

Four Decades of Economic Performance : The Case of Haryana

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Abstract

The economic performance of individual states in India has received less attention than it deserves in the public debate on economic policy, although there is a very lively debate in the academic world and in the press on our national economic performance and the success or failure of various aspects of national policies. Taking the case of Haryana, this paper explores the impact of changing economic policies on its economic performance as reflected in structural and growth changes in the state's economy and the state of regional disparity. The data are obtained from various sources namely Reserve Bank of India Bulletins, Centre for Monitoring Indian Economy (States of India), and Statistical Abstract of Haryana and Census of India (relevant years).

Keywords: *Economic performance, Competitiveness Index, Economic Scene, Budgetary Expenditure, Human Development Index*

Introduction

It may be recalled that the late sixties and early seventies in India reflect the period when the green revolution blossomed to its brightest hue, the eighties experienced substantive liberalisation of domestic economic policy and partial globalisation while the nineties witnessed complete liberalisation domestically and gradual integration of the national economy with the global economy. It has gone by some structural reforms and liberalisation of financial, industrial and trade policies. This is a departure from the hitherto centralised economic planning which supported spatial equality in development process even at the cost of economic efficiency. All these changes have distinctly impacted on the economic scenario of the states, in varying proportions.

An increasing divergence in the growth performances among the States in India became visible particularly in the 1990s after market based reforms were initiated (Ahluwalia, 2000; Rao et.al, 1999). The states with market friendly environment and market supporting institutions and better infrastructure could grow faster than those without (Nayyar, 2008).

Taking the case of Haryana, this paper attempts to explore the impact of these changes on its economic performance as witnessed structural and growth changes in its economy. Consistent with geographical approach, the purpose is to assess how different areas within Haryana have responded to economic impulses in the state. The geographical expression of economic performance in the state has been viewed in terms of regional disparity, nay regional

equity, in levels of development and quality of living space. The data are obtained from various sources namely Reserve Bank of India Bulletins, Centre for Monitoring Indian Economy (States of India), National Sample Survey Organization, Statistical Abstract of Haryana and Census of India (relevant years).

Haryana: The Economic Scene

Haryana, initially a peripheral part of the former Punjab, on its formation as a separate

state in 1966, had by 1980-81 become one of the economically prosperous states of the Indian Union with a per capita income of Rs. 16206/- in comparison to average of Rs. 1711/- of combined India at constant prices of 2004-05. Although it continues to be one of the leading states in 2011-12 in per capita income, it has lost some of its momentum as is evident from the compound annual growth rate over this period (Table 1). The same can be gleaned from its index value against 100 for All-India per capita. Several other states have had an appreciable growth trajectory.

Table 1 : India: Per Capita Income at Constant (2004-05) prices: 1980-81 and 2011-12

Year	1980-81	2011-12	Ratio	CAGR*	Index
Sikkim	11528	73704	6.39	5.97	149
Tamil Nadu	11019	57093	5.18	5.28	132
Goa	26778	129397	4.83	5.05	126
Gujarat	12560	57447	4.57	4.87	121
Andhra Pradesh	9499	42589	4.48	4.80	120
Tripura	8722	39382	4.51	4.82	120
Maharashtra	14526	61468	4.23	4.61	115
Arunachal Pradesh	8857	35231	3.98	4.41	110
Uttarakhand	13288	52607	3.96	4.39	109
Karnataka	10743	41492	3.86	4.31	107
Kerala	13550	52095	3.84	4.30	107
Haryana	16206	61716	3.81	4.27	106
Himachal Pradesh	13859	49203	3.55	4.04	101
Mizoram	10625	37921	3.57	4.06	101
Rajasthan	8433	28429	3.37	3.87	97
West Bengal	9872	32164	3.26	3.76	94
Nagaland	16317	46340	2.84	3.32	83
Meghalaya	12191	34217	2.81	3.28	82
Punjab	17332	46325	2.67	3.12	78
Madhya Pradesh	9823	23447	2.39	2.76	69

