

## Past Achievements and Lessons for the Future

### *Changes in Overall Economy*

The above survey, of the goals of planning in Himachal Pradesh, clearly shows that the planners in Himachal Pradesh have, by and large, followed the framework and objectives of the National Plan and have thus failed to give the much-needed regional focus for planned development in the context of the distinct physical features and environmental conditions of the State. However, it must be recognised that if the sectoral allocation of resources in the plans is in accordance with the regional resource endowments and the requirements of socioeconomic development, the shortcomings involved in not specifying the planned developmental goals might be conveniently overlooked.

The data on resource allocation in various plans (Table 1) reveals that there has been a pattern of sectoral priorities in the Five Year Plans of Himachal Pradesh. The highest priority was given to transport and communications up to the Fourth Plan. After that, the highest priority was accorded to water and power development during the Fifth, Sixth, and Seventh Plans. By and large, the second position was given to the agriculture and allied services' sector in various Plans of the State. Social and Community services were accorded third position in the first three plans and fourth position later on. Industries and minerals ranked fifth in priorities.

Resource allocation patterns have a direct bearing on the growth and structure of the economy. Table 2 shows the basic indicators of growth in Himachal Pradesh and Table 3 shows the percentage distribution of the State Domestic product by origin of industry. An analysis of the growth and structure of the Net Domestic Product of Himachal Pradesh shows that the total income of the State grew at the rate of 2.41 per cent (at constant 1970/71 prices). The overall growth rate of the primary sector (agriculture and allied activities) was merely 1.67 per cent per annum. Income from agriculture (including horticulture and animal husbandry) grew at the rate of 2.33 per cent per annum. Growth in income from forestry was negative (this was because of the ban on forest cutting). The secondary (industrial) sector grew at the rate of 3.3 per cent per annum. The annual growth rate in manufacturing activities was 3.2 per cent and in electricity, gas, and water supply it was 21.7 per cent. The tertiary (services) sector grew at the rate of 4.7 per cent per annum. The growth rate in banking and insurance was 41.9 per cent per annum. Transport and Communications showed a growth rate of 4.9 per cent per annum. The relatively higher growth rate in the secondary and tertiary sectors is due to their small initial base.

The relative contribution of different sectors to the Net State Domestic Product has been changing over time. The share of the primary sector has been declining and that of the secondary and tertiary sectors increasing, as is to be expected in any developing economy. In 1967/68, the primary sector accounted for a 61 per cent share in the Net State Domestic Product, whereas, by 1982/83, its share had declined to 50 per cent. During the same period, the share of the secondary sector increased from 13.8 per cent to 20.7 per cent, whereas the share of the tertiary sector increased from 25 per cent to 29 per cent. The primary sector still has a dominant position in the economy. The tertiary sector has mostly been catering to the needs of the secondary sector, because the growth rate of the tertiary sector has been barely keeping pace with that of the secondary sector. Having a low base, the tertiary sector services were, by and large, used up by the secondary sector and thus they could not percolate down to the primary sector and rural areas.

Table 1: Percentage Allocation of Expenditure of Different Sectors in the Five Year Plans of Himachal Pradesh.

