



**DEVELOPMENT PROFILE**  
**OF**  
**HIMACHAL PRADESH**

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## P R E F A C E

The Himalayan region, traditionally an abode of Gods, has been nestling in its laps the great centres of meditation, learning and research from the heydays of Indian golden age. But for centuries before the Himachal Pradesh came into being it had seen dire neglect and deep frustration. At the time of its formation some of the hill resorts were connected with rail/roads and these were provided with amenities like electricity, water supply, drainage etc. but the hills in general remained in a state of squalor. The backlog of underdevelopment had piled up with the passage of time and hill areas were considered as source of supply of cheap unskilled labourers and mute domestic servants. Thus the hills were plague spots in the country so far as development was considered.

2. For the proper socio-economic development of the area it was essential to first develop its road and communication network so that the breeze of independence could invigorate the economy out of its chronic lethargy. The thirty three years of planned efforts and untiring devotion of the servants of the people has now given the state a modicum of pride by placing it fifth amongst the States of India. But the economy continues to be mostly agro-pastoral and we are now poised for a take off to reap the benefits of all the labour, sweat and toil. On the eve of 7th Plan this is the time for consolidation of past achievements and to look forward to a speedy course of progress with modernisation. This profile for the development of Himachal Pradesh has been prepared in the Directorate of Economics and Statistics by keeping in view these aspects.

3. The Directorate of Economics and Statistics was set up in 1955-56 and from the beginning it is engaged in the promotion of research and investigation of the socio-economic fields and dissemination of economic intelligence for providing guidelines and furnishing data required for planning and policy formulation. With the growing realisation of necessity for **micro-level economic development** the Directorate is bound to play a dominant role in the future also.

4. For the preparation of the publication I owe a debt of gratitude to all contributors of different articles without whose co-operation this publication would not have seen the light of the day. Beside some of the departments concerned, most of the photographs have been obtained from the Director of Public Relations H. P. for which I am sincerely thankful. I would also like to place on record my deep appreciation of the work done by the Deputy Director of Economics and Statistics and other dedicated officers and staff in planning, editing and bringing out this publication.

5. As the articles are contributions from the individuals the views expressed therein may not necessarily be taken as those of the State Govt. I would consider the labour in bringing out this publication as amply rewarded if this is able to stimulate in the readers a sense of involvement in the needs and aspirations of the people of the Pradesh.

R. S. BHATNAGAR,  
*Director of Economics & Statistics,  
Himachal Pradesh.*





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## DEVELOPMENT STRATEGY FOR HIMACHAL PRADESH

—Shri Virbhadra Singh,  
Chief Minister,  
Himachal Pradesh.

Himachal Pradesh has maintained a marked and steady progress ever since it came into being in 1948. The pace of development increased manifold on the reorganisation of the Pradesh in 1966 and grant of Statehood in 1971. From a very primitive agrarian system the mosaic has now gradually spread towards a pulsating economy. Though we stand fifth among States according to the standard of per capita income, yet a lot of leeway has to be made up in future to usefully harness the tremendous energy of large manpower, just waiting to contribute their mite in reaching even greater heights in the development of the Pradesh.

The Pradesh has made tremendous economic progress as revealed by the Statistics of State Income. At current prices, it was estimated at Rs. 3.45 crores in 1950-51 (per capita Rs. 240) (old Himachal), 137.88 crores in 1966-67 (per capita Rs. 440) for the reorganised Pradesh (including Punjab hill areas). Latest figure are Rs. 824.51 crores (1982-83) (per capita Rs. 1865).

The experience gained during the past has enabled us to fix proper priorities of development in the areas, like hydel power generation, communications industries, tourism and horticulture, as well as the sectors needing specific attention, like tribal and backward areas, and other weaker sections of society. The identification of comparatively backward areas and left behind segments



of population has been systematised for their balanced development.

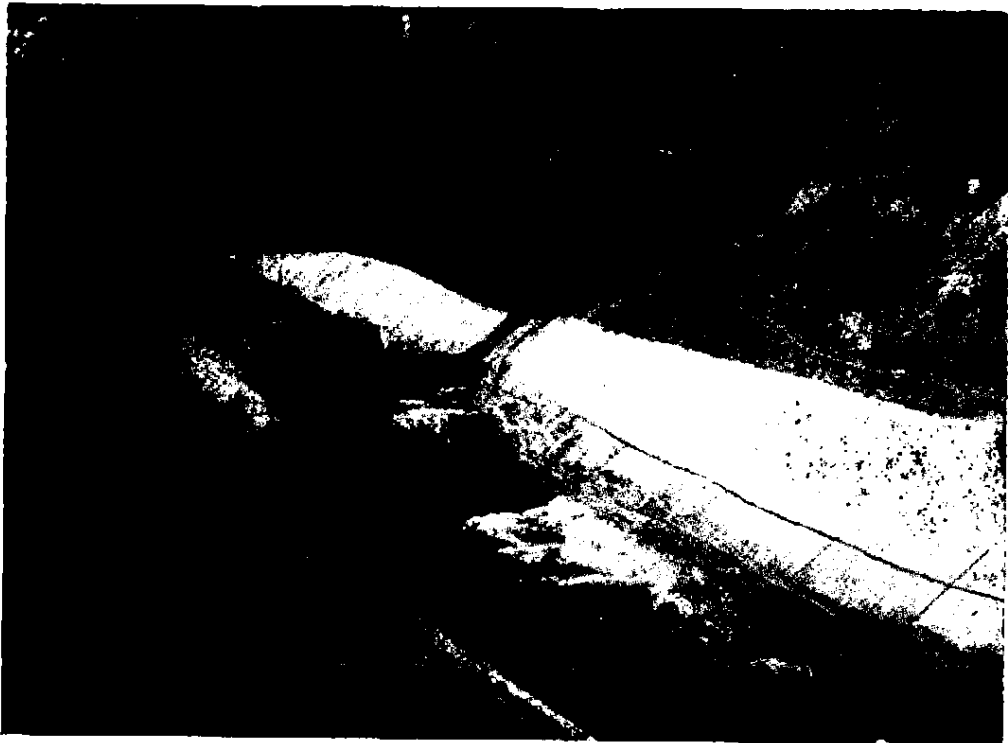
*Hydro-electricity*—From the Sixth Five Year Plan the emphasis has greatly been shifted to the exploitation of hydroelectric power potential of the Pradesh. The generation of electricity is now 587.8 million units per annum. The per capita consumption is constantly increasing and was around 90 units in 1983-84 as against only 8 units in 1966-67. By the end of the Sixth Plan we propose to electrify 85 per cent of the villages. Our target is to cover all the remaining villages at the earliest. The ever increasing burden on fuel wood calls for appropriate electricity tariff to encourage the consumption of power not only for lighting but also for heating, cooking and industries. For the removal of constraint of power shortage it is essential that all available internal and external resources be tapped to develop it as expeditiously as possible.



Shah Nahar Agreement between Himachal Pradesh & Punjab

We have drawn a comprehensive perspective plan in consultation with the Central Electricity Authority for the execution of small, medium and large projects. Major projects like Nathpa-Jhakri, Kol Dam, Baspa, Karchham-Wangtoo, Larji and Parbati could be completed by 2,000 A.D. provided the requisite resources become available. In the Approach Paper to VII Plan the need for special funding of hydel projects has been emphasised. To get over the problem of financial constraints we have entered into an agreement with Haryana & Government of India (Nathpa-

Jhakri 1020 MW). There is a possibility of this Project being included in World Bank Project also. We have also negotiated with the State of Rajasthan (for Kol Dam) and National Hydro-electric Power Corporation (for Chamera Project) so that we could appropriately harness the rivers of the Pradesh to our advantage. The Chamera Project has already been launched by NHPC. Negotiations are also going on for bilateral arrangements in regard to Karchham-Wangtoo and Baspa projects.



Irrigation Canal from Giri Project

Himachal has also been negotiating for a long time for a say in the management of different projects located in the Pradesh. The long drawn out efforts have borne fruit now when we have been recognised as a partner State in the Bhakra Beas Management Board. But our due share in power generation at Bhakra, Beas-Sutlej Link, Baira-Siul projects is yet to be admitted for which we are constantly pursuing the matter with the Govt. of India.

**Communications**—Roads are the lifeline for the economy of this area. The motorable road length which was around 4,220 km in 1966-67 is likely to go upto 14,300 km at the end of 6th Plan. But we have to go a long way to achieve the recommended level of 64 km roads length per 100 Sq. km of area from the present level of 25 km. Efforts are being made to provide an air-link for Shimla as well as for the construction of broad-gauge railway lines like Nangal-Talwara, Behrampur-Bilaspur-Rampur and Bilaspur-Mandi. The railway lines would also greatly facilitate the construction of many hydel-power projects in the area. The existing net-work of roads need to be main-

tained and strengthened by improving it qualitatively i.e. proper soling, tarring, cross drainage etc. and further resources are required to link all the village conglomerates at the earliest. Where necessary (road construction being a costly proposition) ropeways can provide easy means of transportation.

**Horticulture**—Himachal has been a trend setter in the development of horticulture as large tracts of land and hill slopes which were not being used for cultivation have been converted into bountiful orchards. The total fruit production has gone up from 0.45 lakh tonnes in 1966-67 to 3.04 lakh tonnes in 1983-84. Side by side with apples, the production of citrus and other fruits has also come up in the lower hills while dry fruits are being developed in the higher hills, like Kinnaur. Efforts are afoot for evolving a suitable substitute for the wooden packing cases to save valuable forests. Moreover, in the future greater emphasis has to be laid on the establishment of small and big fruit-based processing plants in the Pradesh to encourage establishment of local enterprises. It has also been decided to set up Asia's first Horticulture and Forestry University in H. P. soon.



Picking of Kinno

*Agriculture*—Agriculture provides means of livelihood to the majority of our population. Our experience has shown that cash crop cultivation alone can bring prosperity to the farmers in the interior and gradually stress is being shifted to vegetables and seeds. To improve their economy greater emphasis is being laid on the provision of essential inputs like improved seeds, fertilizers, irrigation facilities, credit and technical guidance. Looking to the typical agro-climatic constraints linked with difficult topography there is need to re-evaluate and revamp the strategy for the optimum utilization of irrigation facilities coupled with propagation of intensive input doses in the irrigated areas. In the rain-fed areas we have to introduce latest research linked water harvesting techniques and improved agricultural practices.

*Forests*—A time has come to recognise forests in the Himalayan ranges as a national resource. The economic prosperity of the hills and the fertile plains of Northern India hinges upon a sound eco-system based on forests of Himalayas. We have drawn up a 20 year perspective plan for bringing 50 per cent of the State's area under forests cover by the year 2,000 A. D. The present coverage being around 13 per cent, this programme would entail massive investment of Rs. 12,000 crores, which is much beyond the State's meagre resources. Nationalisation of forest exploitation and strict anti-smuggling steps have prevented, almost completely, the illicit forest felling and smuggling of timber. Every endeavour is being made to conserve and develop our forest wealth through social forestry (People's participation). This would also be of assistance to restore forest cover to the full where it is at present degraded. Increasing forest cover would create additional rural employment opportunities and help to fulfil the essential needs of the rural community, such as, fuel, timber, fodder, fruits and other minor products, besides organic manure. To accelerate the

afforestation work and also for enlarging soil conservation programme mobilisation of additional funds is essential.

*Industries*—The industrial development in Himachal Pradesh has been hampered by certain inherent difficulties like peculiar topography, lack of technical personnel and entrepreneurs. With liberal subsidies and development of certain industrial areas some medium and small units are now being established. In the small scale sector a lot of assistance is being given through various public sector corporations. The entire State has now been declared as industrially backward under which new industries would be eligible for 25 per cent central subsidy on capital investment. Besides, the transportation subsidy has been increased from 50 per cent to 75 per cent.

The State is blessed with plenty of surplus power. As such it is ideally suited for non-pollutant industries like electronics, watch making, high precision tools and pharmaceutical plants based on local medicinal herbs. Important minerals like salt, slate, gypsum, limestone, barytes, dolomites, pyrites etc. are available. Moreover, wood, fruit and wool based industries have great potential. In the final analysis it is obvious that the emancipation of the rural poor lies in the provision of employment opportunities in the industrial field. A regional engineering college is being set up in the State soon to train youth for manning projects. An Electronics Corporation is also being set up in the State which has ideal climate for development of electronics goods.

*Tourism*—There is great scope for further extension in tourists facilities in the Pradesh. Besides, the summer rush of visitors more and more tourists are now visiting Himachal Pradesh for snow and other winter sports. For the pilgrims visiting various fairs there is need to provide adequate arrangements for

their transport, cheaper stay, health facilities and protection from unscrupulous persons. Moreover, to draw economic benefits from the tourists, the Himachali arts, crafts and textiles should be so developed as to attract their attention. This is required to be studied in depth through tourist preference surveys. In this sector, we will be laying more stress on involvement of private sector in tourist industry. A Food Crafts Institute is also being set up.

*Welfare measures*—As a welfare State we are bound by the Directive Principles enshrined in our Constitution. The problems of welfare measure are not only of rechannelling economic activities within the existing socio-economic framework. If necessary, the framework itself has to be remodelled so as to enable it to accommodate progressively those fundamental urges which express themselves in the demand for the right to work, the right to adequate income, the right to education and right to measures of insurance against oldage, sickness and other disabilities. The State has given special attention in the provision of institutions of education, health care, livestock care etc. More emphasis is required to ensure that the infrastructure already created is improved qualitatively to provide better facilities.

It has been estimated that 42 per cent of the households in the rural areas and 5 per cent of the households in the urban areas are below the poverty line, taking the level of Rs. 700 per head per annum or Rs. 3,500 per family of five. For the poverty alleviation, employment generation and social justice it is necessary to follow an integrated approach in regard to various centrally sponsored schemes. The administrative machinery shall have to be made more responsive to the people's needs. Moreover, the public distribution system shall have to be strengthened to provide a cushion against rising prices of essential consumer articles.

To remove regional disparities within the State, the Government has evolved certain norms for the identification of less developed areas. For this purpose the Panchayat has been taken as the unit for accelerating the development of less developed areas. Such areas are given specially earmarked resources amounting to 10 per cent of the total outlay in respect of all important sectors. For the development of tribal and scheduled castes population adequate earmarking of resources is also done and sub-plans are being prepared. In addition, the new 20-Point Programme is an all-embracing strategy of crucial significance to make our developmental programmes more meaningful. It has all the necessary ingredients of building up a comprehensive infrastructure; economic, social and ecological.

It is an irony of fate that the hill areas of the country are at present languishing at a low level of income mainly because of the fact that their resources have not yet been developed adequately. The basic minimum needs on account of difficult living conditions are higher in the hill. For the resource development successive Finance Commissions, eight so far, have

fully recognised the needs of this Pradesh and special category status has been accorded for the devolution of funds. The devolution of funds is mainly done on the criteria of population and per capita income, while some funds are allocated to special category states. Even after the award of Eighth Finance Commission, Himachal Pradesh would continue to be a deficit State. As such all other internal and external resources shall have to be tapped to give impetus to the process of development.

The Approach Paper for the Seventh Five Year Plan was cleared by the National Development Council in July, 1984. The salient features of the plan objectives and development strategy are as under :—

- (i) Decentralisation of planning and ensuring full public participation in development;
- (ii) Maximum possible generation of productive employment;
- (iii) Alleviation of poverty and reduction in inter-class inter-regional and rural-urban disparities;
- (iv) Attainment of self-sufficiency in food at higher levels of consumption;
- (v) A higher level of social consumption in respect of education, health, nutrition, sanitation and housing;
- (vi) Enhancement in the degree of self-reliance through export promotion and import substitution;
- (vii) Acceleration of voluntary adoption of the small family norm and a positive role for women in socio-economic activities;
- (viii) Reduction of infrastructural bottle-necks and shortages; and
- (ix) Efficiency and modernisation of industrial production through introduction of competition.

In obtaining these objectives an overall annual economic growth rate of 5 per cent, with an industrial growth rate of 7 per cent and an agricultural growth rate of 4 per cent has been proposed. In 1979-80, an estimated 51 per cent of the population was below the poverty line. The government expects this to fall to 37 per cent this year (1984-85). It expects the rate to fall further to 23 per cent by the end of the Seventh Plan, thus more than halving the poverty rate within 10 years. This is part of a long-term aim to cut the poverty rate to 10 per cent by the end of the Eighth Plan (1994-95). Simultaneously, the basic needs of the hill communities will be kept in the forefront in the formulation of programmes. These will include energy, fodder, water supply, education and health.

## ROADS -- FOREMOST INFRASTRUCTURE FACILITY FOR ECONOMIC GROWTH IN RURAL AREAS OF HIMACHAL PRADESH

—Shri Sukh Ram,  
Former Public Works Minister,  
Himachal Pradesh.

### Introductory

In a Socialist Democratic Developing Country, where about 40% population mostly in rural areas live below poverty line, primary concern of an Elected People's Government should be to create conditions for economic growth and give incentives to such people for working productively, to bring them atleast above sustenance level. This concern has been voiced by our leader Prime Minister, Smt. Indira Gandhi time and again.

Before any steps are taken by Government in this direction, it is essential to identify Potentials for Economic Growth of an area and in Himachal Pradesh where 92% population is rural, potential for economic growth lies in growing of cash crops, off-season vegetables and seeds, development of horticulture, dairy development, tourism, establishment of horticulture-forest produce and mineral based industries and generation of hydel power.

Next step would be to analyse why this potential had not been utilised and what were the steps required to be taken to do so? Although agro-climatic conditions in Himachal Pradesh are highly suitable for production of fruits, off-seasons vegetables, cash crops etc. and its economy is largely agro-horticulture based, yet this potential could not be developed due to utter lack of means of communication which kept production areas isolated and cut off from market centres. The rural population was, therefore, devoid of incentives for exploitation of their resources as production of fruit and other cash crops were not remunerative due to exorbitant cost and non feasibility of transportation of the produce. Inaccessibility of the area had also kept the population isolated from urban influence resulting in social, cultural and political backwardness as well as poverty.



Besides connecting rural production area with motorable roads to urban and market centres, other important step for economic growth of the area was to provide employment to landless labourers as well as to other rural population who are mostly marginal farmers so that with cash income from employment they could not only sustain themselves but invest a little bit in development of their Agriculture/Horticulture based economy till the time it could be remunerative. Besides these two major steps, there was of course need for making available latest Farm-Technology, necessary agricultural inputs & providing of social services.

### Road Development since 1948

Realising importance of construction of roads for connecting production areas with market centres, for providing employment to the rural population near their homes, for social, cultural and political advancement of rural population, Himachal Pradesh Government gave first priority to Roads Construction Programme as planned development was taken up with the First Five Year Plan. Need for construction of roads all over the inhabited area was great, but resources available were meagre. A plan was therefore, drawn to start with construction of main arterial roads for connecting major valleys and administrative centres. Initially work of construction of tracks on motorable road alignment on these roads was taken up and these tracks were developed in phased manner to jeepable, single lane motorable standard, providing cross-drainage, bridges, metalling and tarring and then

widening of few roads to double lane standard according to needs and resources. This programme was gradually extended to construction of rural, roads and link roads to minor valleys and production areas.

Starting practically from a scratch with 288

kms. roads in 1948, motorable roads having length of 13,600 kms. have been constructed in the State till March, 1983. Expenditure incurred on Road Construction Programme in State Sector and over all achievements including Central roads during the period 1951—1983 are as under :—

Plan period	Exp. in state sector (in lakhs)		Percentage	Motorable roads constructed in kms.		Appx. average employment Generated for person
	State Plan	On Roads		During Plan Period.	Cumulative at the end of Plan Period	
1	2	3	4	5	6	7
Ist Plan (1951-56) . . . . .	527.25	225.40	42.80	299	587	4,300
2nd Plan (1956-61) . . . . .	1,602.80	533.84	32.30	856	1,443	8,500
3rd Plan (1961-66) . . . . .	3,384.47	1,018.11	30.01	841	2,284	12,100
3-Annual Plans (1966-69) . . . . .	4,000.82	1,228.57	30.60	1,702 2,439	*6,425	16,300
4th Plan (1969-74) . . . . .	11,340.00	2,800.00	24.63	3,081	9,506	16,700
5th Plan (1974-79) . . . . .	23,450.00	4,700.00	20.04	1,896	11,402	22,400
Annual Plan (1979-80) . . . . .	7,880.00	1,497.00	19.00	591	11,993	29,700
6th Plan Three Annual Plans (1980-83) . . . . .	31,800.00	5,596.18	17.76	1,676	13,600	35,000

\*1,702 kms. roads existed in new areas merged in Himachal Pradesh on reorganisation of Punjab in 1966.