Chhattisgarh	11497	27163	2.36	2.72	68
Orissa	10227	24151	2.36	2.72	68
Bihar	5631	13149	2.34	2.69	67
Jharkhand	11479	25265	2.2	2.5	62
Manipur	10715	22739	2.12	2.38	59
Uttar Pradesh	8500	17980	2.12	2.37	59
Assam	11843	22420	1.89	2.01	50
Jammu and Kashmir	16474	28833	1.75	1.76	44
All-India per Capita NNP	11711	41255	3.52	4.01	100

Based on data provided by Central Statistical Organisation

* Compound annual growth rate

On acquiring separate statehood, Haryana became administratively more intense, culturally more homogeneous, and spatially more integrated (Singh, 1998). There were several positives: the green revolution package coinciding incidentally with its formation, electrification of all villages and connected with all-weather roads in 1970s. In addition, with one-third of its area falling in the National Capital Region, the state has derived benefit as a result of growth impulses emanating from the national capital of Delhi. Sharing border with Delhi on three sides, some of its towns—Faridabad, Gurgaon, Sonapat, Panipat—have grown industrially consequent to the policy to shift the industries from Delhi Metropolitan Area to adjoining towns.

Haryana's position as one of the leading states of India is evident from several indices that have been worked out from time to time to rank states of India on select parameters. However, it is imperative for it to retain its momentum.

Position of Haryana among other states of India

Economic Freedom Index: Computed for 20 states of India using 21 variables covering diverse aspects of economic freedom in different areas to arrive at the composite freedom index, Haryana with an index of 0.49 (on a scale from 0 to 1.0) ranked 4th in Economic Freedom of States in 2013 (on the basis of 2012 data), marginally improving its position from an index value of 0.47 in 2005 (Debroy, et al. 2013). In comparison, Gujarat has widened its lead at the top of the economic freedom table, with an index score of 0.65. Tamil Nadu with a score of 0.54 remains in second position but some distance behind. Next in line come Andhra Pradesh (0.50), Haryana (0.49), Himachal Pradesh (0.47) and Madhya Pradesh (0.47).

In an overall environment where the states have become freer over time, the median score for economic freedom among states has now improved from 0.38 in 2005 to 0.43 at present. However, this is way

behind Gujarat, showing that most states have a long way to go yet. Gujarat is not only the freest state, but it has also registered the fastest rate of improvement (from 0.46 to 0.65). The second fastest improver is Andhra Pradesh (from 0.40 to 0.50). Bihar remains at the bottom of league, but its score has improved significantly from 0.25 to 0.31, and this improvement in percentage terms is heartening.

The states have been rated on three parameters of size of government: expenditures, taxes and enterprises; legal structure and security of property rights, and regulation of labour and business. In these three areas, the states have enough powers to directly impact outcomes, and so can be rated. The index of economic freedom however is calculated for each of these categories, and then aggregated. Each category is important for indicating a specific aspect of economic freedom. The overall ratings are a simple equal weighted average of the three ratings.

Haryana ranks first in relation to size of government. It has also been one of the most rapidly growing states of India, and has attracted large investments in the services sector and in manufacturing.

However the state shows decline in index value since 2009 on legal structure and security of property rights. This is worrisome as it puts a serious question mark on the sustainability of high economic growth in the state.

State wise data on (aggregate) FDI equity inflows between April 2000 to December 2016 show that FDI is concentrated in a few pockets in India. The NCR region including Delhi, part of Uttar Pradesh and Haryana had

received 21 percent FDI equity inflows during this period. Proximity to Delhi, one of India's fastest growing economic centres would have helped, but Haryana has been able to leverage it without too much increase in government.

Seen sector-wise, the proportion with 17.99 per cent of total inflows was highest in the services sector (includes financial, banking, insurance, non-Financial / business, Outsourcing, R&D courier, Tech. Testing Analysis) followed by construction development: townships, housing, built-up infrastructure and construction-development projects (7.49 per cent), telecommunications (7.38 per cent), computer software & hardware (7.04 per cent), automobile industry (5.09 per cent).