Sector	First Plan 1951-56	Second Plan 1956-61	Third Plan 1961-66	Annual Plans 1966-69	Fourth Plan 1969-74	Fifth Plan 1974-78	Annual Plans 1978-80	Sixth Plan 1980-85	Seventh Plan Targets 1985-90	(Percentage)	
										Percentage	Annual Growth of Expenditure 1951-66 1966-85
1. Agriculture and Allied services	14.1	15.7	22.7	18.6	24.1	26.2	26.6	25.1	28.97	62	113
2. Cooperation	14.1	14.9	10.3	4.5	3.2	1.1	1.7	1.1	0.77	25	6
3. Water & Power Development	4.1	9.4	7.1	27.9	21.7	26.7	22.2	26.2	37.41	67	392
4. Industries and Minerals	1.7	2.5	2.5	3.2	3.6	3.3	3.0	3.2	2.92	56	132
5. Transport & Communications	46.2	37.1	35.2	34.0	29.1	24.1	22.9	17.7	18.13	26	48
6. Social & Community Services	19.8	19.2	21.2	11.5	18.0	16.3	21.3	24.2	10.25	39	117
7. Economic and General services	0.1	1.2	1.0	0.3	0.3	2.3	2.3	2.5	1.55	666	270
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>42</b>	<b>97</b>
<b>Rs million</b>	<b>(52.7)</b>	<b>(160.3)</b>	<b>(338.4)</b>	<b>(397.8)</b>	<b>(1134.3)</b>	<b>(1614.8)</b>	<b>(1475.6)</b>	<b>(6556.6)</b>	<b>(9070.0)</b>		

Source: Draft Seventh Plan, 1985-90, Shimla: Planning Department, Government of Himachal Pradesh, 1984.

**Table 2: Basic Indicators of Growth in Himachal Pradesh**

Indicators	1967/68	1972/73	1982/83
1. Population (millions)	3.22	3.57	4.28
2. % of population living in rural areas	NA	94.97	92.38
3. Population density/sq.km.	57.8	64.5	77.0
4. Net State Domestic Product (Rs. in millions)	1830	2391	2969
5. Per capita income (Rs/Yr.)			
(a) at current prices	528	769	1658
(b) at 1970-71 prices	568	669	686
6. Literacy rate	21.27	31.96	42.48
7. No. of doctors per million of population	21.8	203	296
8. No. of hospital beds per million of population	1440	1270	1355
9. No. of hospitals & dispensaries	480	590	831
10. % of villages electrified	6.15	24.83	75.63
11. Per capita domestic consumption of electricity (KWH)	3.1	5.6	75.63
12. Electricity generated (million KWH)	3.7	162.6	540.5
13. Mileage of roads (Km)	4308	7609	13600
(a) Per 100 km <sup>2</sup> of area (km)	8.72	16.85	24.44
(b) Per thousand of population (km)	1.51	2.61	3.18

Source: Statistical Outline of Himachal Pradesh (various issues). Shimla: Directorate of Economics and Statistics, Himachal Pradesh Government date of publication.

**Table 3: Percentage Distribution of Net Domestic Product of Himachal Pradesh  
by Origin of Industry**

Sector	(Percentage)			
	1967/68	1972/73	1982/83	Annual Growth (%)
1. Agriculture and animal	55.45	46.15	45.05	2.33
2. Forestry	5.09	7.86	4.78	-2.33
3. Fisheries	0.04	0.04	0.14	30.00
Sub-total:	60.58	54.05	49.97	1.67
4. Mining & Quarrying	0.07	0.22	0.23	1.66
5. Manufacturing	5.55	5.51	5.61	3.20
6. Construction	7.38	13.48	13.28	2.57
7. Electricity, gas, and water supply	0.86	0.59	1.56	21.71
Sub-total:	13.86	19.80	20.68	3.34
8. Transport & Communications	2.50	2.76	3.59	4.91
9. Trade, Storage, & Hotels	7.35	5.45	3.86	-2.14
Sub-total:	9.85	8.21	7.45	0.17
10. Banking & Insurance	0.56	0.94	3.26	41.93
11. Real Estate	2.78	2.97	2.55	1.02
12. Public Administration	5.10	5.70	6.85	4.03
13. Other Services	7.27	8.33	9.24	3.06
Sub-total:	15.71	17.94	21.90	4.70
Total Income (Actual income in million Rs at 1970-71 prices)	100.00 (1830)	100.00 (2391)	100.00 (2969)	2.41

Source: Directorate of Economics & Statistics. Shimla: Himachal Pradesh Government.

Note: Annual growth rate percentage of income during 1972-73 to 1982-83 (at constant prices).