Break-up motorable road length of 13,600 kms. constructed upto March, 1983 is as under :—

(i) (a) State Roads. . . . .	Non-tribal areas . . . . .	11,950	kms. }	12,574
	Tribal Area . . . . .	624	„ }	kms.
(b) Central Roads. . . . .	National Highways. . . . .	318	„ }	1,026
	Boarder Roads with P. W. D. . . . .	83	„ }	kms.
	Border Roads with GREF . . . . .	625	„ }	
				13,600
				kms.

- (ii) Road density per 100 sq. km. area . . . . . 24.42
- (iii) Length provided with cross-drainage/bridges out of total length of 13,600 kms. . . . . 5,670 kms. (42%).
- (iv) Metalled & tarred length out of the total length . . . . . 4,739 kms. (35%).
- (v) Major bridges constructed . . . . . 541 Nos.
- (vi) Villages connected :—
- (a) above 1500 population—69 out of 121 villages.
- (b) 1000-1500 Population—122 out of 191 villages.
- (c) below 1000 population—6,564 out of 16,604 villages.

6,755 out of 16,916 villages.  
(40%).



From achievements tabulated in above paras it will be seen that :—

- (i) Work on 13,600 kms. motorable road length has not been completed in all respects as only 42% length has been provided with cross-drainage and bridges whereas only 35% length has been metalled & tarred.
- (ii) Only 40% villages or production area have been connected with motorable roads.
- (iii) Expenditure on Road Construction Programme has progressively diminished from 42.8% of the First Plan outlay to about 18% during the 6th Five Year Plan.
- (iv) Road density achieved is 24.42 kms. per 100 sq. km. area against all India average of 46 kms. per 100 sq. km. area.

#### **Analytical Appraisal of Impact of Road Construction Programme on Socio-economic conditions**

As these roads were being constructed, rural population throughout the State not only get much needed employment near their homes but with cash income from employment, got incentive for taking to plantation of orchards in a big way, growing of cash crops, off-season vegetables etc. realising that construction of roads would afford cheaper transportation of their produce to market centres and make them available agricultural inputs and necessities of life at lesser cost. Dairy development also got impetus in such

areas which got connected by roads as villagers started selling milk at collection centres located on road side. As fruit orchards came in production and villagers started selling their cash crops in markets, economy of area connected with roads has undergone complete transformation which has brought immense prosperity to villagers of these areas. This is evident from the fact that from one of the poorest States, Himachal Pradesh today stands at 6th position as far as per capita income is concerned. Other benefits which resulted were that need for employment in these areas decreased considerably and seasonal migration from high altitude areas connected with roads reduced.

Road Construction Programme during the last 35 years has, however, brought two distinct conditions in the State. While there has been tremendous economic growth in areas connected with motorable roads which is just 40%, balance area remains backward economically stagnant and its population poor. Especially because development plan expenditure in other sectors which constitute about 80% of the plan outlay has by and large been spent in areas connected with roads. Thus remaining population in 60% area of the State has neither derived economic benefits from development programmes nor have got required incentive for attaining take-off stage for economic growth in changing their cropping pattern etc. due to lack of basic infrastructure facility of road connection to their area. In fact fate of the population in this remaining 60% area has worsened due to rise in prices, lack of employment opportunities near their homes and lack of incentive to them for taking to horticulture etc. which only Road Construction Programme in these areas could have provided.



Inauguration of Anti-Sawra Road

Himachal Pradesh is pretiest part of the country and has vast attractions for tourists from all over. It offers every thing to tourists-bracing climate, scenic views of snow-clad mountains, lush green meadows, beautiful deodar and pine forests and wonderful valleys with perenial rivers. The Pradesh is a vacation land par excellence dotted with numerous tourist resorts. Although there is immense potential for tourism in Himachal Pradesh, yet it is confined to very few places which have been connected by motorable roads. Tourism industry can only develop if good surfaced roads are provided to the tourist resorts which in turn will give incentive for growth of Cottage Industry. Industrial growth can also take place if raw materials i.e. horticulture-forest produce and minerals can be transported economically to Industrial centres, which is possible only when such areas get connected by good motorable roads. Similarly hydel power Projects sites will also have to be connected by roads much in advance for exploitation of immense power potential of the State. These potentials for economic growth, therefore, could not be developed to the desired extent due to inadequate investment on Road Construction Programme.

#### Suggestions for Future Policy Guidelines for Roads Construction Programme

Although according to National policy all villages are to be ultimately connected with all weather motorable roads, considering topography and location of isolated villages high up on slopes of hill ranges, it may not be possible to connect all villages with motorable roads as such an attempt may lead to colossal land slides problem and disturbance of ecological balance. Norms for planning road net work

in Himachal Pradesh or in hilly terrains should, therefore be as under :—

- (i) Except for isolated villages for which it is not feasible to provide motorable road connection, all villages having population of 200 and above should be connected by motorable roads in hilly region.
- (ii) Villages located within 1 km. radius having difference in altitude of not more than 100 meters should be considered as cluster of villages and one suitable village of the cluster should be connected by motorable road.
- (iii) All isolated villages for which it is not feasible to provide motorable road connection should be brought within 3 kms. radius altitude difference of 300 meters from motorable road.
- (iv) All isolated villages should be linked with mule roads not to motorable road alignment standards and gravity type aerial cableways where feasible should be provided for transportation of produce from such areas to motorable road.

Total motorable road length according to these norms for connecting all such villages (12,330) except isolated villages (4,463) has, therefore, been worked out which comes to 26,400 kms., giving road density of 47.35 kms. per 100 sq. km. area. Further investment beyond the year 1979 for achieving this aim comes to 1,600 crores at the then prevailing cost and if only half the length is metalled/tarred the amount required would be 1,180 crores. Districtwise road density required to connect all except isolated villages and achievements as in March, 1983 is as under :—

Sr. No.	Name of District	Area in Sq. Kms.	Population as per 1981 Census.	Road density required to connect all except isolated villages.		Position of motorable road as on 3/1983				
				Required length in kms.	Density in kms. per 100 sq. kms.	Length in kms.	Density in kms. per 100 sq. kms.		per 1000 Population.	
1	2	3	4	5	6	7	8	9	10	
1	Bilaspur	1,167	2,47,368	1,197	102.57	4.83	783	67.09	3.16	
2	Chamba	6,528	31,147	3,529	54.17	11.34	978	14.98	3.14	
3	Hamirpur	1,118	3,17,758	905	80.94	2.84	787	70.39	2.47	
4	Kangra	5,739	9,90,758	4,202	73.21	4.24	2,559	44.58	2.58	
5	Kinnaur	6,401	59,547	647	9.87	10.86	382	5.96	6.41	
6	Kullu	5,503	2,38,734	1,355	24.62	5.67	631	11.46	2.64	
7	Lahaul & Spiti	13,835	32,100	1,036	7.56	32.27	540	3.90	16.82	
8	Mandi	3,950	6,44,827	4,374	110.88	6.78	1,735	43.92	2.69	
9	Shimla	5,131	5,10,932	3,752	73.12	7.34	1,922	37.45	3.76	
10	Sirmaur	2,825	3,06,952	2,120	75.01	6.90	1,371	48.53	4.46	
11	Solan	1,936	3,03,280	2,304	118.94	7.59	1,086	56.09	3.58	
12	Una	1,540	3,17,322	951	61.75	2.99	826	53.63	2.60	
<b>Total :</b>		<b>55,673</b>	<b>42,80,818</b>	<b>26,372</b>	<b>47.35</b>	<b>6.16</b>	<b>13,600</b>	<b>24.42</b>	<b>3.17</b>	
				Say 26,400						

At national level aim under Minimum Needs Programme is to connect all villages having population of 1,500 and above and 50% villages having population between 1,000 to 1,500 with all weather motorable roads by the year 1990. As this will lead to connecting of just 1.25% such villages in Himachal Pradesh where villages are small and scattered against 16.57% villages in the country on an average, this hilly region will not get the same benefit as rest of the country under the Programme. Government of India has now agreed to the suggestion of connecting villages having population of 200 and above under the Minimum Needs Programme for hilly areas. The aim, therefore, should now be for connecting with motorable roads all villages having population of 500 and above and 50% villages having population of 200 and above by the year 1990.

Work on 1800 State Highways and rural roads would have been taken in hand till the end of 6th

Five Year Plan having total length of 23,000 kms., out of which 13,200 kms. length of motorable roads (excluding Central roads) is likely to be constructed leaving spill over of 9,800 kms. If balance spill over length of these roads and remaining 3,400 kms. (26,400—23,000) length of new roads is planned to be constructed during the next 15 years beyond the year 1985, atleast 1/3rd length should be planned to be constructed during the 7th Five Year Plan. Besides construction of motorable road length it is necessary to provide cross-drainage, bridges and atleast soling in the entire length to make these fair weather roads with atleast 50% metalled tarred length. This will necessitate construction of roads as under :—

Particulars	Motorable road length (in kms)	Cross-drainage (in kms)	Metalling/tarring (in kms)	Soling only (in kms)	Bridges. (Nos.)
Position as in 3/90 . . . . .	17,600	17,600	8,800	17,600	900
Position as in 3/85 . . . . .	13,200	6,200	5,200	8,800(M/T Length)	600
Length to be constructed during 7th five year plan . . . . .	4,400	11,400	3,600	8,800	300

Outlay required to achieve this aim during 7th Five Year Plan for Roads and Bridges shall be as under:—

(i) Single lane motorable roads . . . . .	4,400 kms @2.50	lacs per km = 11,000	lacs.	
(ii) Essential cross drainage . . . . .	11,400 kms @0.60	lacs per kms = 6,840	„	
(iii) Metalling/Tarring . . . . .	3,600 kms. @2.40	„ „ „ = 8,640	„	
(iv) Soling . . . . .	8,800 „ @0.50	„ „ „ = 4,400	„	
(v) Bridges 440 Nos. (14,080 meters) . . . . .	@0.40	„ „ Mtr.=5,632	„	
(vi) Mule roads, aerial cableways and foot bridges for connecting isolated villages. . . . .		L.S. = 3,500	„	
(vii) Construction of tracks for roads to be taken up in 8th Five year Plan . . . . .	4,400 @0.12Kms.		52 „	
		Total Say . . . .	40,062 Lacs. 400 crore	

For calculating above outlay rates applied are inclusive of over-heads like, establishment, T P etc. and escalation charges at 7% per annum. With this investment on roads during the 7th Five Year Plan, road density of 31 kms. per 100 sq. km. area will be achieved and 52% of the villages or production area in the State will get connected with motorable roads. This will lead to development of potential for economic growth of about 2% additional area per annum during the 7th Five Year Plan creating assured employment

to about 1,60,000 labourers throughout the year. This investment on Roads Construction Programme will, therefore, help 1,60,000 families in the State to come above the poverty line by having employment. It is, therefore imperative that minimum investment of 375 crores on roads and bridges during the 7th Five Year Plan is made to maintain rate of economic growth and development of potential as well as for giving gainful employment to the rural poor.

## ERADICATION OF ILLITERACY AND IMPROVEMENT IN QUALITY OF EDUCATION.

—Shri Sant Ram,  
Agriculture Minister,  
Himachal Pradesh.

Himachal Pradesh came into being on the 15th April, 1948 by the merger of some 30 odd tiny States. It had four Districts in the beginning i.e. Chamba, Mandi, Mahasu and Sirmaur, with an area of 27,007 square kilometers. In July, 1954, the neighbouring State of Bilaspur was integrated with the Pradesh raising the number of Districts to five and area to 28,175 square kilometers, with the re-organisation of Punjab State in 1966, hilly districts of Kangra, Kullu, Lahaul and Spiti and Shimla were added to the Pradesh. It attained full fledged Statehood on the 25th January, 1971. The density of population is 77 per square kilometer. Shimla, a world famous tourist centre and a well, known summer resort is the Capital of the Pradesh.

Regular education commenced in the princely states in the middle of the 19th century, yet after a span of hundred years, the educational facilities in 1948, when the Pradesh came into existence, were negligible and confined only to urban areas. There was no uniformity in the system of education and its contents varied from State to State. The education of women had been completely neglected. Mostly, the teachers were untrained and their pay scales were very meagre. Generally the educational institutions were housed in dilapidated buildings and were ill-equipped and poorly staffed. There was no proper organisational set up for the development of education. The Pradesh had no institution of higher learning. Above all the public at large was apathetic to education. In 1948, when the Pradesh came into existence, the facilities for education consisted of only 243 Primary, 52 Middle and 10 High Schools. Only 7.1% of the population was literate as per 1951 Census.

Planned development in education in the State commenced in 1951-52, with the launching of First Five Year Plan and steadily gained momentum during the subsequent plans. An investment of Rs. 2,530 lacs has been made on development of education during the first Five Year Plans. During the last 32 years of Educational planning efforts have been made to move ahead in various directions. Maximum attention was paid to the development of educational facilities particularly at the elementary level. In order to achieve the constitutional directive of free and compulsory education for all children in the age group of 6—14



years, special case was taken of the education of girls and children belonging to weaker sections as also to the provision of educational facilities in the Tribal and backward areas. An administrative and supervisory structure have been steadily built up to cope with the increasing needs of development in the field of education.

Presently not only the elementary education, but also upto the 11th Class at the School stage is free for all students in the Pradesh. Although the legislation for compulsory education has been enacted, the provisions of enactment are not being invoked but the targets are being achieved through persuasion, mass-media and opening of more and more Schools in educationally backward areas. Measures have been taken to tackle the problem of elementary education from two dimensions, by increasing enrolment and improving retention. It is gratifying to mention that the drop out rate between classes I—V in the State is 30% against the National drop out rate of 63%. This has been made possible through enrolment drive at the Village, Block, Tehsil and District levels with the active co-operation and help of Panchayats, Block, Tehsil, District administration and other Government Departments. Some of the other measures taken for the purpose are opening of primary schools in Scheduled Caste habitations, provision of free text books/Book-banks for I—XI class students and free writing material for I-II class students, attendance scholarships to Girls students, scholarship @ Rs. 30.00 per month and an annual grant of Rs. 100 for the purchase of books to Scheduled Caste girls from VI—XI classes and stationary etc. and scholarships to all Scheduled Tribe students on the Lahaul pattern.

Special attention has been paid by the Government towards the expansion of educational facilities so that education is taken to the door step of the people.

At present 6,400 Primary Schools, 1,650 Middle Schools, 643 High/Higher Secondary Schools, 27 Colleges, 2 Universities, 1 Sainik School, 1 State Institution of Education, 1 College of Education, 5 Basic Training Schools, 32 I.T.I.'s/RITI/JTS/RVTC's, 1 Medical College and 2 Polytechnics are functioning in the Pradesh.

All these efforts have contributed towards much qualitative and quantitative improvement in Education and the number of scholars in the institutions

have considerably gone up. We have 9.24 lacs pupils in schools of which 3.73 lacs (40.37%) are girls. There are 29,408 teachers in Schools of which 7,879 (26.79%) are women. 20.1 thousand students are on the rolls of colleges and other post matric institutions of Higher Education of which 7 thousand (24.05%) constitute the female students. The number of teachers in these institutions is 1,683 of which 287 (17.05%) are women teachers. The following table gives the details of the number of institutions and scholars in them during 1982-83 :—

Institutions	Number	Enrolment	Girls	Teachers	
				Total	Female
1	2	3	4	5	6
Schools . . . . .	8,693	9,24,248	3,69,800	29,408	7,879
Colleges for General Education . . . . .	27	22,372	4,974	755	151
Medical College . . . . .	1	340	78	95	16
Agriculture Colleges Under Agr. University . . . . .	2	1,297	59	328	18
H.P.University . . . . .	1	1,507	488	117	23
Polytechnics . . . . .	2	444	7	66	1
Sanskrit Colleges/Pathshalas . . . . .	10	1,472	548	58	5
Basic Training Schools. . . . .	5	688	254	57	28
Others i.e. ITI's/RITI/JTS/RVTCs . . . . .	32	2,435	592	207	35

Literacy is a very important indication of development of a particular Country or State. The literacy rate increases either due to the increase in number of literates or due to the decrease in population and so it will increase considerable if we are able to make more people literate and at the same time control the increase in the population. Special attention has been paid to both these aspects in the Pradesh. Our literacy percentage was very low according to 1951 census i.e. 11 per cent as compared to National literacy percentage of 17%. With our sustained endeavour, the literacy percentage of Pradesh rose to 42.48% as compared to the national percentage of 36.23% as per 1981 census. Though we have made remarkable achievements in this field, yet the problem of eradication of illiteracy has gigantic dimensions. Still 58% of the population has to be made literate. The position is, therefore, not happy one. Besides formal education schemes, schemes of Adult Education and non-formal Education programme are being implemented in the State vigorously. At present 1,100 adult Education Centres are functioning with an enrolment of 22,056 adults in the State. Out of 22,056 adults, there are 6,674 adults (2,878 males & 3,796 female adults) belonging to Scheduled Caste and 3,383 adults (1,356 male and 2,027 female) belonging to Scheduled Tribe. In locating these Centres, special attention has been paid to educationally backward districts of Chamba, Kulu, Lahaul and Spiti and areas with concentration of Scheduled Castes and Scheduled Tribes population. For running these centres, unemployed educated youth, as far as possible, have been employed with a remuneration of

Rs. 50 per month. Efforts are being made to raise this remuneration to Rs. 100 per month, the present rate being too meagre. The education Department has drawn up a comprehensive operational plan for Adult Education upto the year 1990 costing about Rs. 8.82 crores. In addition to adult Education centres, 85 non-formal part time education centres in the age-group of 6—14 years are being run with an enrolment of 1302 (boys-445 and girls 857) to bring the drop out cases again into the formal stream. Measures are also being taken to switch over progressively to provide opportunities for multiple entry into any class at the elementary stage of formal education. Himachal Board of School Education has started correspondence courses from the year 1982-83 for the Matriculation Examination. At the University stage, evening classes are available in 4 colleges and Himachal Pradesh University offers a number of correspondence courses at undergraduate and Post graduate level.

A number of improvements have been effected to raise the standards of education in the Pradesh. A board of School Education has been established to prescribe courses and instructions to conduct examination. The Himachal Pradesh University was established in 1978. This University is a multifaculty University. In 1978-79, Agriculture University was established with its Headquarters at Palampur in Kangra District. The B.Ed. College at Solan was converted into State Institute of Education and this institution is being converted into State Council of Educational Research and Training in future. The Board of

School Education has introduced a new syllabus and courses of study for classes I—X w.e.f. 1980-81. For the first time, the study of Science and Mathematics has been made compulsory for all students, boys as well as girls upto Matriculation in the Pradesh. Socially useful productive work as propounded by Gandhiji, Yoga and Moral education has been included as an integral part in the new curriculum. New Text Books from classes I—X have been introduced in the State with effect from the School session 1980-81 and the prices of our text-books are one of the lowest in the country. Arrangements have been made to provide exercise books at prices approved by Government of India.

The Education Department is fully alive to the needs of encouraging suitable programmes in the area of games, sports and youth activities. The State already has an extensive net work of National Service Scheme (NSS) and Nehru Yuvak Kendra and efforts are being made to further strengthen these institutions.

One of the weakest link in our system of education has been lack of education amongst weaker sections of society i.e. the Scheduled Castes, Scheduled Tribes, the economically backwards. To encourage these sections of society 11 free hostels are being maintained for children belonging to Lahaul and Spiti District. In these hostels, provision exists for free boarding and lodging of 475 school students. Instructions have also been issued for reservation of seats in favour of Scheduled Caste/Scheduled Tribes students in general hostels attached to schools and colleges. A special sub-plan for educational development in tribal areas has been prepared and is being implemented. Another problem being faced is the problem of drop outs. The drop out rate in the State at the primary stage is 30% and at the Middle stage it is 50%. This is due to the inherent deficiencies in our education system, socio-economic conditions of the deprived groups, inadequate facilities irrelevant curriculum and lack of incentives.