Competitiveness Index: Earlier, in the oughties despite its relatively high level of economic development, Haryana found an average position in the competitiveness index primarily due to its low score on human resource base, neglect of science and technology, and lack of high quality services (Tarique, 2007). The competitiveness index is used by giving the rank to Standard Competitiveness score to show the development set-up of states. National Productivity Council (2004) worked out the relative competitiveness for all the Indian states by using the criteria of economic strength, business efficiency, governance quality, human resource and infrastructure on the state's local environment (collective as 95 socio-economic and technological criteria). The relative performance of each state in the final rankings is measured through the Standard Deviation Method (SDM). And on this basis standard values (STD) were computed for the 95 ranked criteria.

Human Development Index (HDI):

Another alternative for measuring state-level economic performance is the Human Development Index (HDI) (Planning Commission, 2011) that includes measures of literacy, infant mortality, access to safe water and availability of durable constructed housing, as well as formal education, poverty ratios, and per capita expenditure.

The HDI in Haryana has been rising over the period, having increased from 0.360 in 1981 to 0.552 in 2007-08. It fell in the 'Medium HDI' category as per the HDR 2010 classification (Human Development Report, 2010) along with several other states such as Kerala, Punjab, Himachal Pradesh, Maharashtra, Tamil Nadu, Karnataka, Gujarat, West Bengal and Uttarakhand. The global HDI value of India was 0.504 although fell in the category of countries with 'Medium Human Development' but was short of the world average of 0.624 (Human Development Report, 2010; p. 155).

Structural and Growth Changes in Economy

An analysis of the changes in the structure of economy is primarily concerned with movements in sectoral distribution of net state domestic product (NSDP) ¹. Also of equal importance is the matter relating to the growth rate of NSDP as a whole and disaggregated by sectors.

Contribution of Haryana to Net State Domestic Product, 1965-66 to 2011-12:

Ever since the formation of a new state, Haryana's contribution in the country's income has increased from 1.95 per cent in 1965-66 to 3.43 per cent in 2011-12. All sectors of economy have registered an increase except construction. The share of manufacturing has however declined since 2001-02 (Table 2). The increase is largely in the services sector, and electricity, gas and water supply.

Table 2 : Haryana: Per cent share in Net Domestic Product at constant (2004-05) prices in India: 1965-66 to 2011-12

Year	1965-66	1971-72	1981-82	1991-92	2001-02	2011-12
Net domestic product	1.95	2.39	2.64	3.1	3.02	3.43
Agriculture, forestry & fishing						
Total	2.55	3.27	3.35	4.15	3.58	4.00
Agriculture	3.03	3.82	3.81	4.68	4.09	4.46
Forestry & logging	0.32	0.94	1.07	1.57	1.45	1.71
Fishing	0.04	0.04	0.09	0.44	0.37	0.61
Industry						
Total	1.68	2.04	2.44	3.33	3.61	3.55
Mining & quarrying	0.06	0.12	0.33	0.15	0.32	0.08
Manufacturing	1.68	2.04	2.63	4.18	4.36	3.93
Electricity, gas & water supply					2.36	4.30

Construction	4.96	5.15	4.77	3.89	3.69	3.57
Services						
Total	1.15	1.37	1.95	2.2	2.48	3.24
Trade, hotels, transport, storage, communication					3.07	3.98
Financing, insurance, real estate & business services	1.15	1.22	1.7	1.71	2.18	2.77
Community, social & personal services	1.6	1.54	1.78	1.89	1.8	2.29

Source: CMIE

Haryana's contribution in the country's net state domestic product was higher than its respective share in Central transfers. During 1980-81 to 2011-12 Haryana had 1.18 percent share in transfers from the Centre (Tax Devolution plus Grants) during 6th to 12th Plans (1980-2012) while it contributed 3.82 per cent to Net State Domestic Product (NSDP) during this period; leading to highest ratio of 3.23 in the country between share and contribution.

Sectoral Contribution in Haryana's Economy (Net State Domestic Product), 1965-66 to 2011-12: Within the state, there are signs of structural shift and declining importance of primary activities in the state's economy due to an increase in the share of non primary sector by about 75 percent in three and a half decades. This is in line with the situation prevailing in majority of the states of India.