It is observed that the economy of the State has undergone structural changes temporally, in that the relative contributions by the primary sector, secondary sector, and tertiary sector have changed. But it is significant to note that even though the relative share of agriculture (primary sector) in the State Domestic Product has gone down, the percentage of the work force dependant upon this sector has not decreased, since, 70.8 per cent of working people are still directly dependant on agriculture according to the 1981 census.

The family planning programme in Himachal Pradesh has not yielded desired results as the human population growth rate is still 2.3 per cent per annum. A high population growth rate neutralises, to a significant extent, the fruits of economic growth and threatens what is already a precarious balance between scarce natural resources and people. Therefore, a double-edged approach to development is needed, i.e. increasing the productivity of natural resources as well as checking population growth in the region.

There has been some emphasis on industrialisation, as reflected by the increase in plan allocation to the manufacturing sector, yet the share of this sector in the State income has not risen much. This indicates that there is a further need to probe into what types of industries are being promoted through State intervention, their forward and backward linkages with the rest of the economy, their impact on employment generation, and the incidence of "sickness" among the promoted industries. For a hilly area like Himachal Pradesh, small-scale agro-industries are best suited to the use of local raw materials and manpower. Small-scale industries can provide employment opportunities at a relatively smaller capital cost. These industries help in the dispersal of industrial activities and thus foster balanced development of all parts of the region.

In a hilly State like Himachal Pradesh, with meagre infrastructural facilities (e.g. roads, schools, hospitals etc.), high priority in resource allocation had to be initially accorded to the creation of the prerequisites for development. Heavy allocation of resources for social overheads that provide education, medical facilities, and public health services is also justified. Because of the high priority given to transport and communications, the mileage of motorable roads tripled from 1967 to 1983. During the same period, the literacy rate more than doubled, it was 17 per cent in the 1961 Census and 42 per cent in the 1981 Census. Education is one of the basic needs for economic development in a region. The Himachal Pradesh Government gave due consideration to education and to medical facilities in its Plans. The number of hospitals and dispensaries increased from 480 to 831 from 1967/68 to 1982/83.

In a hilly region with sufficient rainfall and vast hydro-electric potential, the power sector should not be considered to be a mere component of infrastructural facilities; rather it should be counted as a commodity production sector and as a source of income. In Himachal Pradesh, during 1967-68, the electricity generated was only 3.7 million kwh and by 1982/83 it rose to 540.5 million kwh, out of which about 50 per cent of the power (which was surplus) was sold to the neighbouring States, thus providing a good source of income for the State.

Fairly heavy allocation of resources (above 20% of the total outlay) to the agriculture and allied services, on which about three-fourths of population depends for a livelihood, is also justified. However, the main emphasis in agriculture should shift from 'self-sufficiency in foodgrains' to maximization of farm income through cash crops (fruits and vegetables) that are highly remunerative and for which the region has comparative advantages (due to climate and other factors). But the dependence of fruit and vegetable crops on forests, for packaging etc, should be kept to the minimum and alternative means of packaging should be found. The land use data of the State reveals that the area under barren and uncultivable land is increasing over time, mainly due to an increase in the human and livestock population which resulted in marginal land being

brought under the plough and in overgrazing of pastures. Hence, the process of land degradation in the State needs to be contained and it is necessary to examine sustainable approaches to agricultural development. The livestock population has been increasing at the rate of 0.59 per cent per annum and fodder resources have been shrinking. Livestock numbers need to be contained/curtailed and their quality improved to increase income from livestock sources. In the animal husbandry programmes, attention to livestock diseases alone is not sufficient. Programmes for better breeding and feeding should also be popularised and form part of the programme for improving the livestock productivity. In a region where livestock owners heavily depend upon common pastures and grazing lands (whose conditions are deteriorating due to excess livestock pressure), some collective action, with financial and technical support from the Government, is very necessary to improve the forage productivity of the common pasture lands, which are currently ignored by animal husbandry programmes.