In a topographically hilly State like Himachal Pradesh, the biggest problem which is being faced is the lack of funds for the construction of Primary, Middle and High Schools buildings for which the State needs funds to the tune of Rs. 14,200 crores. This is by no means the full requirements of the Department, but if the funds of this order can be made available, a major parts of the backlog of the existing shortage of accommodation can be cleared. However, a beginning has been made and some buildings for Schools mainly for Primary Schools have been constructed out of the drought relief fund provided by the Central Government last year, and Rs. 2.00 crores have been provided for the purpose by the Government (State Government) in the year 1983-84. The case for the provision of funds for the construction of buildings has been submitted to the VIII Finance Commission at the time the Members of the Commission paid a visit to the State.

The other main problem is the requirement of posts to cope with the ever increasing enrolment in the Schools. There is a shortage of 4,000 posts in the primary Schools and of 2,000 posts in the Middle/High/Higher Secondary Schools which is telling upon the equality of education. At this time nearly 1,800 Primary Schools are single teacher in the State. The State Government has recently decided to do away with the single teacher schools and 1,800 teachers under the self employment scheme for these schools, are being sanctioned at the remuneration of Rs. 200 to 250 per month. This is likely to involve an additional estimated expenditure of Rs. 1.58 crores per annum. These posts will be converted into regular posts gradually as per availability of additional funds.

If we are to achieve the target of 100% literacy by the year 1990, we have to lay greater emphasis on the female education. Although we have made much headway in this field. In the State according to 1961 Census, female literacy was 9.49% as compared to male literacy percentage of 21.26% whereas it rose to 31.39% as compared to male literacy percentage of 52.36 in 1981—but still we have to go a long way to bridge the wide gap between the education of boys and girls and the quantum of the problem is huge. Progressive measures are being taken to narrow this gap by improving the rate of girls enrolment and their retention. As already stated the education has been made free, not only upto elementary stage but also upto 11th Class at the School stage both for girls as well as boys. Co-education has been introduced in all the schools meant for boys to provide educational facilities to the girls at their door steps and mixed staff has been provided in these schools to pose greater confidence amongst the girls students. Efforts are also being made to provide toilet facilities for the girls in these schools subject to the availability of finance. Separate provision has been made for the extra curricular activities, games and sports for girls according to their interest and aptitude in these mixed schools. Separate institutions for girls have been set-up where the number of girls is large. Multiple entry facilities have been provided both to girls and boys who could not attend the schools earlier or had to have before becoming functionally literate through the 85 part-time non-formal education centres running through out the State. It is a recognised fact that increase in the number of women teachers is an essential condition for development of women's education but a peculiar difficulty that we are facing is about the inadequacy of women teachers. It is mainly due to the difficulties women have to face in serving in rural areas, caused by resistance from their families, the fear of insecurity in villages and lack of physical amenities such as accommodation, schooling, transport and medical facilities. To overcome this problem husband and wife are being posted on the same or nearby station as far as possible. Residential quarters are proposed to be built for the women teachers subject to the availability of funds. Since poverty is one of the major cause of non attendance and drop out of girls adequate provisions of

incentives, as already stated in the form of free education, free supply of books and stationery, uniforms and mid-day meals, attendance scholarships and other stipends etc. have been made. Efforts are being made to cover more and more girls of poorer section of the society under these incentives.

To introduce vocationalisation, 10+2 System on the all India Pattern is being introduced to begin with, in 32 High/Higher Secondary Schools of State. Next Year, it is hoped to cover 50 more Schools under this system. Two or three vocational crafts will be introduced in each school according to the needs and requirements of the region. A survey of the Solan District was undertaken for the purpose. Similar surveys of the other districts will be taken gradually.

Educational Inspection structure of the Pradesh needs to be strengthened. At present 6,554 Primary Schools are being administered by 114 Block Primary

Education Officers leading to an average 57.5 schools per Block, per Block Primary Education Officer. It is proposed to increase the number of Block Primary Education Officers to 200 to improve the inspection and Administration of the Primary Schools. 2,500 posts of Primary Head teachers have also been sanctioned. To improve the administration and working of primary schools and to provide promotion avenues to the Primary Teachers, numbers of Deputy District Education officers are also being increased to provide a Deputy District Education Officer at every Tehsil Headquarter.

Regular Educational Surveys are being undertaken to assess the needs of equatorial requirements of the different parts of the Pradesh. Fourth Education survey was completed in the year 1979 with the assistance of the Central Government. Our target is to provide schools so that a student has not to walk 1 to 1½ kms. for Primary Education, 5 kms. for Middle and 8 kms. for High Schools.

## HIMACHAL THE APPLE STATE

—Sh. Guman Singh,  
Former Agriculture Minister,  
Himachal Pradesh.



The State of Himachal Pradesh is a dream land of delight, set in the heart of Himalayas. Its north-eastern boundary is made up of Himalayan mountain ranges. Its snow capped peaks, limpid lakes of crystal blue hue, emerald meadows verdant and vast valleys rich with fruit and flora combine to make this land a sublime spot of beauty, half circled with a sliver ring of perennial snows.

Right on the lap of Himalayas, Himachal Pradesh is situated in the North West India. It lies between  $30^{\circ} 22'$  to  $30^{\circ} 12'$  north latitude and  $75^{\circ} 45'$ — $79^{\circ} 04'$  longitude. The territory is bordered by Jammu and Kashmir on the North, Uttar Pradesh in the South-East, Haryana on the South and Punjab on the West. While on the East, it forms India's border with Tibet. The State, endowed with nature's beauty and wealth, came into existence in April, 1948 as an Union Territory with the integration of some 30 erst-while small princely states, with an area of over 27,000 sq. kms. In 1954 another state, Bilaspur was merged with Himachal Pradesh, thereby increasing its area to 28,241 sq. km. This remained the position until 1966 when the hilly areas of Punjab were also

integrated with the State, thus further increasing its size to 55,673 sq. kms., or nearly double of its original area. The population so increased from 1.4 millions to 2.8 millions.

The whole territory is almost mountaineous with elevation ranging from 350 meters to 6,500 meters above mean sea level. It has a deeply broken topography, complex geological structures and sub tropical flora at different altitudes. The southern parts of the state are as hot as the plain while the northern region has a temperate summer and winter with extreme cold and heavy snowfall. The rainfall over the state average 1,523 mm. But there are considerable variations from district to district and from locality to locality. Most of the rainfall is received in monsoon season in July and August.

The importance of Horticulture in improving the economy of Himachal Pradesh is manifest and cannot be over emphasised. The typical geographical features, coupled with favourable agro-climatic conditions, have helped in changing the cropping pattern in the economy of farmers.

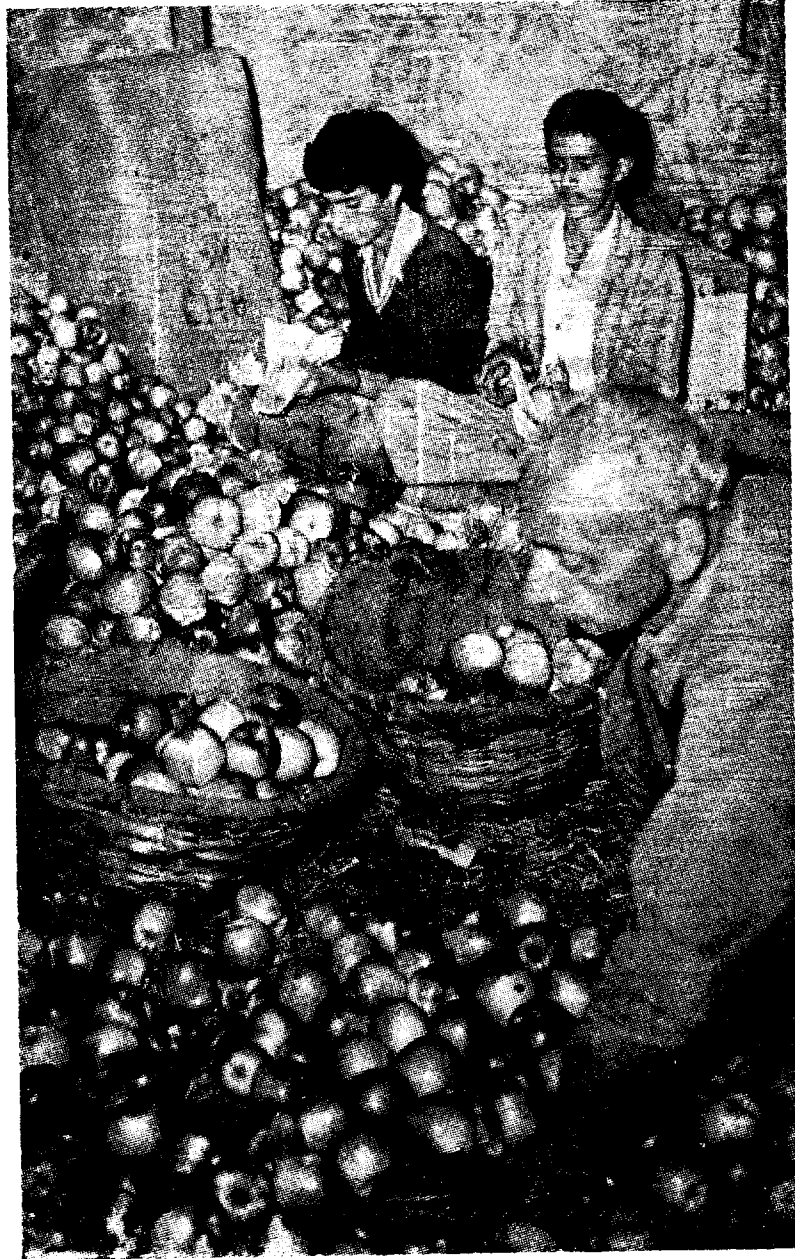




Apple Picking

Before independence, hardly any attention was paid for the development of Horticulture in Hilly areas of Himachal Pradesh which mostly remained under the small princely States, rulers of which had neither the resources nor the urge to develop Horticulture on scientific lines. Even the areas which were under the direct administration of the British Government were developed primarily as health resorts to find escape from the summer heat of the plains. Some commendable pioneering efforts were, however, made

by few missionaries and other settlers for developing pockets like Kotgarh area in the Shimla Hills and Kullu valley. Special mention may be made of Shri S. N. Stokes who introduced apple varieties of delicious group in Kotgarh area. These varieties adopted themselves very well to the local conditions and received preference in the market. These plantations later on served as nucleus for the development of Horticultural industry in Himachal Pradesh.



Apple Grading

After the formation of Himachal Pradesh in 1948, efforts were made for the development of Horticulture on sound and scientific lines. However, we had to start from a scratch. Hardly 1,000 acres of cultivated land were under fruit trees. The avocation of fruit growing in certain pockets was a watertight or air

tight sort of process with only a few of the elite knowing protecting trick. With the establishment of the section of Horticulture in the Department of Agriculture, in 1953, efforts were initiated at the right earnest for the dissolution of all these barriers and proliferation of orchards in other areas for the



Lemon Nursery

benefit of the general masses. This Horticulture Section tackled various problems pertaining to the development of hill horticulture which posed for more complex problems than the horticultural development in the plains. Rugged topography, difficult terrain, poor soil fertility, lack of means of communication and sharp variation in climatic and geophysical conditions, all posed seemingly unsurmountable hurdles to overcome. The Horticultural Section took up the challenge for the proper utilization of land resources and exploitation of rare agro-climatic gifts bestowed so generously by Mother Nature on Himachal Pradesh. The problems relating to the provision of reliable plant material, credit facilities and dissemination of technical know-how were tackled efficiently.

The impact of the commendable work done by the Department and the Orchardists as well as fascinating and absorbing subject, has been so tremendous on the simple minded people of the Pradesh that one and all have taken it without any prejudice of reservation. As a result of this the orchards have sprung up at a very fast rate throughout Himachal Pradesh and the State now occupies a prominent place on the horticultural map of India.

Ever since the formation of Himachal Pradesh particularly after the advent of planning, the pace of progress has been maintained at an increasing tempo. When the 4th plan comes to a successful conclusion, horticulture in Himachal Pradesh would have assured enough strength to play its role in the economy of Himachal Pradesh.

During the Third Five Year Plan, 23,482 hectares area was under apple orchards, but in 1982-83, the area increased 23,482 to 47,754 hectares. During

Third Five Year Plan the production of apple increased from 12,000 tonnes to 1,39,086 tonnes.

The orchardists of Himachal Pradesh have diligently been proliferating the growing of apples. The escalation of the growing of apples has taken increasingly tremendous dimensions. The main development in the field of horticulture has been of apple cultivation and about 60% of the total fruit plantations are covered under this fruit. The State of Himachal Pradesh has perhaps the highest per capita production of apples in the country. The State can also claim to be the first in having highest percentage of cultivable area under apples.

The Himachal Apples have gained superiority over apples produced in other states of the country. In all the four All India Apple Shows, Himachal Pradesh has won maximum number of prizes and the challenge shields since 1958. Himachal Pradesh has also the proud privilege of having the best apple orchard in the country. Late Shri Monohar Dass Sirkek of Gopalpur (Kotgarh) was awarded 'Udyan Pandit' title in apple cultivation, the first time in all India Apple orchard competition organised by the Government of India. As such Himachal Pradesh is crowned as the 'Apple State of India'.

However, other fruits are also equally important, and Himachal Pradesh produces, best quality of Stone and other Hill fruits in the country viz. peaches, plums, apricots, pears; persimmons, nuts and dry fruits. In all the All India Hill Fruits show, Himachal Pradesh has got the proud privilege of winning maximum number of prizes and the challenge shields. The production of citrus and other sub-tropical fruits also hold high promise.



Mango Orchards



Hops Picking

## LAND REFORMS FOR THE POOR IN HIMACHAL PRADESH

—Shri Shiv Kumar,  
Former Revenue Minister,  
Himachal Pradesh.

The idea of land reforms in its present form, was conceived in Himachal Pradesh immediately after the independence. The first popular ministry in the State took office in 1952. In 1953, some revolutionary land reforms measures were taken by the then Govt. for the first time, by enacting the Himachal Pradesh Abolition of Big Landed Estates and Land Reforms Act, 1953 which came into force in 1954. This act was, one of the first of its kind in the country since at that time it was in Himachal Pradesh that the doctrine of 'Land to the tiller' was adopted. This act envisaged transfer of tenancy land to the tenants, of course after payment of compensation, which was 24 times the land revenue in respect of occupancy tenants and 48 times the land revenue in respect of non-occupancy tenants. The Compensation Officer appointed under the Act to implement it, and the latter after summary verification about the title of the applicant was authorised to confer proprietary rights upon them so as to make them the owners of the land held by them in tenancy. The Act also provided for the vestment of land except lands under self cultivation, in the Government, of those landowners who were paying land revenue in excess of Rs. 125 per annum and its subsequent transfer in favour of the tenants.

The tenants or the 'tillers' in H.P. were generally poor and prior to these steps, they had no permanent right over the land except that they enjoyed a part of the produce of the land held by them as tenants under the various land-lords. Their condition was pitiable and they were exploited by the big land-lords who could remove majority of them at will. Thus, for the first time superiority of tenants in relation to land was recognised with a view to honouring the dignity of labour.

The big landlords fought this legislation tooth and nail politically as well as legally. While politically they organised rallies and processions, they challenged the act legally also and at one stage, they nearly won the battle in Court. However, this was only a technical flaw which was removed. Thus, commendable job had already been done by this act so far as vesting of tenancy land into the tenants is concerned. This act provided a great relief to the poor sons of the soil—the sweating multitudes in the rural areas of the Pradesh and they did, indeed benefit from it.

In 1966, with the passage of the Punjab Reorganisation Act, 1966, certain areas of the erstwhile Punjab



were transferred to Himachal Pradesh where this Act was not applicable. The position of the tenants in these areas was no better. The Govt. provided legal protection to the tenants in these areas by passing the Himachal Pradesh (Transferred Territory) Tenants (Protection of Rights) Act, 1971.

In 1972 some more measures and this time, more progressive in the field of land reforms aimed at ameliorating the lot of the poor tenants and other agricultural labourers were taken in the shape of legislation on land reforms. At least 2 big leaps in this regard were made by the Government by enacting the H.P. Ceiling on Land Holdings Act, 1972 and the H.P. Tenancy and Land Reforms Act, 1972. The ceiling act is directly a measure to benefit poor multitudes of the Pradesh. The scheme of the act provides that surplus area taken from the richer class of land owners shall be distributed among the poor landless agricultural labourers in the Pradesh. Then a massive programme of allotment of land was launched in the mid-seventies which envisaged allotment of land up to a minimum limits of 5 bighas (roughly corresponding to about 1 acre) of land to all those having no land or having land less than 1 acre. A survey of these landless agricultural labourers conducted twice in the Pradesh up to 30-4-81, showed, that there were about 90,000 such agricultural labourers in the Pradesh who required settlement under this scheme. The surplus area being inadequate to answer this gigantic call, the Govt. had to fall back upon other land available with it. For this purpose, another Act namely the H.P. Village Common Land Vesting & Utilisation Act, 1974 was enacted which placed shamlat land at the disposal of the Govt. for allotment to these persons, as one of its aims. These coupled with the Govt. waste land provided a backbone of the scheme and the Govt. was able to allot land to almost all of these craving 90,000 landless labourers or persons holdings less than 1 acre of land who were mainly dependent upon agriculture. Very few such persons are awaiting allotment and it is due to the restrictions imposed under Forest (Conservation) Act which provides that no forest land

shall be put to non-forest uses. Their cases are being processed for relaxation of these restrictive provisions of the act and they too shall be getting land soon.

While enforcing land reforms measures in the Pradesh care has been taken to ensure that unlike what had happened in fifties under the first land reforms legislation, namely, the H.P. Abolition of Big Land Estates & Land Reforms Act, 1953, which had no provision for resumption of land by a land-owner in the even of his entire holding being with the tenants, is not repeated. This flaw had rendered some land-owners as landless. This draw-back has been taken due care of in the present enactment which provides that a land owner whose land is to vest in the tenant under the act, shall be entitled to resume up to  $1\frac{1}{2}$  acres (irrigated) or 3 acres (unirrigated) land including the land under his own possession for his living. Thus, the present land reforms act is an ideal reforms measures for the poor since while providing land to the poor tillers, it seeks to take care of land

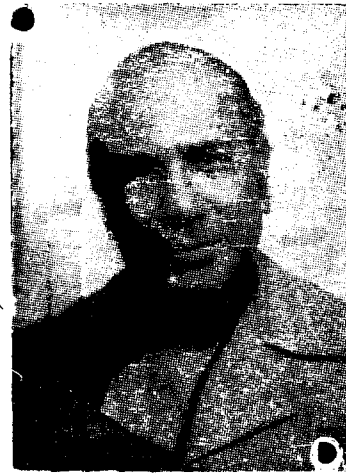
owners also, simultaneously. There were a little over 5 lakh tenants in the State out of whom more than  $4\frac{1}{2}$  lakhs have been conferred ownership right. Most of the remaining tenants can not be conferred ownership right as they are the tenants of landowner who belong to the protected category i.e. serving soldiers, widows, minors etc.

A scheme to provide free legal aid to those poor farmers or allottees who have been dragged into litigation by big money bags, reluctant to part with their gains, is in operation. Such people are provided free legal aid to defend their cases in the courts by the district authorities or the State Board.

The Government is making all possible efforts that the land reforms measures taken by it reach the poor in real sense of the term. Periodical reviews are conducted to ensure that land reform measures are being implemented with full vigour and the beneficiaries put the land to proper use.

## DEVELOPMENT OF TOURISM IN HIMACHAL PRADESH

— Shri Sat Mahajan,  
Transport Minister,  
Himachal Pradesh.



The 20th Century has virtually ushered in an era of international tourism. The remarkably rapid and continuous development of tourism, particularly after the 2nd World War, has been one of the essential key-notes of the world scene. Accounting for 8 percent of the world total trade, tourism is now the target single item in world trade. In many countries, tourism receipts account for upto 40 per cent of the total export of goods and services and often help to cover the trade deficit, thus improving the overall balance of payment situation.

