shaped regional disparity curve. As the industrial growth process in Haryana enters into the next higher stage, we could expect regional disparities in the distribution of registered working factories and industrial work-force to start declining also.

Ever since the formation of the state, the growth of industrial sector in the state as a whole is characterised by enhanced industrial diversification and improved rate of production in individual industries. Broadly speaking, similar changes on the industrial canvass could be observed in case of various regions of the state.

Infrastructural Sector :

Although Haryana can not take the same pride in the field of infrastructural facilities as in the field of agriculture, yet the state's achievements in service sector are quite significant. There is considerable increase in energy; educational; health services; road; transportation and communication; banking and other infrastructural facilities throughout the state. But uneven progress in these facilities brings to light the existence of regional disparities in infrastructural facilities.

Thanks to government's concern for universalization of education, improvement in general awareness and, certain extent, political expediency, we find that educational activities grew at a higher rate in relatively educationally backward regions vis-a-vis relatively educationally advanced regions. These growth rate differentials narrowed down the regional disparities in the educational activities in the state. The regional disparities have declined by 40.47%, 10.68% and 47.9% in case of number of colleges, schools and number of students enrolled, respectively as their respective values of C.V. have climbed down from 37.68% to 22.43%, 21.61% to 19.30% and 34.50% to 17.97% during the period under study.

The decline in inter-regional disparities in this respect could be more meaningfully seen in terms of decline in the values of C.V. in case

of colleges per 1000 of population (from 33.33% to 24.74%); in number of schools per 1000 of population (from 14.14% to 8.66%); and number of students per teacher (from 10.52% to 7.44%).

On the health front there is distinct improvement in terms of total number of hospitals and dispensaries, medical staff strength and number of beds available (an indicator of indoor facilities). Not only this, what is more important, our study reveals improvement in number of hospitals and dispensaries, medical staff, number of beds per lakh of population in all the region of the state. Alongwith this improvement, our study also shows a marked fall in regional disparities in health services. As we find that the value of C.V. declined in case of hospitals and dispensaries per lakh of population from 23.57% to 14.16% and in case of medical staff per lakh of population from 23.56% to 7.90%. However, increase in regional disparities in terms of availability of beds is an aberration from the general trend which would be fall in the proper groove with appropriate corrective measures.

A fall in regional disparities in case of number of hospitals and dispensaries; and medical staff on the one hand and increase in regional disparities in beds availability on the other clearly indicate that outdoor treatment facilities have increased at a much faster rate as compared to indoor treatment facilities in regions II and III. The main reason for increase in regional disparities in beds availability could be seen in

government's failure to established new hospitals and dispensaries with indoor treatment facilities in backward regions, but beds availability of existing hospital in already developed regions increased manifolds during the period under study.

So far as improvement in economic infrastructural network is concerned, it is encouraging to note that as per own study there is a marked improvement in the network of roads, number of motor vehicles and number of co-operative societies and banks throughout the state.

Alongwith general improvement in the economic infrastructural network in the state we also find that regional disparities in case of motor vehicles (of all kinds taken together) per lakh of population have gone up. This increase has been mainly due to faster rate of growth in demand for motor-vehicles in industrially advanced region IV and agriculturally advanced region I. It is interesting to find that as far as regional disparities in road length per 100 sq.kms is concerned, there is a favourable shift. The coefficient of value declined from 17.50% to 16.50%. Obviously, its speaks of governments appreciation of the need for a well neat developed network of roads as a pre-condition for economic development of the state.

Policy implications and Suggestions

As pointed out by Nair (1983), neither the planning commission nor the finance commission has taken any significant policy measures to tackle specifically the problem of inter-districts or inter-regional disparities within a state. Whatever measures in this direction have been taken, represented the government's immense faith in the magic of investment without concentrating on the technological aspects. Infact, no piece meal solution would work what we need is a development package having a balanced mix of elements like investment - public & private - technical shifts, & supportive infrastructural facilities for each backward regions so that undue regional disparities could be taken care of.