### *Changes in the Agricultural Sector*

Since the agricultural sector accounts for the lion's share in the Net State Domestic Product and employs more than two-thirds of the working population, its growth is vital for the growth of the State economy and, consequently, the socioeconomic upliftment of the rural masses. From this perspective, it is interesting to make a critical appraisal of the changing profile of agriculture in Himachal Pradesh.

**Broad Land Use:** The advantage of extensive cultivation cannot be taken because of a variety of reasons. The analysis of the land use pattern over time, therefore, assumes great importance in developing a future strategy regarding reallocation of resources to different crops. The land use data are presented in Table 4. The total geographical area reported by the professional survey was 5,567,300 ha while the cadastrally surveyed area (by village papers) during 1985/86 was only 58 per cent of this. The rest of the area was under snow and was inaccessible. The reported area (by village papers) was considered for analysis of the land use-pattern. The forest area had increased from 21.8 to 27.4 per cent of the total reported area during the fifteen years since 1970/71. However, an increase of 34.34 per cent in barren and uncultivable wasteland is unfortunate. This could be attributed to soil erosion which is a disturbing phenomenon. The land put to non-agricultural uses, such as roads, etc also increased by 27.89 per cent during the period. The area under cultivable waste, i.e. land once cultivated and then not cultivated for five years in succession, showed a welcome decline of 23.67 per cent. Permanent pastures and other grazing lands accounted for 35.7 per cent of the reported area during 1985/86, indicating that the State has good potential for supporting animal husbandry programmes. The percentage of land under current fallows and other fallow land also declined from 2.1 to 1.8 per cent. However, the net area sown increased from 546,300 ha to 582,600 ha during the study period or by 6.63 per cent while the cropping intensity had increased only slightly from 166.9 to 167.1 during this period.

**Farm Size Structure:** There had been an increase in the number of land holdings from 609,000 in 1970/71 to 820,000 in 1985/86, indicating rapid fragmentation of medium and large holdings due to succession; as well as allotment of land to the landless by the State. The percentage number of marginal and small operational holdings had gone up to 83.2 in 1985/86 while they owned only 43.1 per cent of the total of the number of holdings cropped area. The medium and large farmers who constituted only 16.1 and 0.7 per cent, owned 46.6 and 10.3 per cent of the farmed land in the State. The land resources are thus highly skewed in distribution and, with the increase in population, the land-man ratio has gone down and the average size of holdings in Himachal Pradesh has declined from 1.5 ha in 1970/71 to 1.2 ha in 1985-86. This works out to a 20 per cent decline in 15 years.

**Table 4: Changes in Land Use in Himachal Pradesh  
from 1970-71 to 1985-86**

Land Use	1970/71		1985/86		% Change During	
	Area (‘000 ha)	Percent to total	Area (‘000 ha)	Percent to total	1985/86 over	1970/71
1. Total Geographic area:						
a) By professional survey	5565.8		5567.3			0.03
b) Reporting area for land utilization purposes	2932.5	100	3227.1	100		10.05
2. Forests	638.2	21.8	884.8	27.4		38.64
3. Barren & uncultivable	118.8	4.0	159.6	7.0		34.34
4. Land put to non-agricultural uses	172.1	5.9	220.1	6.8		28.89
5. Cultivable waste	167.7	5.7	128.0	4.0		-23.67
6. Permanent pastures and other grazing lands	1188.0	40.5	1153.6	35.7		-2.90
7. Land under misc. tree crops not included in area sown	40.8	1.4	40.8	1.4		0.00
8. Current fallows	58.3		43.9			
9. Other fallow land	2.3	2.1	13.7	1.8		-4.95
10. Net area sown (Cropping intensity)	546.4 (166.9)	18.6 -	582.6 (167.1)	18.1 -		6.63 (0.12)

Source: Directorate of Land Records, Himachal Pradesh, Shimla.