With expanding global affluence, increasing facilities of air transportation and the considerable leisure time at people's disposal, the traffic is bound to increase at an accelerated rate.

From the economic point of view, tourism is especially important in developing countries like India. It is a catalyst to economic growth and foreign exchange earnings. The various and accumulative benefits of tourism can hardly be over-emphasised. Tourism, therefore, requires an integrated approach for effective developments. Its importance as an economic factor is also evident from its being a multi-billion dollar activity, the second largest industry and the largest single employer in the world.

Apart from removing regional imbalances and opening new growth centres providing employment opportunities for young men and women; yielding tax revenue to the government; sustaining many trades like handicrafts; tourism ensures a maximum use of natural resources and optimum use of manpower and expertise.

Besides the economic gains, there is hardly any activity which presents as wide a scope for promotion of human understanding so smoothly and so successfully as the international tourist industry. Tourism has also led to resurgence of culture. Cultural tourism, whose scope is growing rapidly, has enabled our coun-

try to give importance to the development of cultural products intended for visitors and to the protection of the natural environment. It is also noticed that tourism materialise, personalises and brings forward societies and cultures on whose facts are advertised by the Media.

Tourism has been a boon to Himalayan economies, which have sluggish and morbid outlook due to topographical restraints. Himachal Pradesh has experimented in harnessing some of the recreational resources for the socio-economic benefit of the people. Her tourism products are largely nature made and offer much more to tourists than is commonly understood. This is more true in her cultural heritage.

Himachal Pradesh is a vertiable cornucopia of nature; it is also gayland of colourful fairs and festival; ancient temples with super sculptural ornamentations; of peace loving and hospitable people and of pilgrimage centres which attracts lakhs of devotees every year. Infact the magical powers of these mountains which encompass Himachal Pradesh is an indefinable blend of myth and reality.

About two years ago, we took a thorough look at the potential this state posses for attracting a large market visitors. More investment is being undertaken in the field, because of the promise of increasing return on capital, both by private entrepreneurs and by the Himachal Pradesh Tourism Development Corporation. Its impact can be judged from the facilities HPTDC has created in the fields of catering accommodation, transport and entertainment.

Himachal Pradesh Tourism Development Corporation now has about 1,800 bed spaces in its well furnished hotels, bungalows, cottages, youth hostels and a number of well appointed cafetarias and restaurants,



not only at important tourist resorts, but also on the National and State Highways. Its transport fleet consists of about 35 air conditioned deluxe and luxury

coaches and cars and jeeps which are made available for sight-seeing tours, groups excursions and individual journeys.



Club House Manali

During the year 1981-82, the Corporation provided transport to 65 and 95 foreign groups in its luxury and deluxe coaches. In 1983, the Corporation provided transport to 80 groups from abroad. The number of tourists carried by the Corporation in its commercial vehicles in 1981 was 90,900, in 1982 1,08,450 and in 1983 it was 1,24,200. The Tourism Development Corporation have been able to achieve 80 per cent of its fleet utilisation.

During the winter months, the Corporation Organizes package tours from Delhi to Shimla and Chail, Kullu, Manali and from Chandigarh to Bhakra, Kasauli and other places.

With a view to achieving maximum utilisation of its facilities and services, the Tourism Development Corporation has chalked out an ambitious programme during this year, which includes conducted tours to well known pilgrimage place in the Kangra valley, provision of conference facilities at Shimla, Chail, Wildflower Hall and Manali and approaching film producers for location shooting of their films in Himachal Pradesh. As a part of this programme, the Corporation

has also given a new outlook to its guest establishments by carrying out repairs and renovations, replacing old furnishing and furniture and adding new amenities so that the stay of the tourists could be made more comfortable. It has also restructured its catering business so that wholesome meals could be made available to the tourists and other visitors at reasonable rates. With a view to achieve greater proficiency in the management of these guest establishments, HPTDC has sent many of its officials for training in catering and hotel management in Chandigarh Delhi and Bombay.

The policy which the HPTDC has now adopted for developing this industry is to ensure an integrated and balanced execution of regional or area plans and its objective of overall development. The schemes which are taken in hand by the Tourism Development Corporation are aimed at creating economic activities and generating employment and income apart from providing facilities for tourists.

With a view to make maximum utilization of the resources, three travel circuits have been identified in



Himachal Pradesh by the Government of India, Department of Tourism in consultation with the State Tourism Development Corporation. These are :—

- (i) Parwanoo — Chail — Kufri — Narkanda — Shimla,
- (ii) Dalhousie — Khajjiar — Chamba — Kangra — Dharamsala — Palampur — Jawalamukhi — Bilaspur — Chandigarh, and
- (iii) Kullu — Manikaran — Kullu — Manali — Kullu.

In addition to these travel circuits, we have also identified more circuits namely Nahan — Poanta Sahib — Renuka and Shimla — Jubbal — Kotkhai — Rohru.

Himachal Pradesh occupies a prominent place from the view point of pilgrimage. A beginning to tap this potential for religious tourism has been made by constructing a hotel with 70 beds accommodation with all modern facilities at Jawalamukhi, one of the foremost pilgrimage places in northern India. Manikaran in the Kullu Valley is famous for hot springs. A health resort-cum-tourist complex consisting of accommodation, a restaurant, sauna and turkish baths is already under construction. Barog on the Shimla — Kalka National High-way has become not only a favourite stop-over for the public travelling on this highway but a tourist resort of considerable importance. A hotel with conference and recreational facilities to supplement the existing accommodation has also been commissioned at its place. Near by is Kasauli, one of the cleanest and picturesque hill-station. A Tourist Complex consisting of nine double sector is geared more toward providing facilities for the middle and lower level income people including a large number of pilgrims and

to prolong the tourist season by diversifying touristic activities. To achieve this objective, HPTDC organizes every winter, skiing courses at Narkanda, 65 Km. from Shimla It also organises trekking programme in Kullu Valley in collaboration with the youth Hostels Association of India, every year.

Manikaran in the Kullu Valley is well known for its hot springs and as a place of great pilgrimage. With a view to tap its touristic potential, the Corporation is constructing a Bath-cum-Tourist Complex at this place which will be ready for use by the tourists in 1984. Besides providing accommodation and catering facilities, this complex will also provide a swimming pool and sauna Baths. The Tourism Development Corporation is also converting some buildings at Sarahan, the ancient capital of Rampur Bushahar, into tourist accommodation. The restaurant at Renuka will also be ready during this year. A restaurant will also be constructed at Nurpur on Pathankot—Mandi Highway with a view to provide catering facilities to the travelling public.

During the Sixth Five Year Plan, the Tourism Development Corporation would be constructing more hotels at places like Dalhousie, Kullu, Kasauli, Kangra, Sarahan and Chakki near Pathankot and would add more coaches to its transport fleet so that minimum qualitative and quantitative level of facilities could be made available to tourists.

We have also opened Tourist Information Offices at Calcutta, Bombay and Madras so that not only information about places of interest in Himachal Pradesh could be provided to the prospective tourists but also booking of transport and accommodation could be done for them on the spot. We shall also be opening more Tourist Information Offices at places like Ahmedabad, Bangalore etc. in the near future.

## FOREST DEVELOPMENT FOR ECOLOGY, FUEL, FODDER AND INDUSTRY

—Shri Devi Singh,  
Former Forest Minister,  
Himachal Pradesh.

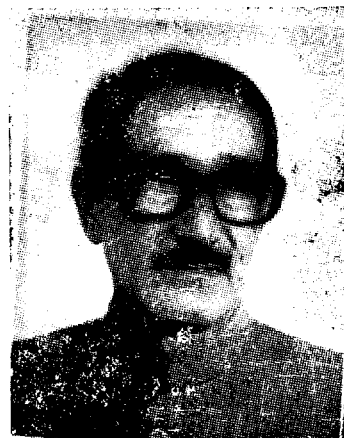
Forests were there before human being appeared on the earth and while forests can exist without people, the converse is not true. Our ancestors were very conscious of the importance of forests and forestry. They lived with the allurement with nature as would be clear from the following stanza, of Smrithi :

“Give the care to the gift of God that soothes you all, ennoble you men and mortals; may this vegetation keep the balance of environment & climes, thou are enjoined.”

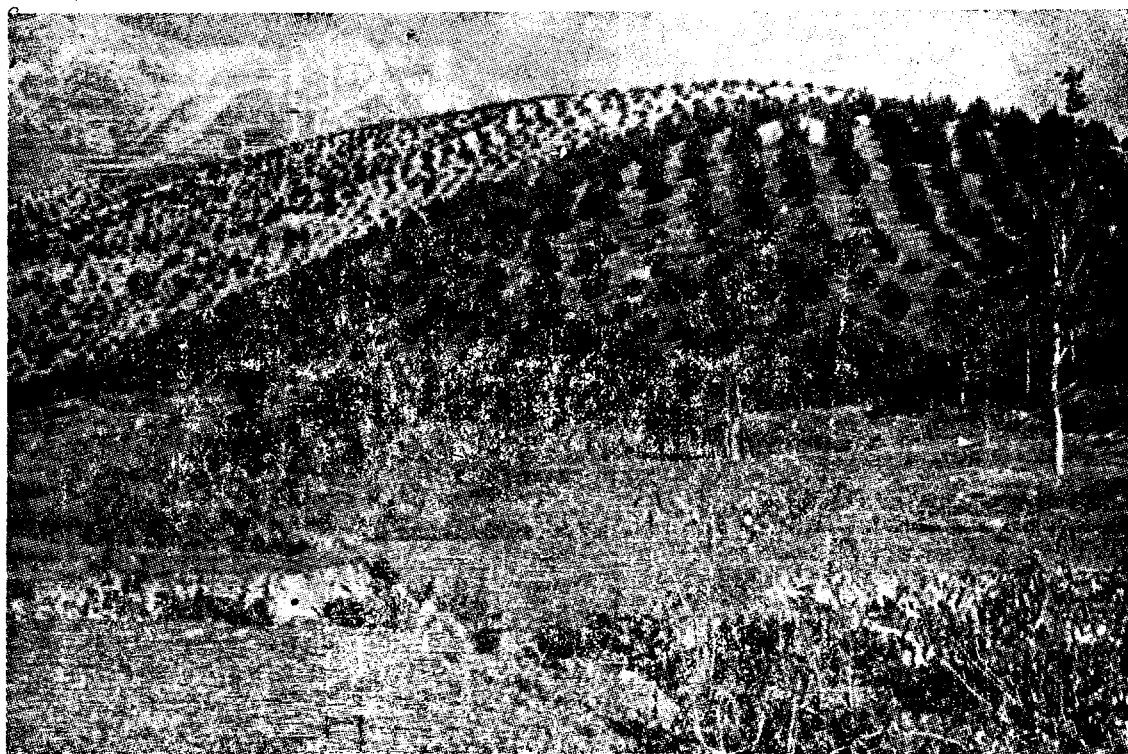
*Parasara Smrithi.*

For centuries man had lived in balance with the natural environment. Almost all the scriptures are full of praise for vegetation. People of those times used to consider it their sacred duty to protect and preserve the environment. They were well aware of the importance of forests in maintaining the ecological balance and environmental conservation.

The importance of trees in the economy of a nation or a country can hardly be over-emphasized. Besides



meeting the daily demand if the rural people for timber, fuelwood, fodder, medicinal herbs, etc., the forests play a vital role in providing employment to the local people. In addition to this the plants protect and improve the environment in which we live. The trees absorb solar radiation and block the direct sun and thus provide bower. Plants take up carbon dioxide from the atmosphere and provide oxygen and make the environment salubrious. It has been estimated that one medium size tree can take carbon dioxide breathed out by two families and can provide adequate oxygen for them. Not only this the plants absorb dust and obnoxious gases and thereby purify the polluted air. The trees also release moisture in the atmosphere and reduce the noise pollution.



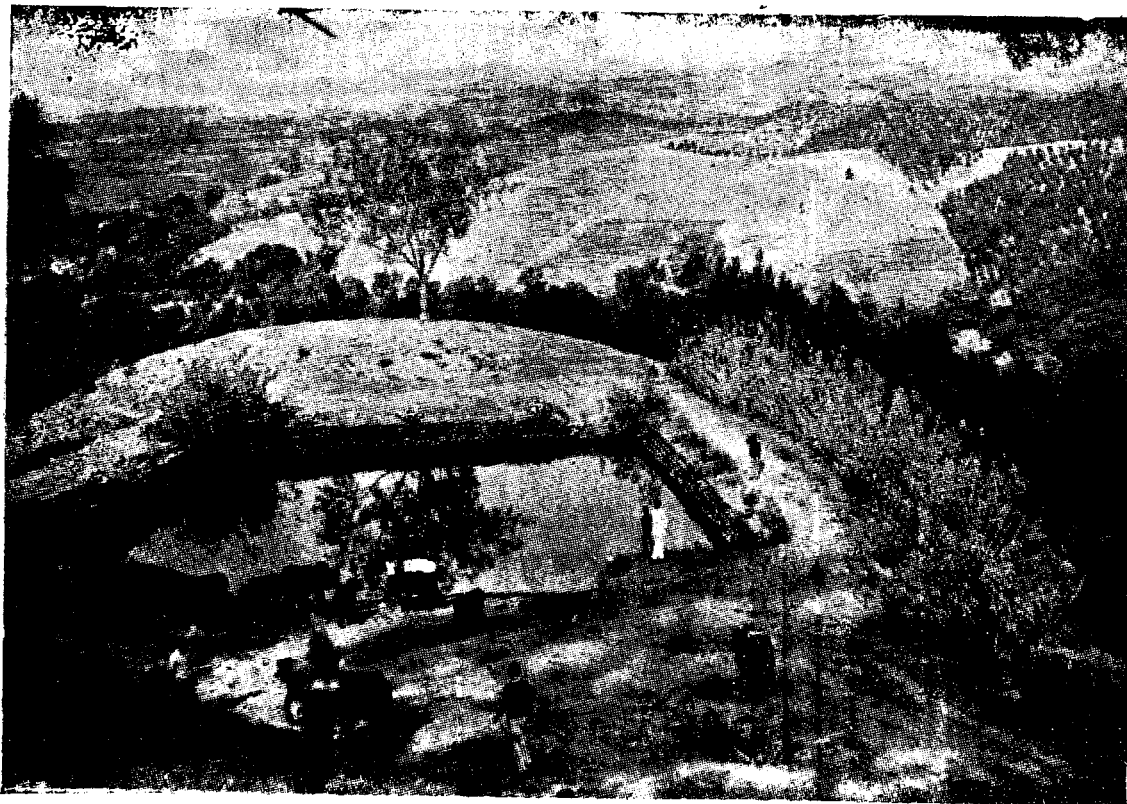
Chil Plantation near Kangra

Population growth, urbanisation, mounting energy consumption and industrial development is causing considerable damage to the forests which are dwindling at an alarming pace. Evidently we are facing ecological collapse through deterioration of the basic ecosystem of land, air and water. The main Environmental problem is two fold, namely, resource depletion and environmental pollution.

It is easy to cut a tree than to grow one. We are cutting trees ruthlessly for immediate economic gains, with the result that the forests are disappearing fast. In this context the deliberations made in the United Nations Environmental Conference held in Nairobi are revealing and startling. It has been estimated that the forests are disappearing in Asia, South America and Africa at an alarming rate of 14 hectares per minute or 73 lac hectares a year. Out of this 18 lac. hectares of forests are vanishing in Asia alone. According to a Govt. report the damage done in the years 1979 to

1981 to the Himalayan ecosystem through deforestation, soil erosion and land use has been to the tune of three thousand crore rupees. In the matter of preservation of forests we should follow the illuminating advice of our Prime Minister "When you save a forest, you not only save the trees but you save peoples' future."

(i) Himachal Pradesh came into being in the year 1948 with the merger of erstwhile princely states. Forests in the merged states were not being managed on scientific basis for want of adequate technical personnel. The state took to planned development in 1951-52 when its first Five year plan was launched. The Forest Department prepared integrated working plans for the Forests of the Pradesh and thus brought these under scientific management. In 1966 more areas from Punjab were merged in the State at the time of re-organisation of States of Punjab, Haryana and Himachal Pradesh. Consequently the area under forests were increased from about 9,000 sq.km in 1950-51



Soil Conservation—Farm Pond

to about 21,000 sq.km in 1966-67. In consequence to this, the Forest Department was faced with problem

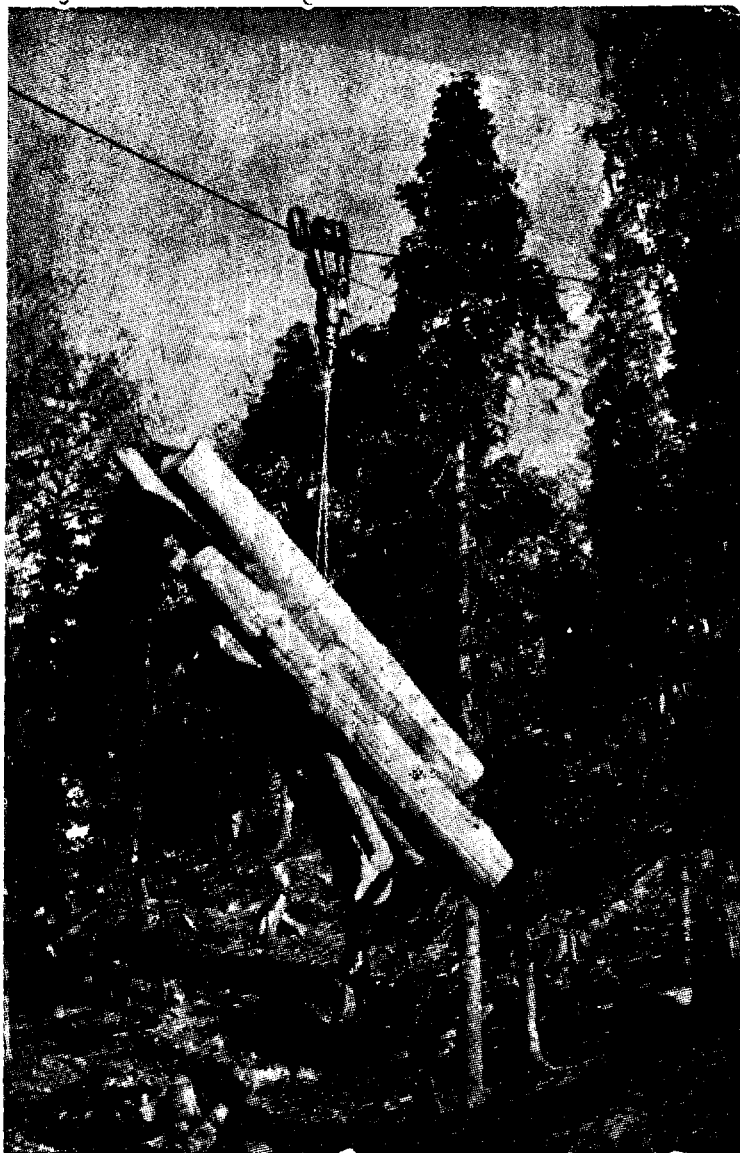
of involving a uniform forest policy for the merged and old areas.



Tree Plantation by the People

(ii) It was indeed, essential to formulate a forest policy to streamline forest working in the state. The State Government has taken numerous decision in this context and has also promulgated important Acts. There has been a marked change in the concept of conventional forestry, on account of drastic changes in the socio-economic condition of the people and environment. Previously efforts were concentrated on raising plantations and carrying out regeneration works only in the Government Forest but now the concept of Farm Forestry/Social Forestry in the Forest Policy of the State has been introduced.

Chronologically, major change in the Forest Policy of the State was effected in April, 1978 by adopting the concept of three Dimensional Forest Farming. This new Forest Policy stressed the need of involvement of the masses in plantations Programmes on the one hand and high-lighted the importance of raising plantations on the other with the three objects in view i.e. soil conservation, production of timber and fodder for the domestic cattle. Thus it will be seen that the concept of multi-utility function of the woods was included in the new Forest Policy. The department was designated as Department of Forest Farming and Environmental Conservation in sequel to the new Forest Policy.