The primary sector's share has plummeted from 57.27 percent in 1966-67 to 17.44 percent in 2011-12. Agriculture constituting the major component of primary sector has experienced the most noticeable decline. Had not livestock rearing, especially dairying, been promoted in the state, the fall in the share of the primary sector would have been steeper (Table 3). However a significant proportion of workforce continues to be in the agriculture sector. Census of India 2011 reported 44.9 per cent agricultural workers in Haryana, of which 27.8 per cent were cultivators and 17.1 agricultural labourers. The corresponding proportions in 1991 were 72.93 percent agricultural workers; 49.56 percent cultivators and 23.38 percent agricultural labour. The proportion of cultivators in 2011 was larger in comparison to the All-India average. There are 9.98 lakh small & marginal farming families which is 65.31 per cent of total farming families. These land holdings are not viable.

Table 3 : Haryana: Sectoral Distribution of Net State Domestic Product (Income) at constant (2004-05) prices: 1966-67- 2011-12 (Percentage Distribution)*

Year	1966-67	1971-72	1981-82	1991-92	2001-02	2011-12	Percent point change since initial
Total Primary sector	57.27	56.4	45.73	39.38	28.1	17.44	-39.83
Agriculture	54.5	53.57	43.48	37.28	26.54	16.56	-37.94
Forestry & logging	2.17	3.92	2.57	2.05	1.48	0.76	-1.41
Fishing	0.02	0.02	0.04	0.16	0.13	0.12	0.1
Total Secondary sector	20.34	20.61	24.11	28.35	28.71	25.88	5.54
Mining & quarrying	0.13	0.11	0.35	0.17	0.28	0.04	-0.09
Manufacturing	10.91	11.25	14.1	18.58	18.88	15.83	4.92
Electricity, gas & water supply					1.05	1.33	0.28
Construction	20.17	16.49	13.81	9.28	8.47	8.69	-11.48
Total Tertiary sector	18.63	19.9	27.89	31.45	42.91	56.68	38.05
Trade, hotels, transport, storage, communication					23.46	32.81	9.35
Financing, insurance, real estate & business services	3.6	3.99	5.39	7.07	10.72	15.29	11.69
Community, social & personal services	9.21	7.84	8.42	8.27	8.57	8.58	-0.63
Net domestic product	100	100	100	100	100	100	

Source: Statistical Abstracts of Haryana (various issues).

Secondary sector (including manufacturing construction, electricity, gas and water supply) improved its share from 20.34 percent to 25.88 percent from 1966-67 to 2011-12. CMIE in its computation has placed mining and quarrying in the secondary sector. Since 2001-02 manufacturing subsector and construction activity reveal decline.

The spatial disparity in urban-industrial sector has widened ever since India opened to the world economy. Faridabad-Gurgaon-Manesar region has taken a lead whereas Mewat district (renamed as Nuh) lying south of Gurgaon registers as the most laggard. All these areas lie on the same axis, south of the national capital of Delhi (Table 4).

Table 4 : Haryana: Spatial Disparity in Select Indicators of Development: 1991-2011

Indicator	Spatial Disparity*		
	1991	2001	2011
% Urban Population	38.78	40.45	50.70
% Female Literacy	26.70	17.77	13.67
% Non-agricultural main workers in rural areas	28.82	27.98	39.70
Registered working factories per 100 km ² of area	101.60	121.42	183.83
Registered working factories/lakh of population	89.14	88.78	103.01
Workers in registered working factories/100 km ² of area	145.21	144.15	217.08
Workers in registered working factories per lakh of population	126.28	98.09	146.67

Note: *Spatial disparity is computed as co-efficient of variability

The tertiary sector has improved its share from 18.63 percent in 1966-77 to 56.68 percent in 2011-12. Seen together, trade, hotels, transport, storage, and communication have emerged as the major contributor in 2011-12. Financing, insurance, real estate & business services having benefited from new technologies have also risen considerably.

The state's economy like the Indian economy has diversified more in the tertiary sector. All these sectoral shifts have come about at the cost of primary sector. The broad-based services sector is the major contributor to the states' income. In fact the services sector has been the key driver of the fast growth of the Indian economy in recent years (Planning Commission 2008), replacing manufacturing (Dasgupta and Singh 2005).

India's economic performance has been in contrast with that of China where industry, with an emphasis on mass production, led to the country's rapid growth (Li et. al, 2003). A traditional structural change was also not visible in India. A distinct shift in

policy initiative can be seen with the 'Make in India' thrust of the new government. Its spatial implications would be a matter of observation and research in the times to come.