**Cropping Patterns:** A change in cropping patterns has been taking place in the State as elsewhere in the country. The shift in cropping systems is normally advantageous and indicates a dynamic economy. The change depends upon the crops involved and the multifarious stimuli such as the changing economic, technological, and institutional factors. The data shown in Table 5 give a broad crop-group-wise changing pattern in the State. Food crops include cereals, pulses, vegetables, fruit crops, and spices and these together accounted for about 96 per cent of the total cropped area while the remaining was shared by non-food crops. The area under fruit crops registered the highest increase at the compound growth rate (C.G.R.) of 6.59 per cent per annum, followed by wheat (1.45%), total vegetables (1.31%), maize (1.19%), and total spices (1.07%). However, the area under two principal cereal crops, i.e. paddy and barley, total pulses, and total oilseeds, decreased at the rate of 0.57, 1.47, 3.90, and 0.12 per cent respectively. Pulses suffered a maximum decline of 39 per cent, followed by barley (15.2%), paddy (12.6%), total non-food crops (5.9%), and total oilseeds (3.9%) during the reference period. The decrease in area under pulses and oilseeds might not be immediately disadvantageous to the farmers because of the present low level output-input ratios of these crops, but, nevertheless, it has national repercussions.

**Production and Productivity of Principal Crops:** The data presented in Table 6 show the trends in area, production, and productivity of the four principal cereal crops and the three important cash crops in the State. Nationally, the water, fertilizer, and seed (HYV) technology has markedly increased the productivity of wheat from 1,123 kg during 1970-73 to 2,046 kg/h during 1983-86 but, in Himachal Pradesh, the impact of the 'green revolution' is not noticeable in wheat as its yield instead declined from 1,030 to 935 kg/h even though the wheat cultivated area was nearly 83.5 per cent saturated with HYVs of this crop. The two important reasons are sub-optimal use of fertilizers (24.7 kg/h) and scanty irrigation facilities. Further, the 50 years of research work conducted by the Regional Station of the Indian Agricultural Research Institute, at Shimla, indicate that the northern hill region suffers from innate typical agronomic unsuitability for production of wheat and barley. Apart from this, the menace of rust diseases also causes loss of about 10 per cent in yield. However, the wheat-cultivated area appeared to have gained at the cost of barley and also due to additional areas brought under the plough. This change is perhaps a corollary to a similar change in the food habits of the people in the State. The increase in the productivity of paddy, which had a 56 per cent area under irrigation and almost a hundred per cent area under HYVs, was comparatively noteworthy. The average yield levels in the State were 1049 and 1,272 kg/h as against the All India figures of 1,123 and 1,552 kg/h during 1970/71 and 1985/86 respectively. But still there has been a marginal shift in area from paddy to other crops. However, in the case of maize, the Himachal farmers have acquitted themselves very well and the productivity levels even exceeded the national average.

As for principal cash crops, the saga of the revolutionary strides in apple production and the increase in productivity is widely recognized. Apple cropped areas, production, and productivity registered the notable increases of 73.2, 133.8 and 35.0 per cent respectively. But ginger cultivation recorded a decrease in all respects and the data in Table 6 show a similar trend for potatoes as well. The latter is, however, not accurate as the production figures of the Directorate of Land Records and the Directorate of Agriculture of Himachal Pradesh differ widely. The figures of the Directorate of Agriculture are much higher and also more reliable. The recorded annual export figures of 60,000-70,000 MT of seeds and ware potatoes support this contention.