Sky Line Rope-way in Remote Forests

In pursuance to above policy, the state Government took number of decisions for its implementation. In for first instance the Government decided that any individual department or an institution normally should not cut trees except under pressing circumstances. It was also enjoined upon the fellers that the concerned institutions, individual or department would have to plant three trees for every single tree felled. Secondly the Government decided to involve the Panchayats in the maintenance of new plantations raised by the Forest Department in the areas reserved for grazing. The Government also offered incentive and decided to pay 10 paise per tree planted and living after every three years upto 20 years and there after every 4 years till the tree is harvested. Thirdly in order to ensure involvement of the masses it was decided that every Himachali should plant at least 5 trees annually.

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The tree Dimensional Forest Farming merged with Social Forestry/Farm Forestry with the passage of time. Consequently Social Forestry/Farm Forestry Schemes were initiated during the year 1979-80.

Out of the total area of 55,673 sq. kms. of the Pradesh, forests cover an area of 21,322 sq. kms. which is hardly 38%. According to National Forest Policy 60% of Geographical area in a hilly state like Himachal should be under forests to fulfill both protective and productive functions. Keeping in view the directions of the national forest policy the state Government constituted a high powered Committee during the year 1980, to work out the area available for afforestation. Based on the findings of the said committee a new forest policy was formulated by the

State Government under which 50% of the Geographical area is envisaged to be brought under forests by the year 2,000 A.D. The existing forests forming nearly 38% of the total geographical area of the State would also be restocked by planting especially demarcated and un-demarcated forests, which are poorly stocked. A 20 years perspective plan starting from 1981-82 has been prepared for forestry, soil-Conservation and watershed management in the Pradesh in pursuance of the State Forest Policy. The estimated area likely to be available for carrying out afforestation work is about 20,000 sq. km.

The concept of social forestry is not new. Agro forestry is being produced from the distant past to the present day. The farmers grow trees for fuel and fodder either scattered in the fields or on the bunds. The Social Forestry has assumed importance on account of denudation of forests on one hand and the increase in population on the other. The net result of deforestation is soil erosion and scarcity of fuel wood which is the major source of energy in the villages. In view of what has been said above the State government has embarked upon a Social Forestry Programme. The following areas are planned to be earmarked for the purpose.

	<i>App. Area (Hectares)</i>
1. The ex-villages common lands now vesting in Government under the H.P. village Common lands (vesting & Utilization) Act, 1974	4,32,590
(ii) Land declared surplus under the Big land Estates Act, 1972	38,118
(iii) Ban Maufiareas	110
(iv) Private area adjoining agricultural fields	To be surveyed
(v) Government Waste and degraded forests	11,40,300

The Plantations are being raised in this State right from the Five Year Plan i.e. 1950-51 and the extent of the area covered during different plan periods are given below :—

Period	<i>Area Planted (Hectares)</i>
1950-51 to 1955-56	1,196
1956-57 to 1960-61	4,711
1961-62 to 1965-66	40,903
1966-67 to 1968-69 (A.P.Os)	27,321
1969-70 to 1973-74	73,349
1974-75 to 1978-79	93,388
1979-80	25,108
1980-81	23,405
1981-82	21,746
1982-83	26,798
Total	3,37,925

Annually we are planting about four crore plants under various schemes. The plantations under farm forestry were started in 1976-77 and area covered so far is as under :

Year	<i>Area (Hectares)</i>	<i>Remarks.</i>
1976-77	654	Farm Forestry
1977-78	7,901	Do.
1978-79	7,649	Social Forestry
1979-80	3,571	Do.
1980-81	5,357	Do.
1981-82	6,760	Do.
1982-83	12,758	Do.

Social Forestry has been included in the 20 point Programme. About 68% of the Annual Plantation target is covered under Social Forestry Programme. The Social Forestry Schemes being implemented by the Forest Department include mixed plantation in waste lands/Panchayat lands, Farm Forestry, Rural Fuel-wood plantations, Reafforestation of Degraded Forests and National Rural Development Scheme under which wood lots are to be created near the villages. Under this programme main emphasis is laid on raising plantations of fast growing deciduous trees which will yield leaf fodder, leaf manure-fuel-wood, wood for agriculture implements and packing cases required for transporting fruit and vegetables to the markets. The plantation under the above scheme are raised on un-demarcated protected forests and other Government lands situated in the vicinity of villages. The plantations of commercially important tree species required for wood based Industries are being raised in the Government Forests.

"A tree for Every Child" Programme has been started at the instance of the Prime Minister so as to include the spirit of love for trees amongst the children. Under this Programme the children are encouraged to plant trees in the areas selected by the forest department, in compounds of their houses and along fields of their families. Name plate is fixed to each plant planted by a child. The Sanad/Patta will be issued after five years of planting by the Revenue Department in favour of the child in respect of the trees planted by him/her. The child will be entitled to produce of the trees planted by him/her. Ten to twelve lakhs plants are planted annually under this programme. The school children are also encouraged to raise nurseries of forest plants. Nursery in-puts like seed, Polythene bags, manure and fertilizer, fencing material and technical knowledge are provided free by the Forest Department.

The seedlings raised by the students are purchased by the department. The Panchayats/Educational Institutions are also encouraged to raise plantations on waste-lands and inputs like plants, fencing material etc. are provided free by the Forest Department. The

work of digging of pits and actual planting is carried by Panchayats/Institutions. Besides this, individuals are encouraged to raise plantations on the lands belonging to them. The required number of seedlings are supplied by the forest department at the rate of 10 paise per seedling. This token money is charged to create an interest and a sense of ownership amongst the

individuals who plants the seedlings.

The State Government awards prizes annually for raising best plantations by Panchayats/Institutions as also by forest officials. The Scheme of awarding prizes has generated a spirit of competition amongst the masses and officials alike for excelling in raising plantations.



## 20-POINT PROGRAMME—A MINIMUM DEVELOPMENT PLAN FOR THE POOR

—Shri J. B. L. Khachi,

Former Planning and Co-operation Minister,  
Himachal Pradesh.

The New 20-Point Programme is an all-embracing strategy of crucial significance to make our developmental programmes more meaningful and it also pinpoints the various developmental aspects where we need to accord effective priorities not only in terms of financial investments but also in terms of efficacious delivery of fruits of development. Apart from the sharpened focus on poverty amelioration and unemployment eradication, it has all the necessary ingredients of building up a comprehensive infrastructure—both economic and social. It also takes care of ecological too.

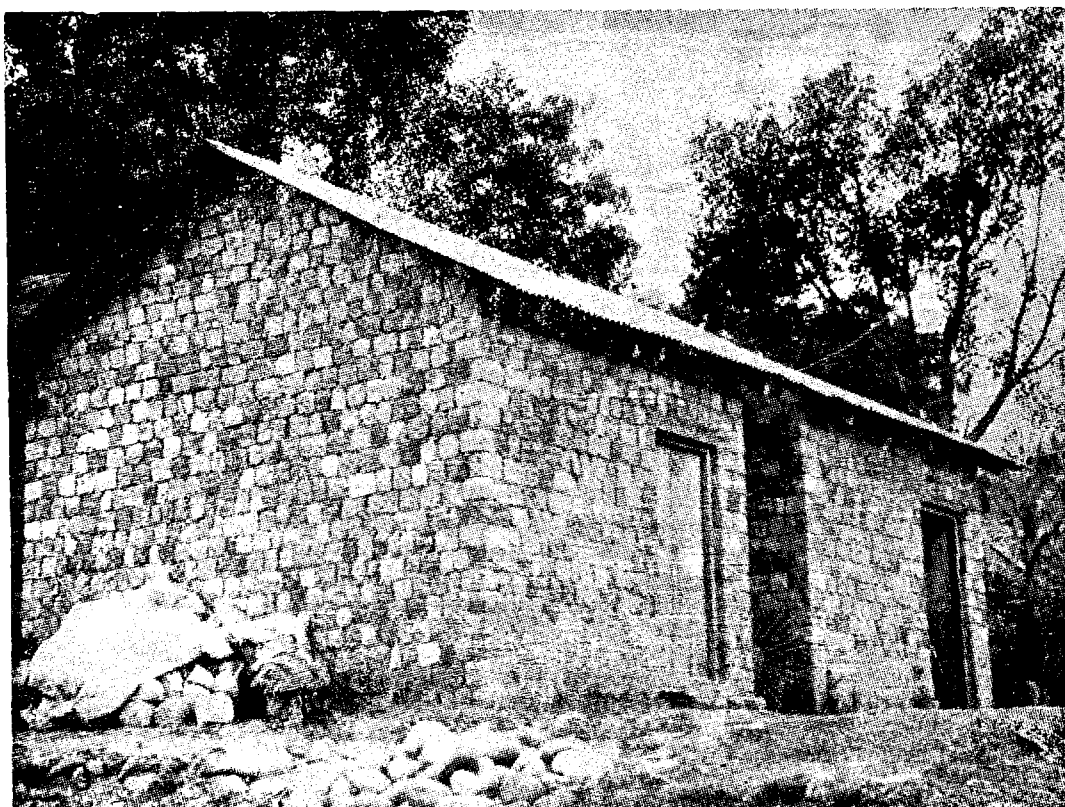
The revised 20-Point Programme reflects many facets of concern which our Prime Minister has for everyone in the country. It has the concern of a mother for infants; the concern of a parents for the youth; the solicitude of an elder sister for women; the benevolence of a friend and a healer for disabled, lepers and blind; the guiding light for economically under privileged; and above all, the message of inspiration and missionary zeal for the politico-administrative structure of the country. In summation, it is the medium through which the real and demonstrable success of our planned economic development effort can be actualised. It demands the complete symbiosis of public participation and implementation machinery.

The Himachal Pradesh Government has accorded a very high primacy for this programme ever since



inception. The leap taken forward with the 20-Point Programme of mid-seventies has not only been consolidated but has been given a push forward. The State has been in the front rank in terms of performance as assessed by the Planning Commission during 1982-83 and 1983-84. In terms of investment of developmental resources for this programme, starting with about 70% of total developmental resources being earmarked for this programme during 1982-83, the level of earmarkings has reached over 80% for 1984-85.

It may be of relevant significance to have an introspection of the achievements of the last two years. Additional irrigation potential of 7,500 hectares has been created. Nearly 89,000 families living below poverty line have been provided economic assistance towards augmenting their family incomes. Safe drinking water has been provided to 2,170 villages besides



House for the Houseless Poor



providing rural electrification to 2,447 villages. The programme of environmental improvement of slums has covered a population of 19,084 persons. About 9.75 crore saplings have been planted over an area of about 35,000 hectares and 1,070 biogas plants set up. Over 32 lakh mandays of employment generation has taken place under NREP coupled with creation of about 1,200 durable community assets. Nearly 67,000 sterilisations have been performed with greater involvement of people. Over 4,600 village and small scale industrial units have been permanently registered. Infrastructural expansion has also taken place for ICDS, health, education, adult literacy, public distribution system, etc. The tempo built up is going to-gather added momentum during the current year. Rewards for better performance have been received from the Government of India in the areas of rural

water supply, family planning and environmental improvement of slums.

The physical achievements would be meaningless in terms of more numbers unless those are imparted the desired credibility through a highly efficient, intensive and responsible monitoring. Wide ranging measures have been innovated towards physical monitoring of various programmes. These include physical audit of the completed schemes, identification of the gaps or shortfalls in the course of implementation and need for management of infrastructure at the post implementation stages. The monitoring mechanism is being further intensified and improved upon. With all these inputs, the programme is bound to transform the socio-economic well being of the people of this hill-State and be an active participant in the national economic mainstream.



A Beneficiary under 20-Pt. Programme

The summary of physical targets and achievements under some selected items of New 20-Point Programme during 1982-83 and 1983-84 pooled together is as under :—

Item	Unit	Target for 1982-84	Achievement 1982-84
1. IRDP . . . . .	Families	82,800	88,942
2. NREP . . . . .	Lakh	24.35	32.46
3. Assistance to S. C. families . . . . .	No.	56,510	1,02,437
4. Assistance to S. T. families . . . . .	No.	10,960	17,118

Item	Unit	Target for 1982-84	Achievement 1982-84
5. Village electrified . . . . .	No.	2,170	2,447
6. Trees planted . . . . .	Lakh No.	860	983.96
7. Biogas plants . . . . .	No.	500	1,070
8. Slum population covered . . . . .	No.	8,000	19,074
9. Problem villages . . . . .	No.	2,040	1,901
10. Sterilisations . . . . .	No.	62,000	67,411
11. Sub-Centres opened . . . . .	No.	225	225
12. VSI Units registered . . . . .	No.	3,443	4,639



Handicapped Beneficiary

As regards the implementation of the New Twenty Point Programme in the State during the year 1984-1985, a brief summary of the achievements upto the end of June, 1984 is contained in the following table :—

Item	Unit	Target	Achievement
1. Slum population covered . . . . .	No.	4,000	2,943 (73.6%)
2. Pump sets energised . . . . .	No.	100	51 (51.0%)
3. Villages electrified . . . . .	No.	538	221 (41.1%)
4. S. T. Families assisted . . . . .	No.	2,620	1,139 (43.5%)

Item	Unit	Target	Achievement
5. NREP . . . . .	Lakh Mandays	12.80	2.12 (16.6%)
6. IRDP . . . . .	Families	41,400	6,192 (15.0%)
7. Water supply to problems villages . . . . .	No.	670	97 (14.5%)
8. Biogas plants . . . . .	No.	2,500	350 (14.0%)
9. S.C. Families assisted . . . . .	No.	33,780	4,099 (12.1%)

In all the above items, except Rural Water Supply the performance of Himachal Pradesh is far ahead of the national averages, during the current year upto June, 1984.

## DEVELOPMENT OF BACKWARD AREAS IN HIMACHAL PRADESH

—Shri Kaul Singh Thakur,  
Minister of State,  
Health and Family Welfare,  
Himachal Pradesh.



It is now recognised that the path ways of development in the past have not lead to an even distribution of benefits of economic growth between geographical areas. In fact these areas are those unprivileged pockets which somehow eluded the process of development. It would be in the fitness of things to call such areas as 'under developed' or 'less developed', which implies that there exists a potential for development but it remained untapped.

An important objective of the planned effort is to bring about a progressive reduction in regional inequalities in the process of development. There is no doubt that the fulfilment of this objective requires ungrading the development process by identifying such neglected regions, rather than curtail the growth of those regions which have gained certain momentum. By and large the resource base in backward regions is low and many of them are living with one or the other adverse natural factors which inhibit the process of growth. In the context of the entire country all the Hill Areas have been categorised as 'under developed' as there are vast infrastructural gaps in the matter of communications, transport etc. By this criterion, Himachal Pradesh itself is a 'Special Category State' and this arrangement enables the State plan outlays to be substantially met out of Central Assistance.

Within Himachal Pradesh the inter-regional disparities are more pronounced. As regards the intra-state disparities in the levels of economic development among various sub-regions within a state, the H.P. Government already have adopted a clear cut policy. Under this policy a large number of areas have been declared as backward for specific earmarking of resources for their development.

The identification of backward areas in Himachal Pradesh prior to 1978 was done on the basis of the recommendations of Deputy Commissioners, generally taking into consideration the remoteness and inaccessibility of the area concerned. The followings areas were declared as backward in Himachal Pradesh in

according with the recommendations of the Deputy Commissioners in June, 1974 :—

Name of District	Areas Identified as backward
1. Chamba	(i) Bharmour (ii) Pangi
2. Kangra	(i) Bara Bangal (ii) Chhota Bhangal
3. Mandi	(i) Chohar Valley
4. Kullu	(i) Manali-Ujhi (ii) Outer Seraj (Ani & Nirmand) (iii) Banjar Block
5. Shimla	(i) Dodra Kawar (ii) Pandrabis (iii) Chhaisbis (iv) Kashapat (v) Chopal Tehsil (vi) Gram Panchayats : Munish, Darkali Taklech and Deothi.
6. Sirmour	(i) Trans-Giri-Tract
7. Kinnaur	(i) Kinnaur District
8. Lahaul-Spiti	(i) Lahaul & Spiti District
9. Solan	(i) Mangal & Beral Panchayats

There were no specific norms prescribed and the decisions could, more or less, be construed as impressionistic or adhoc. To be more systematic in locating the inter or intra-regional disparities in the levels of socio-economic development of various areas or sub-areas, the Government, after detailed thought and consideration and also taking into account the general recommendations of the Planning Commission in this behalf, decided to lay down some objective criteria for identification of backward areas in Himachal Pradesh.

This necessitated a complete (i) review of the prevailing norms for declaration of areas as backward, (ii) review of the status of existing backward areas and (iii) fresh identification of backward areas on an ad-hoc set of indicators of development. The Himachal Pradesh Government then finalised the following indicators/norms for the identification and review of various backward areas in the Pradesh.

#### INDICATORS

<i>Remoteness and Inaccessibility :</i>	<i>Weightage</i>
(i) The geographical centre of the area under consideration should be atleast 15 km away from the main motorable road . . . . .	25
<i>Demographic Indicators :</i>	
(ii) The percentage of Scheduled Castes/Scheduled Tribes population in the area under consideration should be 25 percent or more . . . . .	15
(iii) Average density of population per sq. km. should be 25 per cent or less . . . . .	5
(iv) Ninety percent of the total working population in the area under consideration should be workers engaged in the primary occupations like agriculture and animal husbandry , etc. . . . .	5
(v) The percentage of school going children in 1—14 years age group in the area under consideration should not exceed 20 percent. . . . .	10
<i>Infrastructural Indicators :</i>	
(vi) The percentage of scarcity villages with reference to drinking water should be 60 or more. . . . .	10
(vii) The percentage of electrified villages to total should be 25 per cent or less . . . . .	8
(viii) The number of health institutions in the area should not exceed one . . . . .	8
(ix) The area under consideration should not be served by a bank branch as per R. B. I. Norms . . . . .	5

(x) There should be no veterinary institution in the area . . . . . *Weightage*  
5

#### *Agriculture Indicators:*

(xi) The average holding size in the area under consideration should be one hectare or below . . . . .	3
(xii) The percentage of cropped area under major cereals (wheat, maize and rice) to remunerative cash crops like potato apple, tea, etc. to the gross cropped area should not exceed 50 . . . . .	1
<b>Total</b> . . . . .	<b>100</b>

The scoring of indicators would be done on an absolute basis and the qualifying score for declaring an area as backward has been kept at 60 percent.

#### **Development of backward areas**

To evolve an effective development strategy for these areas it has been decided to review the status of notified backward areas from time to time, say every five years. This would preferably correspond to the Five Year Plan so as to assess the level of development reached. Based on the review, the area may be denotified. The unit for declaration of an area as backward would be as compact as possible for administrative purposes and the smallest unit to be considered for this would be a panchayat circle.

The existing system of earmarking 10 percent of the outlays in agriculture, horticulture, minor irrigation, education, health and water supply would be continued and that in addition such earmarking may be done for animal husbandry, food and supplies (for construction of minor godowns), forests, roads and bridges (rural roads), rural electrification and village and small scale industries as well.



Potato Cultivation in Lahaul Valley

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20/11/87

The Planning Department was made the model agency to declare/denotify the backward areas in accordance with the above principles.

As for the inter-area allocation of earmarked outlay, this may be left to the departments who would make judicious inter-area allocations keeping in view the needs of the area and potential for development in respective sectors.

The outlays earmarked for backward areas will be exhibited in the budget under separate sub-heads like the outlays for special Component Plan for Scheduled Castes, so as to make these outlays non-divertible.

The notified tribal areas would stand excluded from the list of backward areas since their development is being fully taken care of through the Tribal Sub-Plan. Based on these policy decisions the Pradesh Government, has revised the backward areas list (Annexure).

The District wise break up of Panchayats is as indicated below :—

District	No. of Panchayat declared as backward	Percentage share in outlay earmarked for backward areas
1. Bilaspur	1	0.41
2. Chamba	73	30.04
3. Hamirpur	8	3.29
4. Kangra	10	4.12
5. Kullu	50	20.58
6. Mandi	40	16.46
7. Shimla	32	13.17
8. Sirmaur	25	10.29
9. Solan	2	0.82
10. Una	2	0.82
Total	243	100.00

With regard to earmarking of 10 percent outlays in selected Heads of development for backward areas, it has been decided that 10 percent earmarking would be applicable to the works component. Such component would be arrived at by deducting from the total outlay for a particular head of development the outlays earmarked for Tribal sub-plan and the expenditure likely to be incurred/budgetted for establishment.