The post-reforms period has witnessed maximum structural change in economy of the state with the index value of 9.1 during oughties as compared to 7.7 during nineties, 4.7 during eighties and 7.3 during seventies. The seventies were marked by spread of green revolution technology, and the nineties with opening of the Indian economy to the world. The change is negatively correlated with growth rates in the agricultural sector. The decline in proportion of income generated in agriculture and animal husbandry and rise in shares of secondary and tertiary sectors is due to higher rates of growth in secondary and tertiary sectors as compared with that of agriculture, which accounts for 99 percent of the value of primary sector output.

The state NSDP grew at higher rates than the national average in the sixties through to nineties. The growth rate in per capita income too was impressive despite

high population increase rate. During 2001-2011 Haryana's income (NSDP) at constant prices of 2004-05 has grown at 8.79 per cent and per capita income at 6.83 per cent (Table 5). Importantly, Haryana an agriculturally prosperous and high income category state has experienced fluctuating growth rate of per capita income.

Agricultural sector saw a dwindled growth rate during nineties, but picked up in the following decade. The new technology introduced during the mid-sixties supported with pricing policy led to increase in area under wheat and rice and later on high value industrial crops like oilseeds and fibres. However the gains of the Green Revolution have reached a plateau level.

Table 5 : Haryana: Compound Annual Growth Rate of Some Economic Parameters at Constant (2004-05) Prices, 1966-2011

	1966-71	1971-81	1981-91	1991-2001	2001-11
Net domestic product	7.16	4.82	6.21	5.44	8.79
Per capita income	4.35	2.18	3.69	2.91	6.83
Agriculture	6.53	2.67	4.67	1.74	3.48
Manufacturing	8.03	7.33	9.26	5.70	6.87
Construction	3.73	3.20	1.99	4.53	8.70
Services	8.91	8.34	7.39	9.05	12.06
Population		2.56	2.45	2.53	1.83

In Haryana the crop land use has failed to wean itself away from the wheat-rice rotation towards a more diversified cropping pattern. This has proved detrimental to its water and soil resource base. As a result, the cost of agricultural production is experiencing a regular rise and income to the agriculturalists has started falling. The ecological hazards of this crop system are also well documented.

Some diversification is evident with the Gibb's Martin diversification index moving from 0.83 in 1966-67 to 0.73 in 1999-2000. A more important diversification that needs encouragement is growing of fruits, vegetables, flowers and other horticulture crops. This, in turn, would depend on the

generation of adequate surpluses through higher investment in rural infrastructure and in scientific research and emphasis on allied agricultural activities

The decade following economic liberalisation saw growth of service and construction sector. Trade, transport, banking and other services have continuously grown since the formation of the state. The lower rate of growth of agricultural and manufacturing sectors which together account for 3/5th of the total income had lowered the rate of growth of NSDP during nineties. Although things have picked up since the beginning of the new century there are signs of structural distortion in the economy. Any pattern of growth cannot

be sustained for long which does not allow agriculture and industry to establish strong and mutually reinforcing linkages essential for sustained development.

Budgetary Expenditure

The growth rates can be partly explained in terms of the execution of economic policy through the budgetary exercises. It can be seen that the share of capital expenditure has declined to 1.99 percent of NSDP in 2010-11 from 2.99 percent in 2000-01 and 2.86 in 1970-71 (Table 6). It had risen to 3.45% in 1980-81. This expenditure leads to creation of an asset and is made on building of roads, power plants, health facilities etc. Seen over the entire period, it has been fluctuating over the decades. The low investment both in the public and private sector is not only going to affect economic rate in the years of actual

fall but also put a constraint on expansion of future rate of economic growth especially when private investments, both local and foreign, do not come forward to fill the gap.

The revenue expenditure is the money the government spends on salaries of its employees and constitutional functionaries, interest payments on borrowings, and subsidies. Within it the plan expenditure is on development schemes and the non-plan expenditure is spending on pension payments and wages, defence, interest on borrowings and subsidies. The division of the total revenue expenditure between development and non development heads show that development expenditure has generally constituted more than 60 per cent of the total budgetary expenditure in 1970-71 which has varied from 6.67 per cent of the NSDP in 1970-71 to 11.27 per cent in 1990-91.