**Table 5: Change in Cropping Pattern in Himachal Pradesh  
During 1970/71 to 1985/86**

Crop/ Crop Group	1970/71		1985/86		% change during 1985/86 over 1970/71	Annual compound growth rates (%) 1970/71 to 1985/86
	Area (ha)	% to total cropped area	Area (ha)	% to total cropped area		
1. Wheat	317672	34.8	377107	38.7	+18.7	1.45
2. Maize	257255	28.2	299514	30.8	+16.4	1.19
3. Paddy	103869	11.4	90762	9.3	-12.6	-0.57
4. Barley	40387	4.4	34241	3.5	-15.2	-1.47
5. Total cereals	764439	83.8	829333	85.2	+8.5	0.71
6. Total pulses	71721	7.9	43747	4.5	-39.0	-3.90
7. Total foodgrains	836163	91.7	873080	89.7	+4.4	0.40
8. Total fruits	11953	1.3	35198	3.6	+194.5	6.59
9. Total vegetables	20546	2.3	25186	2.6	+22.6	1.31
10. Total spices	2665	0.3	3504	0.4	+31.5	1.07
11. Total food crops	875630	96.0	939675	96.5	+7.3	0.56
12. Total oilseeds	22219	2.4	21344	2.2	-3.9	-0.12
13. Total non- food crops	36111	4.0	33963	3.5	-5.9	0.45
Total crop area	911741	100.0	973638	100.0	+6.8	0.52

Source: Directorate of Land Records, Himachal Pradesh, Shimla.

**Table 6: Trends in Area, Production, and Productivity of Selected Principal Crops of Himachal Pradesh During 1970-73 and 1983-86.**

Crop	Area ('000 ha)			Production ('000 MT)			Productivity (kg/ha)		
	1970-73	1983-86	% change	1970-73	1983-86	% change	1970-73	1983-86	% change
Maize	257.3	301.8	17.3	402.9	562.2	39.5	1566	1863	19.0
Paddy	99.8	93.4	-6.4	104.7	118.8	13.5	1049	1272	21.3
Wheat	319.8	379.7	18.9	328.9	355.0	7.9	1030	935	-9.2
Barley	41.2	33.8	-18.0	53.0	32.5	-38.7	1286	962	-25.2
Potato <sup>@</sup>	15.1	14.1	-6.6	67.9	50.2	026.1	4497	3560	-20.8
Apple <sup>*</sup>	28.7	49.7	73.2	86.0	201.1	133.8	2997	4046	35.0
Ginger	2.1	2.0	-4.8	1.3	1.1	-15.4	619	550	-11.1

Source: 1. Directorate of Land Records, Himachal Pradesh, Shimla.  
2. Directorate of Horticulture, Himachal Pradesh, Shimla.

Note<sup>@</sup>: According to the Directorate of Agriculture, Himachal Pradesh, the estimates of the yield level of potato in the state was 4146 and 6914 kg per hectare during 1970-73 and 1983-86 respectively.

**Contribution to Gross Agricultural Value:** The contribution of the various principal crops and crop-groups, to the gross agricultural value and consequently to the State Domestic Product on a triennium basis is shown in Tables 7. It is observed that wheat, maize, paddy, and barley together accounted for 78.4 per cent of the area during 1970-73, and this increased to 82.8 per cent during 1983-86. The percentage contributions of these crops to gross agricultural value were proportionately less than the percentage area occupied by them while paddy alone maintained its status. Even though the area under HYVs of maize was only 30 per cent in 1985/86, its value contribution recorded the highest growth rate of 8.49 per cent per annum, at current prices, and 1.57 per cent at constant prices, followed by paddy (6.33%), wheat (6.29%), and barley (3.12%), at current prices. At constant prices, the contribution of wheat increased at a growth rate of 1.48 per cent per annum, but paddy and barley showed a decline at the rates of 0.26 and 2.68 per cent respectively. The decrease in area in these crops could perhaps be attributed to less remuneration from them. On the whole, cereals that occupied about 83 per cent of the area contributed only about 65 per cent to the total State agricultural income in 1983-86. However, the growth rates for the contribution of cereals were 7.03 and 1.03 at current and constant prices during the period 1970-73 to 1983-86.

Table 7: Change in Area, Percentage Contribution to Agricultural Value in State Domestic Product and Growth Rates of Principal Crops and Crop-Groups in Himachal Pradesh during 1970-73 to 1983-86.