During the financial year 1984-85, an amount of Rs. 686.15 lakhs has been allocated to the development of backward areas in the Pradesh. The head-wise break-up of the outlays are as indicated below :—

(Rs. in Lakhs)

Head of Development Scheme	Amount allocated for the development of backward areas
1	2
1. Agriculture	36.75
2. Horticulture	44.50
3. Minor Godowns	4.50
4. Animal husbandry	19.50
5. Forests	110.00

6. Minor Irrigations	
(a) P. W. D.	48.50
(b) R. D. D.	2.50
Sub-total (a + b)	51.00
7. Rural electrification	57.90
8. Village & Small scale industry	19.00
9. Roads and Bridges (rural roads)	90.00
10. General & University education	69.00
11. Health	
(a) Allopathy	36.00
(b) Ayurveda	4.00
Sub-Total (a + b)	40.00
12. Rural water supply	
(a) P. W. D.	141.50
(b) R. D. D.	2.50
Sub-Total (a + b)	144.00
GRAND TOTAL : (1 TO 12)	686.15

## ANNEXURE

## List of Panchayats Declared as Backward for Purposes of Development in Himachal Pradesh

District	Sub-Division/ Tehsil/Block	Panchayats
1	2	3
Chamba	Tissa Block	(1) Charori
		(2) Kohal
		(3) Jassaur
		(4) Deola
		(5) Dehra
		(6) Bagheegsoh
		(7) Chanju
		(8) Charda
		(9) Jungera
		(10) Devikothi
		(11) Gulehi
		(12) Satyas
		(13) Benderi
		(14) Mangli
		(15) Bharnaita (Sanwal)
		(16) Shalella Bari
		(17) Janjha Kothi
		(18) Dehgran
Salooni Block		(1) Bhunad
		(2) Kanger
		(3) Gawaloo
		(4) Badka
		(5) Karwal
		(6) Bhajatra
		(7) Simni
		(8) Kilor
		(9) Pichladiur

1	2	3
---	---	---

*Chamba—contd.*

*Salooni Block—contd.* (10) Kandhawara  
(11) Bharella  
(12) Kharjota  
(13) Ail  
(14) Panjai  
(15) Banawlie  
(16) Aura  
(17) Pichladur

**Bhattiyat Block** (1) Maloonda  
(2) Kahari  
(3) Gola  
(4) Kathola  
(5) Jolna  
(6) Morthu  
(7) Tikri  
(8) Dharun  
(9) Jandrog  
(10) Parceera  
(11) Ballera  
(12) Benina  
(13) Kuddi

**Chamba Block** (1) Shillagharat  
(2) Jhullara  
(3) Sirh  
(4) Kalare  
(5) Chilbangla  
(6) Singni  
(7) Paluer

**Mehla Block** (1) Bandla  
(2) Bharina  
(3) Kupara  
(4) Basodhan  
(5) Rathiar  
(6) Darwin  
(7) Brehu  
(8) Kuru  
(9) Khundel  
(10) Balot  
(11) Pareena  
(12) Kuned  
(13) Kilor  
(14) Dullara  
(15) Kiri  
(16) Bat  
(17) Sarahan  
(18) Bakhatpur

1	2	3
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*Bilaspur  
Sirmur*

**Jhhandutta Block (1) Dhani  
Sangrah block** (1) Khud-Drabal  
(2) Bharari  
(3) Bhajond  
(4) Shamra  
(5) Kuffer-Kaira  
(6) Ser Tandi-U.L.A.  
(7) Bhutli Manal  
(8) Lana Cheta  
(9) Ghehal

**Shillai Block** (1) Jarwa  
(2) Badol  
(3) Bhaluna  
(4) Sangna  
(5) Satahan  
(6) Halahan  
(7) Koti Dhiman  
(8) Kota Pae

**Paonta Block** (1) Bwarli-Bhauria  
(2) Korga  
(3) Kathwar  
(4) Sakhauli  
(5) Kanti Mashwa  
(6) Thontha Jakhal  
(7) Bharog Bhaneri  
(8) Pilhori

*Shimla*

1. Tehsil : Chopal (1) Majholi  
(2) Kulag  
(3) Charoli  
(4) Banah  
(5) Juru Shilal  
(6) Jhokar  
(7) Malat  
(8) Jublee  
(9) Chandnadar

2. Sub-Tehsil :

**Chhohara** (1) Dodra  
(2) Kowar  
(3) Jakha  
(4) Sara Bassa  
(5) Pekha  
(6) Diwidi

3. Tehsil Rohru (1) Restari  
(2) Pujarli-3  
(3) Kalon



1	2	3	1	2	3
<i>Mandi—contd.</i>	5. Seraj Block	(1) Thana (2) Shili Baghi (3) Chet Dahar (4) Kalhani (5) Kholā Nal (6) Thachi (7) Soegad (8) Khal Wahan (9) Thachadar (10) Bagrathach (11) Chhattari (12) Gattu	<i>Mandi District</i>	6. Karsog Block	(1) Mehandi (2) Shoat (3) Jaral (4) Khahando (5) Mashog (6) Preshi (7) Gawalpur
				7. Dharampur Block	(1) Torkkhola (2) Seoh (3) Kamlah (4) Kothun



# ROLE OF ADMINISTRATIVE MACHINERY IN THE DEVELOPMENT PROCESS

—Shri K. C. Pandeya,  
Former Chief Secretary,  
Himachal Pradesh.

## Introduction

Over the last three decades, we have witnessed a basic transformation in the role of administration. From a tax collecting and law and order enforcing agency, it has become an agency responsible for the socio-economic development of the country. In the times ahead, the challenge to the competence, creativeness and resourcefulness of the services will be greater than ever before. The public servants have to understand new management techniques, learn the latest skill and inculcate new attitudes in consonance with the ideals of democracy and our goals of development.

## What is Development

Before discussing the role of administration in development let us discuss what development in fact means. To me, development signifies growth or change for the better in any aspect of a social process. Applied to an economy, it means growth in its different sectors of production and distribution, improving standards of education, living and civilization of people, improving wages for the workers, etc. Political development similarly means healthy growth of political institutions in society like democracy, public administration, growth and justice, equality among citizens, integration among communities and linguistic regions, and so on. Social Development signifies the development of social institutions which may facilitate smooth changes and outlook of people. It means improvement in social structures like norms of mutual conduct among members, values, cultural tastes, humanization and modernization. Hahn-Been Lee has rightly said: "Development is a process of acquiring a sustained growth of a system's capability to cope with new, continuous changes toward the achievement of progressive political, economic and social objective".

The most important component of development is its dynamism. Development must signify continuous change in society for the betterment of people in their various phases of life. Development brings in its process continuous change in different walks—spiritual, material, religious, social, economic and political.

## Pre-requisites of Development

Since development is a continuous process the existence of following pre-requisites for development has to be ensured:

1. *A Stable Political System*—If a society aspires for a planned development it must have the basic



infrastructure laid down in an acceptable political order and a well defined constitutional system. Without such a base no society can move in the direction of nation-building and socio-economic progress. It must have a stable constitution to provide for mutual adjustment among its different social components, sections, classes and sectors.

2. *Stable Administrative System*—Unless a society has a well-regulated system of public administration it cannot undertake any programme of development for improvement in the environment of society. A system of public administration must have a sound base of rules and regulations, division of responsibilities, delegations of authority, division of work among different departments and an efficient system of co-ordination among different wings of the system like executive, the judiciary and the legislature.

3. *A Well-grounded Cultural System*—Development cannot take place in a society which has heterogeneous groups of people come together suddenly for any reason. There must be a historically minimum cultural affiliation, linguistic or otherwise, binding the people together for common understanding and working. Unless there is an environment of minimum cultural understanding, the heterogeneous elements of society would always be clashing among themselves and instead of paving the way for the development of civilization they would be tending to destroy or retard its development. An environment of integrity—social, political and cultural is essential for economic development.

4. *A System of Planning*—For a concrete programme of development a sound system of planning and the machinery for its implementation is necessary. National building and socio-economic progress require a sophisticated system of planning in which there is well-regulated utilization of the resources, men and material. No wonder most of the modern societies cannot exist without a sound system of planning.

5. *People's Participation*—For development of society, it is extremely necessary that the people as a whole must actively participate in the process of development. Since in the modern civilization people are conscious of their existence and role in society in different walks of life, any administration which wishes to ignore their participation is likely to fail in its objectives. Modern societies are not based on the individual whims or fancies of monarchs and dictators but on the active public opinion of the masses. No democracy can function without establishing a healthy contact with the people through its administration.

6. *Goals of Development Administration*—Administration today has to accelerate national development, make use of upto-date and relevant technological innovations, adopt and facilitate necessary institutional changes, increase national production, make full use of human and other resources, and thereby improve the level of living. Thus, administration has to realize the following objectives :—

- (i) Equitable distribution of wealth and income.
- (ii) Maximum utilization of material and manpower resources.
- (iii) Establishment of peace and stability and protection to weaker sections of the society.
- (iv) Protection against external aggression and internal disorder.
- (v) Establishing and maintaining consensus on the soundness of prevailing constitution and enlightening the masses about the popularity of the Govt.
- (vi) Devise ways and means to integrate diverse communal, religious, tribal and other elements into a national political community.
- (vii) Establishing a clean and pure administration.
- (viii) Development of educational infrastructure together with vocational and professional institutions.
- (ix) Maintenance of sound financial structure including a stable value for the currency.
- (x) Efficient management of utility and other services.

### Planning and Development

Planning is an effective instrument to achieve the objectives of development. According to Sixth Plan, the principal objectives of planning to be achieved within a period of ten years will be (a) removal of un-employment and under-employment, (b) appreciable rise in the standard of living of the poorest sections of the population, and (c) provision by the State of some of the basic needs of the people in these income groups like clean drinking water, adult literacy elementary education, health care, rural roads, rural housing for the landless and minimum services for the slums. In the light of these objectives the focus

is required to be concentrated on development activities, the planning and implementation of projects and programmes for rural development.

Dealing with the administrative machinery, the plan observes : "The state administration at all levels will need to be revitalised. The most radical restructuring may be needed in the fields of agriculture and rural development administration. The personnel of all categories dealing with development projects in States have to be persuaded to accept a system of values where services in rural areas and work with rural agencies is regarded as more important than other fields of work".

Similarly, dealing with the implementation machinery, the document further observes : "With the great emphasis on rural development, a major improvement in the organisation, attitudes and competence of implementation machinery at all levels will be required at the State, District and Block levels. New institutional arrangements may have to be devised which should ensure that the poor sections of the population, who are the targets of new planning strategy, are given adequate representation in the decision making process particularly when it comes to critical areas, such as land reforms and operation of infrastructural facilities which provide them with minimum needs.

### Planned Development and Himachal Pradesh

Planned development in Himachal Pradesh as elsewhere in India, is a process aiming at economic amelioration of the people in consonance with their needs and aspirations. I can safely say that the planned development in this state has been a steady march towards removal of morass of economic backwardness with which the people of the State had been afflicted for centuries. The political and economic development of this state is the history of advancement of hill-looked people. Looking to the peculiar geographical constraints in this State, area-oriented plans were introduced and this process multiplied in the successive five year plans.

Roads in Himachal Pradesh were considered as the forerunner of all development and progress, therefore, it was considered most appropriate to open the first phase of development with opening up hitherto inaccessible areas through a network of roads. This priority, first of all was given in the First Five Year Plan. Horticulture, Hydel generation, etc. were later on added to the list of priorities.

Now, the Sixth Five Year Plan is coming to a close and the review of work of all these six plans in this State has been very rewarding.

Our engineers deserve commendation in this respect. These officers were responsible for opening up the entire Pradesh and link it with rest of India with most dependable communication, i.e., the roads. The role of administrative machinery in the planned development has been really praiseworthy. In fact, this machinery has the capacity of delivering goods to the people from various programmes of socio-economic amelioration.

One of such programme is the revitalised 20-Point Economic Programme of our dynamic Prime Minister, Mrs. Indira Gandhi. This programme is an article of good youth. It is not an easy task to rush through social and economic reforms envisaged in this programme. In Himachal Pradesh efforts are being made not only to keep up the pace of implementation of this programme but also to accelerate it further. It is the endeavour of the Government to see that the benefits actually flow up to the needy persons.

The identification and varification of rural poor under 20-Point Economic Programme will henceforth be done by 'Gram Sabhas' in their open meeting so as to ensure that benefits reach really the genuine and most deserving persons. The Government is keen to ensure just and equal development of all areas of the State. It has taken up identification of the pockets which remained backward so as to bring them at par with other areas. The State is doing its utmost to fulfil its obligation of ensuring economic development with social justice and to achieve this, the State has taken a number of concrete steps. For example, steps have been taken to root out corruption from public life and provide clean and efficient administration to the people. The State has appointed Lokayukta having in its purview all the public representatives and servants.

Himachal Pradesh is bringing radical changes in planning process with emphasis on uniformity and equality in achievement of physical targets in respect of different social and economic services in different areas during planning for the Seventh Plan. Resource mobilisation will also, now form part of the planning process. The State has formulated poverty eradication projects and schemes which aim at economic development of the State. The State is determined to raise additional resources to put it on better economic footing.

#### **Administration for Development : Some Suggestions**

Administrative machinery has to transform itself into an effective instrument for delivering the goods to the people by implementing multifarious programmes for the socio-economic betterment of the people. It has to become fully responsive to the needs and aspirations of the people. In order to make administrative machinery efficient to achieve the goals of development, following suggestions deserve to be considered and implemented effectively :

1. The efficiency of any administration is judged by the way its delivery system in the areas where it comes in contact with the citizens. A close look at the problems in administration at the cutting edge level will reveal that more than anything else it is the archaia and cumbersome rules and procedures that are responsible for halting the progress. More often than not, the good intentions of administrator get lost in the maze of forms formalities and precedents. In the sphere of rural development the need to simplify the formalities cannot be over-emphasized.

2. In a democracy it is necessary that the administration deliver the goods without violating the basic democratic principles. As Karve has observed, the

civil services are specially selected, suitably organised the statutorily protected to do the right things under the law in the best democratic manner. He warns us "They are an elite, and if a democracy cannot rely on its administrative elite to carry out the rules of law in an appropriate democratic manner, the democracy will not receive continued acceptance by the electorate. It will wear out."

3. In a democratic society, there is a great need for planning from below. Prof. S. C. Dubey has rightly said "Planning so far appears to be from top down. Because of the unique curbs on Project autonomy, its officials hesitated to demonstrate much initiative . . . they tended on official level to accept orders from above . . . As an outcome of this trend the officials were oriented less towards the village people and more towards their official superiors . . . . A large number of project sponsored activities are directed along the lines of traditional government 'drives' rather than according to the principles of extension work . . . ."

4. Administration has a great role to play in planning. Though technically it falls on the Minister to plan and public administration to implement, yet in actual practice civil servant does planning work also. The politicians plan on the basis of the data provided to them by the administrators. Administration should thus devise effective methods of data collection and dissemination.

5. Administration has to perform the role of giving advice. An administrator should be clear in his mind that in a parliamentary democracy he is only an advisor. It is another thing that the advice rendered is usually accepted. But he should hesitate dictating. Ramsay Muir has rightly said : "The Minister has obtained his position because of his achievement in the general field of politics. In a majority of cases he has no special knowledge of the immense and complex work of the department over which he presides . . . . They (Civil Servants) bring before him hundreds of knotty problems for his decision, about most of which he knows nothing at all. They put before him their suggestions supported by what they seem the most convincing arguments and facts. It is obvious that, unless he is either a self-important egoist or a man of quite exceptional grasp, power and courage, he will ninety out of hundred, simply accept their view, and sign his name on the dotted line."

6. Need for training the civil-servants to equip them to meet new challenges can hardly be over-emphasized. Training, in fact, is an investment in human resources. The public servants have to understand new management techniques, learn the latest skills, and inculcate new attitudes in consonance with the ideals of democracy and our goals of development. For this training has to be a continuous process, to which the public servants have to be receptive. They should never think that they have reached such a level that they do not require any further knowledge or skills for improvement in their work.

7. To cap all, there is a great need for attitudinal change especially in the higher civil servants if the goals of development are to be achieved. The higher civil servants should pay a good deal of attention to

the lower civil servants. We cannot think of rural development without caring for the welfare of lower functionaries like Gram-Sewaks and Patwaries. In fact, the persons working at the cutting-edge-level are the most important for improving the working and image of the administration. They are the persons who need to be motivated by providing them better conditions of work. They are the persons who should be provided with facilities like telephone and motor-cycle to enable them to perform their duties effectively. This will be possible only if we change our basic attitude of feudal class consciousness in the services. When we develop the attitude of being partners in achieving the common goal of a welfare administration, we should treat each other with mutual respect for each other. A B.D.O. in his own sphere is doing as important a job as a Collector. The other aspect of the matter is the attitude towards the rural population problems. We should treat problems of individuals as important matters to be attended to with the same seriousness as a note for the Cabinet. An administrator has no value for the society unless he solves problems of individuals or groups of people with sympathy and efficiency. An application from a small man should be handled with the same care as a letter from a V.I.P. If a small unknown villager wants time from any officer, he should be given an appointment with the same sense of seriousness as for an important man. Genuine concern for the less fortunate is the essence of attitudinal change.

### Conclusion

With the increase in the range of Government's activities and the tempo of development, the volume and complexity of administrative work has also grown. Today the administration is not confined to the maintenance of law and order only. It has to work for the socio-economic development of the teeming millions groaning under the morass of poverty. To achieve this administration has to adopt new techniques of management and develop new attitudes in consonance with the democratic ideals.

### Role of Administrative Machinery in the Development Process

Role of administration in the present times has increased tremendously. From a tax collecting and law and order enforcing agency, it has become an agency responsible for the socio-economic development of the country. In the times to come, the challenge to the competence, creativeness and resourcefulness of the services will be greater than ever before.

To me development signifies continuous change in society for the betterment of people in their various phases of life. Development brings in its process continuous change in different walks—spiritual, material, religious, social, economic and political.

Administration today has to accelerate national development, make use of upto date and relevant technological innovations, adopt and facilitate necessary institutional changes, increase national production, make full use of human and other resources, and thereby improve the level of living.

Planning is an effective instrument to achieve the objectives of development. Planned development in Himachal Pradesh, as elsewhere in India, is a process aiming at economic amelioration of the people in consonance with their needs and aspirations.

Administrative machinery has to transform itself into an effective instrument for delivering the goods to the people by implementing multifarious programmes for the socio-economic betterment of the people. Administration today has to be responsive to the needs and aspiration of the people. Administration should have respect for the parliamentary democracy we have in our country. Higher civil servants should pay more attention to the needs and problems of the lower civil servants. We cannot think of rural development without caring for the welfare of lower functionaries like Gram-Sewaks and Patwaries. The public servants should understand new management techniques, learn the latest skills and inculcate new attitudes in consonance with the ideals of democracy and our goals of development.

## RURAL DEVELOPMENT PROGRAMME IN HIMACHAL PRADESH

—Shri B. C. Negi  
Financial Commissioner (Dev.),  
Himachal Pradesh.

Himachal Pradesh situated in the lap of Himalayas ranges between 350 metres to 6,975 metres above mean sea level. According to 1981 Census, 92.28% of the total population is inhabited in the scattered villages. The prosperity of the Pradesh rests with the development of rural areas. After attaining Independence, manifold developmental activities were taken up and Community Development Programme launched on 2nd October, 1952 in this Pradesh was a first step in this direction which has instilled in the rural population economic changes and social awakening. The State Government has not departed with the Community Development concept and now the New 20-Point Economic Programme has ushered in an era embarking upon rural development ensuring speedy amelioration of the people living in sub-poverty conditions and simultaneously envisaging creation of developmental infrastructure for heralding economic growth impulses in our economy.