Table 6 : Haryana: Statement of Budgetary Expenditure (Rs. in 10 million)

Period/ Nomenclature	Revenue Expenditure			Capital Expenditure	NSDP
	Development	Non-Development	Total		
2010-11	18900.81 (7.90)	9328.14 (3.93)	9409.38 (11.83)	4752.97 (1.99)	239255.55
*	66.76	33.24			
2000-01	4049.11 (8.37)	3132.26 (6.47)	7181.37 (14.84)	1445.16 (2.99)	48381.26
*	56.38	43.62			
1990-91	1379.45 (11.27)	663.84 (5.42)	2043.29 (16.69)	142.62 (1.16)	12238.45
*	67.51	32.49			
1980-81	302.27 (10.19)	98.45 (3.32)	400.72 (13.51)	102.26 (3.45)	2966.95

*	75.43	24.57			
1970-71	57.99 (6.67)	35.40 (4.07)	93.39 (10.74)	24.87 (2.86)	868.88
*	62.09	37.91			

Note:

- (i) Figures in parentheses indicates “as percent of NSDP”
(ii)* Indicates “as percent of total expenditure”

Source:

- (i) Government of Haryana, 2002. Statistical Abstract of Haryana 2000-01. Economic and Statistical Organisation, Planning Department: Chandigarh.
(ii) Government of Haryana, 2012. Statistical Abstract of Haryana 2010-11. Economic and Statistical Organisation, Planning Department: Chandigarh.

Employment Status

Some insights on status of employment can also be gained from a perusal of NSS data (Table 7). Self-employment is significantly higher in rural areas in Haryana than in India indicating a more egalitarian distribution of productive assets. Whereas male self-employed have declined both in rural and urban areas female self-employed have risen in urban areas of Haryana.

At the same time, percentage of casual labourers in Haryana is lower than that in India. The proportion of female casual labourers have declined in India as well

in the state with a noticeable decline in urban areas. The incidence of casual employment reflects absorption of labour on temporary and part time basis in various low productivity activities. A large section of such workers are likely to be poor.

Regular/Wage salaried employees present a complex picture. Rural-urban contrast is observable. So is male-female gap. Although at the All-India level in 2011-12, the proportion of male and female employee nearly matches in urban areas, in Haryana, urban females show a very high proportion of employment in comparison to their male counterpart.

Table 7 : All India and Haryana: Percentage of Usually Employed Persons by Status of Employment, 1987-88 to 2011-12.

Employment status	Territory		Percentage in respect of					
			Maale			Female		
			1987-88	1993-94	2011-12	1987-88	1993-94	2011-12
Self employed	India:	Rural	57.5	56.7	54.5	54.9	51.3	59.3
		Urban	41.0	41.1	41.7	39.3	37.2	42.8
	Haryana	Rural	65.6	61.6	58.2	76.6	62.5	75.2
		Urban	49.1	41.5	42.7	21.2	27.1	27.8

Regular/ Wage salaried employees	India:	Rural	10.4	8.7	10.0	4.9	3.4	5.6
		Urban	44.4	42.7	43.4	34.2	35.5	42.8
	Haryana	Rural	11.6	14.0	16.5	5.4	5.4	4.2
		Urban	38.7	45.6	46.3	68.2	44.3	67.5
Casual labour	India:	Rural	32.1	34.6	35.5	40.2	45.3	35.1
		Urban	14.6	16.2	14.9	26.5	27.3	14.3
	Haryana	Rural	22.8	24.4	25.3	18.0	32.1	20.6
		Urban	12.2	12.9	11.0	10.6	28.6	4.7

Source: NSS Report No. 537: Employment and Unemployment Situation in India, 2009-10. p.85. and Key Indicators of Employment and Unemployment in India 2011-12, NSS 68th round, pp.69-73, Ministry of Statistics and Programme Implementation, Government of India.

In the previous discussion on economy it was noted that Haryana exhibits positive output structural changes but the corresponding shifts in the employment sector are not significant. Over the years the relative importance of primary sector in the occupational structure has declined for obvious reasons.