S. No.	Crop/ Crop Group	Area ('000 ha.) <sup>1</sup>			Contribution (Rs. Lakhs) <sup>2</sup> at current prices				Contribution (Rs. Lakhs) <sup>2</sup> at constant prices			
		1970-73	1983-86	Percent change	1970-73	1983-86	Percent change	ACGR (%) 70/71- 85/86	1970-73	1983-86	Percent change	ACGR (%) 70/71- 85/86
1.	Wheat	319.4 (34.9)	379.7 (38.8)	18.9	3067 (26.3)	6716 (17.6)	119.0	6.29**	2963 (27.2)	3230 (23.2)	9.0	1.48
2.	Maize	257.3 (28.1)	301.8 (30.9)	17.3	2860 (24.5)	9304 (24.4)	225.3	8.49**	2608 (24.0)	3601 (25.8)	38.1	1.57*
3.	Paddy	99.8 (10.9)	93.4 (9.6)	-6.4	1165 (10.0)	3470 (9.1)	197.9	6.33**	1152 (10.6)	1307 (9.4)	13.5	-0.26
4.	Barley	41.2 (4.5)	33.8 (3.5)	-18.0	422 (3.6)	549 (1.4)	30.1	3.12**	356 (3.3)	217 (1.6)	-39.0	-2.68*
5.	Total cereals	764.3 (78.4)	837.6 (82.8)	9.6	7691 (65.8)	20243 (53.0)	163.2	7.03**	7232 (66.4)	8443 (60.6)	16.7	1.03*
6.	Total pulses	72.5 (7.9)	43.6 (4.5)	-39.9	452 (3.9)	554 (1.5)	22.6	0.54	335 (3.1)	142 (1.0)	-57.6	-7.44**
7.	Total food- grains	836.8 (91.5)	881.2 (90.1)	5.3	8143 (69.7)	20797 (54.4)	155.4	6.76**	7567 (69.5)	8585 (61.6)	13.5	0.77
8.	Total fruits	14.4 (1.6)	32.5 (3.3)	125.7	1121 (9.6)	6681 (17.5)	496.0	13.85**	1047 (9.6)	2163 (15.5)	106.6	5.96*
9.	Total vegetables	19.8 (2.2)	23.2 (2.4)	17.2	563 (4.8)	1537 (4.0)	173.0	6.55**	546 (5.0)	636 (4.6)	16.5	0.21
10.	Total spices	2.9 (0.3)	3.2 (0.3)	10.3	120 (1.0)	526 (1.4)	338.3	10.61**	88 (0.8)	79 (0.6)	-10.2	-0.48
11.	Total oilseeds	22.3 (2.4)	21.5 (2.2)	-3.6	151 (1.3)	299 (0.8)	198.0	4.70**	134 (1.2)	87 (0.6)	-35.0	-3.89**
12.	Total food- crops	877.8 (96.0)	943.9 (96.5)	7.5	10030 (85.9)	29654 (77.6)	195.7	7.81**	9313 (85.6)	11499 (82.5)	23.5	1.37*
13.	Total non-food crops	36.3 (4.0)	33.8 (3.5)	-6.9	217 (1.9)	409 (1.0)	88.5	4.40**	196 (1.8)	128 (0.9)	-34.7	-3.78**
14.	Farm byproducts	-	-	-	1436 (12.2)	8139 (21.3)	466.8	13.47**	1376 (12.6)	2313 (16.6)	68.0	4.10**
Total:		914.1 (100)	977.7 (100)	9.1	11683 (100)	38202 (100)	227.0	8.64**	10885 (100)	13910 (100)	28.1	1.69**

Source: 1. Directorate of Land Records, Himachal Pradesh, Shimla  
2. Directorate of Economics and Statistics, Himachal Pradesh, Shimla.