To achieve these objectives, the Department of Rural Development is playing a pivotal role for the rural uplift by executing various key programmes like Integrated Rural Development Programme, National Rural Employment Programme, TRYSEM etc. etc. with the following objectives :—

IRDP and NREP form an integral part of the Plan Programmes. Under the poverty alleviation programme of Integrated Rural Development as against the target of 1,87,500 families living below the poverty line, 1,54,529 families have been assisted during the Sixth Plan period upto the end of March, 1984 and the target is ahead to assist 41,400 families per year enabling them to cross the poverty line.

NREP envisages employment opportunities to the rural masses. As against the target of 11.81 lakh mandays, 14.74 lakh mandays were generated and 1346 assets created during the year 1983-84. During the year 1984-85, 12.80 lakh mandays are likely to be generated. Foodgrains @ 1 Kg. per head per day are also distributed as a part of wages to the labourers engaged under the programme.

TRYSEM forms a part of IRD Programme. As against a target of training 2,760 youths per year, 2,859 youths were trained in different trades and 1,712 youths were given self-employment during the year 1983-84.

Rural Landless Employment Guarantee Programme is a step further and with the cent per cent central assistance the programme is being implemented by the



Departments of Rural Development, Public Works, Agriculture and Forests. A sum of Rs. 3.60 crores is likely to be spent during the year 1984-85.

Besides, the above major programmes, the Department of Rural Development is actively implementing other schemes for the rural uplift. Many scarcity villages, which are not covered by the Irrigation & Public Health Department, are provided water supply and during 1983-84 a sum of Rs. 25.00 lakhs was provided thereby benefiting about 6,400 souls.

Excluding Lift Irrigation Schemes, the Department is undertaking minor irrigation schemes upto 50,000 and during 1983-84, 310 hectares of land was likely to be irrigated.

In order to provide benefits to the women and children in particular to supplement the production of vegetables and nutritious feeds Applied Nutrition Programme is being implemented and during 1984-85 five more Blocks are being covered and a sum of Rs. 4.00 lakhs is likely to be incurred.

In Spiti Sub-Division of Lahaul & Spiti District and Pooch Sub-Division of Kinnaur District, Desert Development Project is being implemented with the central assistance on 50 : 50 basis and schemes under Irrigation, Agriculture, Forestry, Soil Conservation and Animal Husbandary are being taken up with an allocation of Rs. 50.50 lakhs per project.

In the Districts of Shimla and Sirmour, Special Livestock Production Programme for Poultry Production, Sheep and Calf Rearing are being implemented through the Department of Animal Husbandry.

With UNICEF assistance the programme of Development of women and children in rural areas is in operation in 5 blocks of Kangra District. The female members of IRD families are given various economic schemes, as a group approach.

The Integrated Project of Social Inputs in Area Development Programme is in operation in 3 Blocks of Mandi District with emphasis on construction of latrines in the schools and supply of drinking water in the area.

For saving fuel & energy and ensuring healthy environments, 2,994 smokeless chullah have been installed in 37 Development Blocks lying in lower alleviation. During 1984-85, 25,000 smokeless chullahs are likely to be installed in the rural area.



Seminar on Rural Development

## TRAINING OF PERSONNEL FOR DEVELOPMENT

—Shri M. K. Kaw,  
Commissioner-Cum-Secretary,  
Education Arts, Language and Culture,  
Himachal Pradesh.

The concept of training is based on the principle that human achievements can be always improved by the application of superior knowledge and techniques which arise out of organised recollection and innovation. The application of such knowledge and techniques flowing from modern research in public administration and allied sciences has revolutionised modern administration in the developed countries; and the developed countries are fast adopting these newly evolved techniques to keep pace with them. Failure to adopt the new methods leads to stagnation and primitivism and failure to deal with the complex problems of modern administration amenable to the old and obsolete approach brings about serious setbacks for any government. The new imperatives of development administration calls for sophisticated strategies supported by scientific analysis and tests; and once the authenticity of the modern management practices is affirmed by the progress in the advanced countries, there is no reason for any country to suffer regression by chosen inertia. The process enabling the government personnel to be in the mainstream of research and new ideas and to assimilate new techniques in response to the dynamic needs of administration is what is called 'Training' and this is an inseparable component of any forward-looking personnel policy.

In our country, the importance of both pre-entry and post-entry training for services has been emphasized after independence in the recommendations of various Committees and considerable importance has been attached to the desired measures of administrative reforms. Till Himachal Pradesh was a union territory, it had to depend upon other institutions in the country for imparting training to the officers of the State. After Himachal Pradesh acquired the status of a full-fledged State, it was felt necessary to establish an Institute to impart training to the officers with special emphasis on the local conditions of the Pradesh. The Pradesh has its peculiar climatic conditions and has difficult terrain which makes the work of the public servants much more difficult, as compared to their counter-parts in other States of the country. With this idea, the Government of Himachal Pradesh on the 1st day of January, 1974, established its own training Institute as the Himachal Pradesh Institute of Public Administration. The Institute is situated at a distance of about 15 Kilometres from Shimla on Shimla-Mashobra Road in the picturesque surroundings of Fairlawn.



The aims and objectives of the Institute are to contribute to a continuing improvement in day-to-day administration, so that it is able to fulfil the aspirations of the people. It is felt that if the administration is to meet the new challenges successfully it would require new types of personnel not in terms of individuals but in terms of attitudes. We shall have to prepare personnel who can identify themselves with the common people, particularly those in the rural areas. In a developing State like ours, new knowledge and modern skills and their application constitute the latest resources that can be mobilised without heavy demand on expenditure. There is a perennial need to keep on adjusting to new techniques and knowledge, new skills and competency, new attitudes and behavioural patterns and new emerging social institutions lest public personnel reach too soon their level of incompetence and become inevitable victims of the Peter Principle. Training is considered to be a continuous process which focusses on knowledge, skills and attitudes of the public servants at all levels with a view to achieving the objectives of the administration.

At present the aims and objectives of the Institute are as follows :—

- (i) To conduct training courses, seminars, workshops on various disciplines for the civil servants of the State in order to improve their knowledge, and to develop their skills and attitudes necessary to perform their official duties with economy, efficiency and satisfaction to the public;
- (ii) To conduct departmental examinations for various services in the state;
- (iii) To impart pre-examination coaching in various competitive examinations in the country;



(iv) To render consultancy and advisory services in administrative and management matters;

(v) To conduct research and issue publications connected with public administration.

The Institute has devised various training programmes to suit the training needs of the public servants at all levels and it is envisaged that during the coming few years the objective of equipping public servants to meet the needs and aspirations of the people will be achieved.

A Centre for Research and Training in Rural Development has been set up in the Institute with 50% aid from the Government of India, for imparting training to the functionaries engaged in rural development programmes and conduct case studies to serve as an input for the training. This Centre has started functioning at the Institute from 1982-83.

Since the inception of the Institute, it has conducted the following programmes :—

Category	No. of Courses	No. of Participants
1. Gazetted Officers	162	3055
2. Non-gazetted Officers	164	4466
3. Pre-Examination Coaching students	8	86
	334	7607

In order to decentralize the training in the field, three Regional Training Centres have been set up at Nahan, Dharamsala and Mandi. During the year 1984-85 seven additional training centres of this type are proposed to be set up to cover most of remaining districts. With the setting up of these Centres, the Institute would be able to meet the training needs of the staff posted in the field, on a larger scale.

The Institute has also set up a Training Centre in the Armsdell building of the Secretariat. Regular courses are being run here for the staff working in the Secretariat.



## PLANNED PROGRESS OF TRIBAL AREAS IN H. P.

—Shri A. N. Vidyarthi,  
Commissioner-Cum-Secretary, Tribal Development,  
Himachal Pradesh.

The Constitution of India, in its very preamble, pledges to secure, to all citizens, justice, social, economic & political. To redeem this pledge, Article 38 enjoins the State to try to promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which justice, social economic and political, shall inform all the institutions of the national life. Article 46 further lays down that the State shall take special care of the Scheduled Castes and the Scheduled Tribes in this process.

In pursuance of the above Constitutional directive, the first systematic effort for the development of the tribal areas was initiated in 1955 in the form of Special Multipurpose Tribal Development Blocks. The modified version of this programme was taken up on a larger scale during the Second Plan when the Tribal Development Blocks were started. This programme was further expanded during the Third Plan and all areas with more-than-2/3rd tribal concentration were covered by the end of this period. Although it was agreed, in principle, to extend the programme to all those areas which had more than-50 per cent tribal population, it was not possible to do so during the Fourth Plan. The development effort in the then existing Tribal Development Blocks was consolidated by extending the period of their operation. The area coverage, therefore, remained practically unchanged upto the end of the Fourth Plan. In the meantime, this programme was reviewed on a number of occasions, notably, by a Study Team appointed by the Planning Commission under the chairmanship of Shri Shilu Ao. It was also found that the development effort from the general sector programmes was not adequate in these areas particularly, in the context of their comparatively lower economic base. It was, therefore, decided to evolve a new strategy for the development of the tribal areas from the beginning of the 5th Plan. The new strategy comprised preparation of sub-plans for areas of tribal concentration. For this purpose, the tribal areas were divided into two parts :—

- (i) the area having more-than 50% tribal concentration; and
- (ii) the area with dispersed tribal population. Category (i) areas were taken up for sub-plan preparation in the first instance, beginning 1974-75.

In Himachal Pradesh, the area of operation under the sub-plan remained the same as had been under the T.D. blocks but funds for their development now flowed from all the Plan heads rather than "Welfare



of Backward Classes", as hitherto, and the Plan effort was supplemented by share from Special Central Assistance, exclusively placed with the Union Home Ministry for tribal development in the States. This Central pool for the 5th Plan period was Rs. 190 crores which has been raised to Rs. 470 crores for the Sixth Plan period. The share of Central Ministries under their Central programmes/Centrally-sponsored schemes and institutional finance is over and above these two components. The concept of sub-plan was not altogether a novelty to this State. Till the end of the 4th Plan, apart from the seven C.D. Blocks being concurrently treated as Tribal Development Blocks, the two districts of Kinnaur and Lahaul-Spiti were treated as border districts and plan outlays for the same were segregated from the general sectors and these totalled Rs. 463.57 lakhs, distributed as under :—

Sector	4th Plan outlay (Rs. in Lakhs)
1. Agriculture and Allied Services . . . . .	236.05
2. Co-operation . . . . .	2.65
3. Water and Power Development . . . . .	36.05
4. Industry and Minerals . . . . .	4.50
5. Transport and Communications . . . . .	106.05
6. Social and Community Services . . . . .	78.27
7. Economic Services . . . . .	—
8. General Services . . . . .	—
Total : (1 to 8)	463.57

This outlay was distributed between Kinnaur and Lahaul-Spiti as under :—

Kinnaur—Rs. 307.26 lakhs.  
Lahaul-Spiti—Rs. 156.31 lakhs.



Gujjar Belle

The pattern of Central Assistance for the border districts was also different than that for the rest of the Pradesh. It was 90 per cent grant and 10 per cent loan; though, in fact, this yardstick was never required to come into play as, for the entire 4th Plan period, the State was treated as a union territory with consequential devolution of national finance on a preferential pattern.

Thus, the seeds of sub-plan were already in germination and the process was only accelerated and strengthened with the introduction of the concept of tribal sub-plan. The sub-plan covered more areas and the State effort was also supplemented by support from the pool of Special Central Assistance.

The one most distinguishing feature of the tribal areas in the State is that they are very vast in area (42.49% of the State) but extremely small in population (3.13% of the State) with the result that per unit cost of infrastructural facilities is exorbitant. These are situated in the hinterland beyond high mountain passes where habitation is at an average elevation of 10 thousand ft. above the mean sea-level and the climatic condition are most inhospitable. Such eco-

system tends to limit the working season to hardly six months in a year.

Against the backdrop of such physical constraints, to start with, we had the 5th Sub-Plan (1974—79) size of Rs. 16 crores which comprised Rs. 12.81 crores as State share and Rs. 3.19 crores as Special Central Assistance. The Fifth Plan was terminated a year ahead of the schedule and the allocation and expenditure during this period was as follows:—

(Rs. in lakhs)

	Fifth Sub-Plan 1974-79	
	Outlay	Actual Exp.
State Plan . . . . .	904.81	781.51
S.C.A. . . . .	189.00	130.59
Total : . . . . .	1,093.81	912.10

Utilisation of funds was to the extent of 83.39 per cent.

The performance of the sub-plan during the inter-regnum 1978-79 and 1979-80 improved to 98.27%.

## Sixth Plan

Against 3.3% population concentration in the tribal area (1971 Census), the state Plan flow to the tribal sub-plan was targeted at 5.36% and the actual

achievement during the 5th Plan period (1974-79) was 5.75%. Against this backdrop, the State Plan flow to the tribal sub-plan for the Sixth Plan period (1980-85) has been targeted at 8.48% and the actual achievement is placed at 8.64%. The size of the Sixth Plan and the Annual Plans is sub-joined below :—

## TRIBAL SUB-PLAN OUTLAY AND EXPENDITURE

(Rs. in lakhs)

Sl. No.	1980-85 (Outlay)		1980-81 (Actual Exp.)		1981-82 (Actual Exp.)		1982-83 (Pre-Actuals)		1983-84 (Ant. Exp.)		1984-85 (Outlay)		
	S.P.	S.C.A.	S.P.	S.C.A.	S.P.	S.C.A.	S.P.	S.C.A.	S.P.	S.C.A.	S. P.	S.C.A.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Agriculture & Allied services		1176.00	237.00	250.10	47.41	266.68	42.57	357.13	55.76	390.50	69.71	461.33	73.09
2 Co-operation		81.00	74.00	15.20	18.00	16.77	13.00	16.13	15.00	16.00	13.50	14.00	16.08
3 Water & power development		1066.00	..	66.48	..	130.83	..	246.28	..	260.00	..	310.50	..
4 Ind. & Minerals		115.00	55.00	16.51	8.26	19.87	8.93	25.11	10.00	32.00	10.00	27.01	10.00
5 Trpt. & Communications		1145.00	20.00	193.52	1.00	243.43	1.00	246.27	1.20	236.00	1.00	319.50	0.81
6 Social & Community services		951.40	177.00	147.58	32.54	167.34	28.49	197.42	30.78	257.15	41.20	289.41	47.50
7 Economic Services		3.00	12.00	..	2.30	0.20	1.00	0.60	2.50	1.50	3.00	2.25	3.52
8 General Services		210.00	74.00	41.38	9.70	47.99	13.00	48.85	19.53	52.25	21.11	61.00	29.00
Grand Total (1-8)		4747.40	649.00	730.77	119.21	893.11	107.99	1138.01	134.77	1245.40	159.52	1485.00	180.00

It merits special mention that the State plan flow to the tribal areas has been above the national average, both during the 5th Plan as also the 6th Plan and Himachal is one of the four States in the country where such flow has been above par the population concentration; the others being Bihar, Orissa and Rajasthan.

With a view to bringing the dispersed tribal population, outside the tribal areas, within the ambit of sub-plan treatment, contiguous group of villages with a minimum population of 10,000 of whom at least 50% are Scheduled Tribes are identified as Tribal Pockets. Such two pockets, Chamba and Bhattiyat, have been identified in Himachal Pradesh covering an area of 891 sq. kms. and population of 27,497 (1971), S.C.A. of Rs. 4.94 lakhs was received for 1981-82, and the expenditure was Rs. 3.38 lakhs. Rs. 5.20 lakhs was the approved outlay for 1982-83 and the expenditure was Rs. 4.68 lakhs; that for 1983-84 is Rs. 6.30 lakhs and the same for 1984-85 is Rs. 10.00 lakhs.

Together with tribal areas, 71.30% of the S.T. population stands covered under sub-plan concept (1971 census). With a view to effecting equitable distribution of sub-plan funds over the five ITDPs, this State is the only State in the country to have devised an objective formula for such distribution based on population (40%); geographical area (20%);

and relative economic backwardness (40%). The share of each ITDP works out as under :—

Kinnaur—30%;

Lahaul—18%;

Spiti—16%;

Pangi—17%; and

Bharmour—19%.

With a view to making posting in tribal areas on attractive proposition and, inter alia, help implement sub-plan programmes, apart from enhanced compensatory allowance ranging between 120% to 150% of pay subject to a maximum of Rs. 250 to 500 per month, in implementation of the Maheshwar Prasad Committee report recommendations. Overstay Allowance to non-local transferable employees who are made to stay in the tribal areas in public interest has been granted at the following rates :—

4th year—10% of basic pay.

5th year—17½% of basic pay.

6th year—25% of basic pay.

7th year and onwards—35% of basic pay.

One-step up financial/technical/administrative powers have also been delegated to the Plan implementing officers at the ITDP level. Special financial/administrative powers have been delegated to the SDOs (Civil); Project Officers (ITDPs); Dy. Commissioners; Addl. Dy. Commissioners; Asstt. Commissioner; and the Commissioner (Tribal Development) to sanction individual schemes; to sanction expenditure on purchase of material; to sanction grant-in-aid to various local institutions; to accord administrative approval to original works; and to sanction expenditure on repairs to various tools/equipment and machinery, concurrent with that of Heads of Depts/Controlling Officers/Disbursing Officers; Commissioner (Tribal Dev.) enjoying full powers. From the year 1981-82 a Single Consolidated Demand (Demand No. 35) has been introduced for budgetary provisions, both Plan and non-plan, which goes to ensure non-divertibility and non-lapsability of sub-plan funds.

Under the 7th Finance Commission award, Winter Allowance @ Rs. 40 p.m. for four winter months from December to March at a cost of Rs. 20 lakhs has been granted, besides construction of 96 Type-I quarters at a cost of Rs. 24 lakhs; award money restricted to Rs. 25,000 each unit, the rest coming from State funds, average cost being Rs. 50,000 each unit.

Hitherto, sub-plan funds were disaggregated from the total plan provision under a particular head to arrive at the total but from the year 1984-85, lump-sum approach has been approved for the tribal sub-plan whereunder 9% of the gross State Plan outlay will be placed at the disposal of the Tribal Dev. Deptt. for further allocation to the 5 ITDPs and the individual heads of development in keeping with the felt needs and aspirations of the particular area. This will lead to make the sub-plan more realistic as earlier it was tied to the apron strings of the main plan and the manoeuvrability was limited.

Point 7 of the New 20 point programme is devoted to accelerated development of SCs/STs and, under the family oriented programme, 50% of the 11,815 target-group families are designed to cross the poverty line by the end of the Sixth Plan. This "growth with equity" programme will be spilled over to the Seventh Plan until poverty is completely wiped out.

All in all, our tribal areas are well set on the road to progress and sooner, rather than later, they will catch up with the rest of the Pradesh. A statistical profile is given at annexure which speaks for itself of the impact and incidence of planned development in the tribal areas.

Statistical Profile of Tribal Areas

ANNEXURE

Item	Unit	Ref. Year	Tribal areas	H. P.
1	2	3	4	5
1. Area . . . . .	Sq. km.	1981	23,654 (42.49)	55,673 (100.00)
2. Population . . . . .	No.	1981	1,33,432 (3.13)	42,80,818 (100.00)
3. Density of population per sq. km. . . . .	Do.	1981	6	77
4. S. T. population . . . . .	percentage	1981	77.52	4.61
5. Decennial growth rate . . . . .	Do.	1971-1981	17.14	23.71
6. Workers . . . . .	Do.	1981	57.91	42.38
7. Agricultural Workers . . . . .	Do.	1981	63.99	70.81
8. Literacy . . . . .	Do.	1981	30.73	42.48
9. Cultivated area per agricultural workers . . . . .	Hect.	1980-81	0.45	9.59
10. Density of cropping . . . . .	percentage	1980-81	128	165
11. Area under food crops . . . . .	Do.	1979-80	99.64	96.71
12. Area under fruits . . . . .	Hect.	1982-83	4,939	1,08,676
13. Area under Forests . . . . .	Do.	1982-83	4,44,625	21,14,200
14. Average size of operational holdintgs . . . . .	Do.	1976-77	1.42	1.62
15. Net area irrigated to net area sown . . . . .	percentage	1980-81	43.38	16.04
16. Gross irrigated area to gross area sown . . . . .	Do.	1980-81	45.23	16.47
17. Livestock population . . . . .	No.	1977	3,04,874 (6.36)	47,95,226 (100.00)
18. Veterinary Hospitals/Dispensaries per lakh of livestock population . . . . .	Do.	1982-83	29	11
19. No. of blocks . . . . .	Do.	1983-84	7	69
20. Gram Panchayats . . . . .	Do.	1982-83	118	2,357
21. Memberships of 20 . . . . .	Do.	1982-83	974	21,096
22. Cooperative Societies :				
(i) All types . . . . .	Do.	1982-83	140	3,500
(ii) Primary agricultural . . . . .	Do.	1982-83	104	2,100
23. Membership of 22 (ii) . . . . .	'000 No	1982-83	19	630
24. Installed capacity . . . . .	MW	1982-83	2.30	128.02
25. Villages electrified . . . . .	No.	1982-83	271 (56.00)	12,754 (76.00)
26. Road density per 00sq. km of area . . . . .	km	1982-83	7.01	24.43
27. Educational institutions per lakh of population . . . . .	No.	1982-83	402	211
28. Medical institutions per lakh of population . . . . .	Do.	1982-83	54	19
29. Villages supplied with piped water supply . . . . .	Do.	1983-84	400 (82.47)	10,967 (64.83)

Note :— Figures in brackets denote percentages.