Since the inter-regional differentials in natural factor endowment - quality of soil, underground water, agro-climatic conditions, etc. are bound to exist, so, understandably, the disparities in agricultural activities at the regional level can not be eliminated altogether. Of course, the disparities could be reduced to a desired extent by conscious planned state intervention in the forms of incentives, direct participation and environment building.

There is a wide scope to scale down regional disparities in agricultural activities by extending the infrastructural facilities and the new agricultural technology in relatively backward regions of the state.

The major policy thrust, therefore, should be on increasing irrigation facilities in the south-western regions, which happen to be deficient and erratic in rainfall, so that economically meaningful cropping pattern could be adopted. To exploit the vast potentials of these regions and for setting aside economic regional disparities, the state must, therefore, exploit and develop all possible sources of water for irrigation on the one hand and greater emphasis need to be laid on dry land farming technologies involving new varieties of seeds, crop protection from insects and pests, and appropriate water management on the other.

To increase the output of various crops in relatively backward regions, it is necessary to raise their productivity by evolving suitable high-yielding varieties of seeds with stable yields. This may be followed by appropriate extension education programme to the farmers to acquaint them with the improved and efficient methods of crops husbandry.

There is need for cheap and timely supply of credit facilities to the farmers in backward regions in order to boost agricultural production in these regions so that the regional disparities in agricultural production (productivity) can be narrowed down in the state.

The regional disparities in agricultural sector can be narrowed down to a desired extent by increasing the production of various crops by

increasing area under cultivation and gross cropped area in backward regions through land reclamation; and, which is even more significant by improving productivity (output per hectare) of various crops through improving consumption of fertilisers and HYVs seeds. Consumption of fertilizers and HYVs seed can be improved by formulating a suitable policy for providing these facilities at subsidised rate to the farmers of the backward regions of the state.

Likewise, to narrow down regional disparities in industrial activities, the following considerations could be kept in mind.

As a part of development strategy for Haryana, there can be no escape from a pattern of decentralised industrialization if the emerging problems of unemployment and regional disparities are to be solved. Agro-based industries, labour intensive manufacturing works, engineering goods industries should be established in small towns and selected villages of the backward regions and centralization of large scale industries at a few places so that main highways and rail routes should become major corridors of development while the link roads, which would encourage spot and string development along the routes, may connect the small nodes with the main corridors of development.

Incentives should be given to those units which are established in a selected backward regions having the necessary growth potential. Units receiving financial incentives should become viable within a specific period.

Total fiscal and financial concessions given should be co-ordinate and the general policy should be reviewed at the aggregate level in order to find out the amount of subsidy given for the development of selected backward regions.

Systematic efforts should be made to spot and, if necessary, to develop the potential entrepreneurial talent available among the engineers, trader-cum-money lenders, progressive farmers and artisans. If the government adopts an incentive oriented approach in various regions, it may go a long way in solving the problem of regional disparities in industrial activities in the state.

Industrial units may be encouraged in backward regions if the problem of marketing, specially in medium and small units, is solved either through co-operative institutions or by assigning this work to establish large firms specialising in marketing. Further, for reducing regional disparities in industrialisation, a locational policy has to be formulated. Growth centres should be developed by the government in each district in the state. In these growth centres government should

ensure easy availability of developed industrial plots at reasonable prices; better communication and transport facilities; adequate water and power supply; skill upgradation facilities/opportunities; etc.

Before a time bound programme and required package are prepared to boost economic activities in a backward region, the state government should arrange a detailed techno-economic survey of the concerned region to assess its growth potentials and the nature and strength of the bottlenecks.

It would be pertinent to add here that unless and until regional disparities in infrastructural facilities are removed, it will not be possible to narrow down inter-regional economic disparities in the state. So the immediate requirement is to improve and strengthen the infrastructural network - energy, transport, communication, educational and health, finance etc. - on priority basis in relatively backward regions.

In the present study on account of non-availability of district level data as regards to certain important components of agricultural, industrial and infrastructural sectors, we could not examine the nature of regional disparities in non-farming income generating activities in the rural area; investment and capital structure in industrial sector; and energy components of the infrastructural sector. In view of these limitations and need for deeper explorations and rigorous investigations of the issues involved, it would be pertinent to carry out further research in the problem area, i.e., regional disparities at sub-macro level.