Note: ACGR= Annual Compound Growth Rate  
\* Significant at 5% level  
\*\* Significant at 1% level

Pulses and oilseeds have not done well. Pulses occupied 7.9 per cent of the total cropped area in 1970-73 but contributed only 3.9 per cent of the gross value of the agricultural sector. The area and value contribution of pulses decreased to 4.5 and 1.5 per cent respectively, by 1983-86. It is rather disturbing to note that the productivity of pulses declined sharply from 4.0 q/h in 1970/71 to 2.9 q/h in 1985/86 causing a decline in its contribution. Secondly, the area under pulses also decreased by 39.9 per cent and thus perhaps the cultivation of pulses has been restricted to marginal lands. The contribution of pulses in monetary terms declined at a rate of 7.44 per cent per annum at constant prices followed by oilseeds (3.89%). It is the highest rate of decline in the contribution of a crop enterprise.

The vegetable crop group includes potatoes, off-season vegetables, and other vegetables. They together accounted for 2.2 per cent of the cropped area in 1970-73 and 2.4 per cent in 1983-86 but contributed 4.8 and 4.0 per cent to the State agricultural income during these years at current prices. At constant prices, the percentage contribution from 1970-73 and from 1983-86 was higher at 5.0 and 4.6 per cent respectively. Vegetables registered growth rates of 6.55 and 0.21 per cent at current prices and constant prices, respectively.

By far the fastest growth occurred in fruit production. The area under fruit increased by 125.7 per cent between the periods 1970-73 and 1983-86 and the gross production value rose by 496 per cent if measured in current prices and by 107 per cent at constant prices. Annual growth rates by 13.85 per cent and 5.96 per cent.

Share of Sub-sectors in Agricultural Output Value: Agriculture is the main constituent of the primary sector which is composed of (i) agriculture (ii) forestry and logging (iii) fishing, and (iv) mining and quarrying. The relative contribution of field crops, plantation (fruit) crops, and animal husbandry to the total value of agricultural output in Himachal Pradesh is presented in Table 5. The table reveals that from 1971 to 1986, at constant 1970/71 prices, the total value of agricultural output grew at the rate of 2.6 per cent per annum. Among the different constituents of the agricultural sector, the highest growth rate was recorded in the case of fruit crops, followed by livestock production; their respective outputs increased at the rates of 6.8 per cent and 4.2 per cent per annum. During the same period (i.e. 1971 to 1986) relatively slow growth (1.5 per cent per annum) was reported in the case of output from the field crop.

Because of faster growth in the productivity of fruit crops and animal husbandry, their relative shares in the total value of agricultural output were increasing and thus the relative share of field crops was declining (Table 8). In 1971/72 the share of field crops was 68.6 per cent in the total agricultural output of the State, and this declined to 62.1 per cent by 1985/86. The respective shares of plantation crops and animal husbandry in the total agricultural output were 8.0 and 23.4 per cent in 1971/72 which respectively increased to 10.8 and 27.1 per cent by 1985/86. This is a healthy trend because ecologically sound development of hilly areas requires that more and more land should be diverted away from field crops to tree crops and grasses so that disturbance of the topsoil is reduced.

**Table 8: Percent Contribution of Field Crops, Plantation Crops, and Animal Husbandry to the Value of Total Agricultural Output in Himachal Pradesh During 1971/72 to 1985/86 at Constant Prices of 1970/71**

Years	Field crops	Plantation Crops	Animal Husbandry	Value of total Agricultural Output <sup>1</sup>
1971-74	68.6	8.0	23.4	14448.7
1974-77	69.0	8.5	22.5	1516.9
1977-80	65.0	8.4	26.6	1625.1
1980-83	62.5	10.9	26.6	1822.3
1983-86	62.1	10.8	27.1	1996.9
Annual Growth <sup>2</sup>	1.5	6.8	4.2	2.6

Source: Directorate of Economics and Statistics, Himachal Pradesh, Shimla.

Note: 1. Figures in parentheses denote the average annual value of total agricultural production in millions of rupees at 1970-71 (constant) prices.

2. Annual compound growth rate of production during 1971/72 to 1985/86.