Disaggregated by sectors, the share of male main agricultural workers has declined to 34.54 per cent, a substantial decline since 1971. The last decade has seen a decline in absolute numbers and so a negative growth rate, which largely can be attributed to declining share of cultivators both in absolute numbers and proportionate share. However, the decline is far less than the decline in the share of agricultural sector in the economy. On the other hand, agricultural labourers have increased in absolute numbers over 2001 but not in proportionate share.

Marginalisation of rural agricultural workforce is the natural outcome. The labour force diversification in rural areas needs to be encouraged through investment in agro-processing and related activities.

The shift of labour force from the agricultural sector is associated with an increase in work participation rate of workers in household industry and 'other workers' category. Within the manufacturing sector, the share of the household industry vis-à-vis organised industry has declined substantially.

The Question of Regional Disparity

Which could be the possible measures of the relative development levels of various districts? The selection was based upon the indicators expected to address various dimensions of development as also availability of all the requisite data. The following indicators meet the requirement to a great extent:

- i) Industrial development to represent economic growth
- ii) Percentage of non-agricultural workers in rural areas, to measure the degree of diversification of rural economy and rural transformation;
- iii) Percentage of literate females as an index of status of women to indicate social development;

- iv) Percentage of households with computer/laptop facility, to substantiate technological advancement;
- v) Percentage of urban population, to typify modernisation.

Harnessing data from a variety of sources, such as the Census of India and Statistical Abstract of Haryana on these parameters, a statistical exercise was run to arrive at the development level of districts of Haryana. These data were duly normalised dividing each value by its mean, the highest value of

a district in the variable was considered as equivalent to 100 and all other values were computed accordingly. This procedure was followed for all the five indicators. Finally for each district a composite score was computed by adding the values of all the variables and divided by the number of variables, which were 5 in the present case. The results obtained are presented in Fig. 1. The eastern part of the state contrasts with the west. Mewat district lying adjacent to the most developed districts of Faridabad and Gurgaon lags far behind other areas.

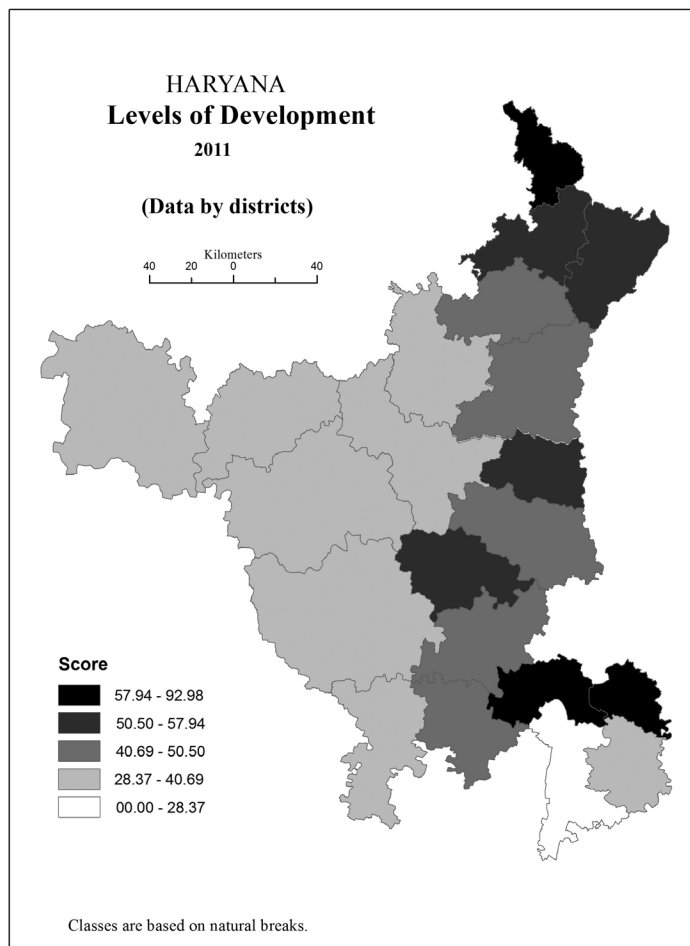


Fig.1 :

The development level finds an association with the quality of living space in different parts of the state. The Pearson correlation value was +.64 which was found to be significant at the 0.01 level (2-tailed). The quality of living space has been referred to three sets of factors: (i) status of housing conditions, represented by the percentage of households living in *pucca* houses; (ii) availability of living space, measured by percentage of households living in two or more rooms, percentage of households having separate bathroom, and percentage of households having separate kitchen within the house; (iii) and provision of amenities, in terms of percentage of households having toilet within the house; the facility of treated

water supply, LPG/PNG as cooking fuel, and electricity for lighting. An index was computed for each indicator using the following formula:

$$\text{Quality of living space} = 1 - \frac{\text{max.-specific}}{\text{max.-min.}}$$

The scores for each district on all the eight indicators were summed and divided by the number of indicators. The regional picture emerging in Fig.2 shows a relatively developed eastern Haryana in comparison to central and southern parts of the state. The western part of the state is also positioned well in this regard. Again the district of Mewat ranks the lowest on these parameters.

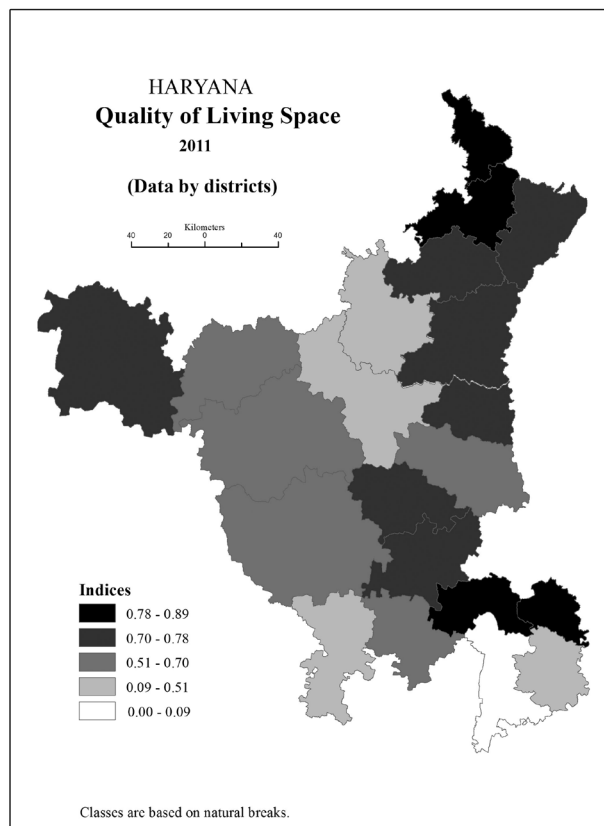


Fig. 2 :

Conclusions

Haryana, one of the economically developed states of the Indian Union, has undergone structural and growth changes in its economy since the green revolution ushered in late sixties which coincided with its formation as a separate state. Its economic structure has got transferred from agrarian to more diversified industrial and tertiary oriented one. The trend is more towards tertiarisation rather than secundarisation of economy. The nineties, in particular, have witnessed maximum structural change. However, Haryana needs to work on its development model and bring in more inclusivity, improve its human development index, diversify its crop structure and labour force, create strong and mutually reinforcing linkages between agriculture and industry for a sustained economic growth and prosperity. A widening of regional disparity is seen because of convergence of urban-industrial sector in the eastern part.

Notes

1. NSDP stands for the sum of the values added by all the production units carrying out of their business in the state less the capital good needed for the replacement or depreciation of worn out and obsolete goods. It is irrespective of whether the owners of the units are nationals or expatriates. The domestic product is a territorial concept.
2. Index of structural change =

$$\frac{\sum |p_1 - q_1| + |p_2 - q_2| + |p_3 - q_3|}{3}$$

Where, p and q represent the percentage distribution of NSDP for two points in

time p_1, q_1 – primary sector p_2, q_2 – secondary sector p_3, q_3 – tertiary sector

For example, index of change for the state of Haryana for the decade 1990-91 to 2000-01 will work out as follows:-

$$= \frac{|45.71 - 33.36| + |23.47 - 25.90| + |30.82 - 40.74|}{3} = 8.4$$

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