## REORIENTATION OF STATISTICAL SYSTEM IN HIMACHAL PRADESH

**Shri B. B. Tandon,**  
**Commissioner-Cum-Secretary, Public Works,**  
**Himachal Pradesh.**

Himachal Pradesh appeared on the map of India on 15th April, 1948 with the integration of 30 odd princely hill States. The statistical activities were almost non-existent in these states as their administrative needs were limited and information used to be collected in connection with the execution of main administrative functions viz. maintenance of law and order and collection of land revenue. Moreover, all the statistical data which originated as a bye-product of administration were fragmentary, incoherent and undependable and had, therefore, little practical utility from the standpoint of providing an overall measures of economic and social development. The Government of Himachal Pradesh, with passage of time, came to realise the seriousness of the lacunae in the statistical field, moreso, when the Pradesh's First Five Plan was drawn up. It was in this context that the then Himachal Pradesh Government sanctioned the creation of the Directorate of Economics and Statistics in 1955 which started functioning from January, 1956. District Statistical Offices (DSO) were established in Mandi, Chamba, Sirmour and the then Mahasu districts in the year 1958-59. The fifth district i.e., Bilaspur, was attached with the Mandi district for statistical operations. Later, on 1st May, 1960 tribal district of Kinnaur was carved out from the then Mahasu district and the District Statistical Officer's office was established there, in the year 1962. In 1966, hilly areas of the erstwhile Punjab State were merged with Himachal Pradesh and in this process three more District Statistical Offices viz., Kangra, Kulu and Shimla were added to the existing district statistical agency. The process of administrative reorganisation of districts continued and District Statistical Offices were also set up in the newly created districts of Hamirpur, Solan and Una. Presently, there is a District Statistical Officer each in all the twelve districts of the Pradesh. The office is manned by a District Statistical Officer assisted by two to three technical personnel, a clerk and a peon.

The Directorate of Economics and Statistics (DES) is the apex statistical agency in the State. The main functions of the DES are co-ordination of all the statistical activities in the State; assembling and dissemination of all essential statistics; organising special enquiries and surveys; including participation in the National Sample Survey programme; estimation of State Income; collection of price data; construction of Index Numbers; conduct of census of H.P. Government employees; economic classification of



budgets of the state government and local bodies; preparation of reviews on the economy of Himachal Pradesh; conduct of in-service statistical training course; maintenance of liaison with the Central Statistical Organisation (CSO) and other central ministries and co-ordination of road statistics; housing and building statistics; labour statistics; factory statistics and large scale surveys at national/state level such as population census; agricultural census; economic census, etc.

The District Statistical Officers were initially entrusted with the task of collection, compilation and timely submission of primary and secondary data at the district level, bringing about improvement in the quality of statistical information generated as a bye-product of administration at the district level, improving the coverage of primary data, supervising the work of Progress Assistants appointed in the blocks for community development statistics and assisting the district administration by providing statistical material needed for administration and planning purposes. In course of time, the activities of the D.S.O. have increased manifold. Now the District Statistical Officer has also been entrusted with responsibility of execution of field work of different surveys undertaken by the Directorate of Economics and Statistics. They have been assigned the task of building up of the data-base for micro level planning. They are associated with many large scale national surveys like the economic census, the population census, the agricultural census, National Sample Survey etc. These offices prepare and bring out District Statistical Abstracts, district and block level economic indicators and assist the district development authorities in formulation and monitoring of district plans, component plan for scheduled castes and 20 Point Programme. They are also associated with price intelligence machinery, village index cards, preparation, supervision of crop-cutting experiments and many ad-hoc requirements of the Directorate of Economics

and Statistics in connection with State Income estimation etc. Thus there has been considerable expansion of their activities in the recent years.

Statistical Cells have also been set up in almost all the major departments in the State over the last three decades. Some of these departments have statistical staff at the district and lower level also. This development in the statistical system has resulted in increasing the coverage of data but still there is a large scope for improving the quality and timeliness of the data. The lower level staff is required to assemble, scrutinise and compile these data at micro-level. They are also to make use of the secondary data, which is mainly a by-product of administrative records and is to be culled out of the registers and files of the administration. The clerical staff who maintain these registers and forms are usually not aware of the importance of the information and hence their attitude towards maintaining these records completely and correctly is lackadaisical one. This, introduces numerous errors in statistics and vitiates the quality of data. Secondly, in a number of cases the forms used for reporting also require revision to meet the latest requirement of data. To improve the quality and timeliness of the primary data, it is imperative that the schedules and questionnaires used for collecting information should be as far as possible short and simple. In this regard it may be ensured that data on items which are not included in the tabulation programme are not collected. These would not only erode delays in collection and processing of data but should also minimise respondents resistance to supplying of information.

There is also some amount of avoidable duplication in the collection of statistical data. Different agencies of the government some times disseminate conflicting statistical series. For example, there is large variation in the 'net area irrigated' as reported by the revenue agency and the State Irrigation department. Similarly, area under fruit' as available in the revenue records and as released by the State Horticulture Department do not tally. Some-times even a single agency at different levels releases conflicting data. In some of the cases the agricultural statistics released by the Deputy Commissioners(D.Cs) at the district level conflict with district-wise series released by the Director of Land Records (D.L.R.) D.L.R. also base their series on the reports released by the Deputy Commissioners. All this is indicative of lack of coordination and need for uniform set of commonly understood concepts and definitions between the different departments and within a department itself. Also there is an urgent need of sound feed back arrangements. All these measures would help in developing statistical standards in different sectors of official statistics on a scientific basis and also for improving the quality of statistical data.

Co-ordination of statistical activities at the State level is also important because the statistical system in the State is a decentralised one. The Director of Economics and Statistics should play this important role. At present, the Director of Economics and

Statistics has no control over the statistical programme of the individual departments. As a result of this not only it is difficult for Director of Economics and Statistics to ensure that duplication in collection and compilation of data is avoided, but also it becomes very often difficult to ensure adoption of standard concept, definition, methodology and classification in collection of data and presentation of results.

Collection of primary and secondary data is the most important work of all the statistical agencies. In most of the cases data has to be collected through voluntary efforts. Whether the data are collected statutorily or through voluntary efforts, it is imperative that those who are charged with the important function of data collection should be highly trained in the data collection technique. They should also inculcate full sense of involvement in their jobs. The collection of statistical data cannot, therefore, be left to the novices. Besides, getting the statistical personnel trained in the periodical in service statistical training course organised by the Directorate of Economics and Statistics, the departments can utilise the services on deputation of experienced personnel from the DES. It is understood that such an arrangement is working successfully in some of the other States.

In the sphere of decentralised planning, the need for maintaining essential statistics at level lower than the district is increasingly being felt. The existing arrangements for collection and maintenance of data at the village level by multifarious primary agencies functioning under the administrative control of different State departments need considerable improvement in regard to quality, coverage and timeliness in data collection.

Primary workers of a large number of development departments have been assigned the responsibility of collection and compilation of statistical information at village level. Agricultural statistics is handled by village revenue agency, crime statistics originate at village level from the reports of village chowkidar. Panchayats have been entrusted with the civil registration data, computers at primary Health Centres are required to collect and maintain statistical information on various health aspects and about eligible couples and family welfare programmes. Panchayat Secretaries and Cooperative Secretaries have also been entrusted with the task of collection and compilation of statistical data in respect of certain developmental activities at the village level. Such functionaries work under the direct control and supervision of their respective district level authorities. Neither the Director nor the District Statistical Officer has any direct control over these village level functionaries. No systematic procedure has so far been developed for standardising and co-ordinating their statistical activities. As a result, the quality of statistical supervision is often not upto the mark in ensuring accuracy and timeliness in the data collected. Thus there is an urgent need of providing Statistical Assistant each at the block level who would work

under the administrative and technical control of the D.S.O. The present agency of Progress Assistant is not discharging any statistical functions. The Statistical Assistants at Block level would also scrutinise the returns and supervise the field work of the surveys conducted by the Directorate of Economics and Statistics. There should be a continuity in the whole statistical system. Flow of statistics should move upwards from the base level to the highest administrative level with appropriate checks at each level. The statistical personnel should be imparted training in basic statistical methods at the initial stage of their service and then regularly given refresher training, say every five years.

Dissemination of statistical data is as important as its collection. Generally there is a delay in the publication of statistical material mainly on account of low priority attached to it in the printing press. Delayed printing of statistical publications defeats the

very purpose of timely dissemination of information. To reduce this delay, the printing programme of the basic statistical publications of the state requires to be suitably phased. The use of modern office machines would also go a long way in reducing the pressure on printing presses.

In order to meet the growing demands of the administrators and planners, the statistical system will have to come up to their expectations. The State statistical system should act as 'Computer' in the sense that whatever data the planners and administrators need should be made available with minimum time-lag and without sacrificing the quality. Provision of adequate staff for statistical activities should be viewed as an important investment for economic development because in the absence of inventory of data, the entire planning may prove an exercise in futility. The statistical system should thus be allowed to grow in status as to function as brain of economy.

## SCIENCE AND TECHNOLOGY

—Smt. C. P. Sujaya,  
Former Member H. P. State Electricity Board,  
Himachal Pradesh.

In the process of planned development for developing economy, the Science and Technology plays an important role for a change in the field of Science and Economic Development. The rapid Development of Science & Technology and its application helps in achieving the objective of our Planning. No doubt Himachal Pradesh during the past 30 years has achieved considerable success in the field of Horticulture and Agriculture communication and Power. To achieve maximum results in the planned economy, it is clear that major investment area in our state plan require a much more deliberate and sustained application of Science and Technology. This requires not only financial support for Science and Technology activities but linkage between the various sectors (i.e. Educational, Research and Development, Industry, Agriculture, Horticulture, Forestry and Irrigation). Science & Technology helps speedily to improve production through better efficiency and fuller utilization of capability already created in the various sectors of Economy. Technology has to be oriented for improving production. It helps in the creation of more employment activities and in the reduction of redundancy especially of the weaker sections of the community and of women. Science & Technology Planning brings self reliance and acts as a result oriented strategy in planning.

For a country like India with a large perportion of people afflicted in poverty. Now only solution seems to be in term of Development through Industrialization and Modernization of Agriculture. Major Science & Technology efforts can achieve this goal.

The Science & Technology Department is a new Department and was set up in the State during the year 1982. The Science & Technology Chapter of the Sixth Five Year Plan has clearly highlighted the need for enhancing the S&T efforts at the State Level. As a specific measure for undertaking these efforts, it was suggested that the State Councils for Science and Technology may be set up and activated during the Sixth Five Year Plan.

The H.P. State Government has already established a State Council for Science and Technology under the chairmanship of Chief Minister and duly notified vide Government Notification No. PLG. FC(F)7-1/81 dated 24th February, 1983. (Copy enclosed). The main functioning of the State Level Committee on Science and Technology are as Under :—

### A. Activities Relating to Planning

- (i) Prepare short-term and long-term S&T Plan as an integral part of the socio economic Development Plans of the State,



- (ii) Identify areas of priority and specific projects and programmes for S&T activities relevant to the State.
- (iii) Directly Undertake specific S&T activities using its own resources and promote and assist other organisations in implementing the objectives of S&T Councils.
- (iv) Consider, if necessary, the establishment of appropriate infrastructure, and institutions for carrying out high priority S&T activities relevant to the State.

### B. Compilation and Exchange of S & T Information

- (i) Prepare Directories/Inventories and make assessment of following major resources in the State.
  - (a) S & T Institutions and Facilities;
  - (b) S & T Manpower;
  - (c) Mineral Resources;
  - (d) Meteorological Data;
- (ii) Disseminate at the State Level information about new programmes and schemes of Central Government S&T Agencies;
- (iii) Periodically report on important S & T activities at the State-level. DST could use these State Reports to periodically inform all the State Councils about such activities in an integrated manner;
- (iv) Exchange experiences with other State Councils through organisation of inter-State visits, workshops, etc.;

### C. Studies and Surveys

- (i) Sponsor studies and surveys at State levels on topics of problems where S&T inputs can provide Solutions, e.g. drinking water, rural housing, energy, preventive health care, food preservation, etc.;



- (ii) Studies relating to Future Research (Futurology) should also be encouraged as relevant to problems of the State.
- (iii) Wherever feasible, make use of and involve professional bodies, societies and educational institutions in carrying out studies, surveys, state of the reports, etc.
- (iv) Studies and surveys related to problems of environment and related to the requirements of the State should be encouraged with emphasis on specific case studies, etc.

#### D. Technical Utilisation and Entrepreneurship Development

- (i) Demonstration and evaluation of State specific or Region-specific technologies. In this task, interaction with National Research Development Corporation (NRDC) should be encouraged.
- (ii) Maintain a shelf of proven technologies for the benefit of entrepreneurs, and develop appropriate mechanisms for the application, dissemination and transfer of such technologies at various levels in the State.
- (iii) Technologies relevant to rural development in the area of agriculture, energy, etc., may be given special attention.
- (iv) Efforts made to modernise traditional technologies for better efficiency and removal of drudgery from manual labour.
- (v) Promote and encourage agencies at the State level to undertake the upscaling of technologies from pilot plant level to production level.
- (vi) Support and encourage the utilisation of consultancy organisation in Science and Technology.
- (vii) Review existing programmes of entrepreneurship development and devise studies action plans for their improvement this should include identification of education and training requirements and preparation of appropriate programmes.

#### E. Research and Development

- (i) Identify location or region specific problem for research and development taking into account present and future needs.
- (ii) Organise sectoral/thematic workshop, in cooperation with other state wherever appropriate, and use these to formulate R&D programmes.
- (iii) Identify competent research groups or institutions which can execute the above programmes.
- (iv) Encourage and help talented scientists in undertaking frontline research.

#### F. Popularisation of Science

- (i) Promote, in a catalytic way, programme for popularisation of Science at all levels of society through exhibitions museums, science fairs, jathas, plays, music, radio, T.V., books magazines, etc. Particular emphasis should be given to utilising voluntary agencies, in these programmes.
- (ii) Popularization programme should include analysis of certain traditional approaches, beliefs, and practices based on superstitions, thus in allocating a scientific temper in the minds of the people.
- (iii) The promotion of Scientific temper should also be emphasised in Government Departments, Public Agencies, Universities and Educational System involving the professionals and the students. School and College students should particularly be encouraged for forming scientific clubs and societies which should help in this programme.

#### G. Other Activities

- (i) Maintain liaison with various Central S&T Agencies and Departments as well as units of these agencies in their respective States.
- (ii) Provide encouragement to young scientists through study visits, seminars training opportunities awards, etc.
- (iii) Identify and promote S&T programmes for women and programmes for involvement of women in S & T activities.
- (iv) Identify and promote S&T programmes for the benefit of weaker sections of society, handicapped, disabled and aged persons.

#### Science and Technology Planning

The State Science & Technology Department will bring together broad spectrum of expertise involved in S&T Planning, etc. Govt. as well as the Deptt. of S&T, including the Young Research Scholars Scientists with a view to undertake continuous review of S&T priorities and analysis of constraints so as to bring about integration of S&T with the development process of the State. Since the Scientific and Technological Development is a continued process so Deptt. will prepare a perspective plan to be spread-over a period of 15 to 20 years for the activities and programmes which will be undertaken for the Development of the State. The plan of the Department for the development of S&T capabilities and promotion of Science and Technology activities in the State through interactive plan. The following activities will find a place in promotion of the S&T programme of the State :—

- (i) Popularisation of science and creation of scientific temper among the people through S&T efforts;

- (ii) Programme on location of specific technology through support to S&T projects by voluntary S&T field grounds and coordinated S&T programmes in a few areas. This should cover aspects of technology to transfer through linkages with other schemes like integrated rural development programme, employment generation programme, district industrial centre etc;
- (iii) Engineering design and consultancy capability;
- (iv) Creation of multiple data based on natural resources at the State level;
- (v) Innovation on S&T education development;
- (vi) Indigenous technology utilization and S&T entrepreneurship;
- (vii) Workshop/seminars on S&T;
- (viii) S&T information base;
- (ix) Additional S&T schemes, coordinated S&T programmes etc., of priority to the development of the State.

The Annual Plan for the year 1984-85 envisaged for the setting up of a Science & Technology cell with the A.D. and also setting up of working groups as under :—

Field of Activity	Department to be associated
(a) Land and water management	Forest, Horticulture, Agriculture, Animal Husbandry and Irrigation.
(b) Rural Technology Transfer.	R.I.D.D., Industries and Technical Education.
(c) Power . . . . .	M.P.P. & Power.
(d) Health . . . . .	Health, Ayurveda, Public Health, R.D.D. and Medical College.
(e) Education and manpower Development.	Education, Universities, Planning, Technical Education and Industries.
(f) Industrial Development	Industries.

The Science & Technology cell proposed to be established will comprise of :—

- (i) Principal Research Officer (Scientists) in the pay scale of (Rs. 1775—2100). One post
- (ii) Research Officers . . . . . Two posts. (Rs. 825—1580)

- (iii) Technical Assistant . . . . . One post (Rs. 700—1200)
- (iv) Sr. Scale Steno . . . . . One post (Rs. 570—1080)
- (v) Peon . . . . . One post. (Rs. 300—430)

This small cell of Science & Technology will start functioning and will undertake the various activities as stated above and will frame a programme for the application of Science & Technology to the Development needs of the State and will advise the Government after the formulation of the policies and measures including technical, Administrative and legal advice which will promote such applications to identified needs, objectives, goals impartially to Health, Education, Manpower utilization, Agriculture, Horticulture Development, Forestry and the Development of Human skill in the Rural areas. This will help in promoting the Scientific management & development of natural sources of the State

#### SUMMARY

##### Development of Science and Technology

The Science & Technology Department was set up in the State during the year 1982. The H.P. State Govt. has established a State Council for Science and Technology. The rapid Development of Science and Technology and its application helps to improve production through better efficiency and fuller utilization capability already created in the various sectors of economy.

The Department is of the view that a prospective plan spread over a period of 15 to 20 years for the activities and the developmental programmes of the State, should be drawn up which should aim at expeditious exploitation of our natural resources through co-ordinated planning.

In the field of Science & Technology the following working groups are being set up for exploring the feasibility of adopting new programmes in each major sector of planning :—

- (i) Land & Water management,
- (ii) Rural technology transfer.
- (iii) Power.
- (iv) Health.
- (v) Education and Manpower development.
- (vi) Industrial development.

The Science & Technology Department will undertake various activities and frame various programmes/schemes for the application of Science & Technology to the development needs of the State. This will help in promoting the scientific management and development of natural resources of the State.

## IRRIGATION FOR PRODUCTION

—Shri M.L. Bansal,  
**Engineer-in-chief,**  
**Public Works Deptt.,**  
**Himachal Pradesh.**

The importance of Irrigation in boosting up crop production is well established. Adequate and timely supply of irrigation water to crops is the pre-requisite in the Agricultural production process particularly in areas where the rain-fall is scanty and irregular. It is an instrument with which rural transformation and agricultural development could be possible. The supply of Land being inelastic, accelerated growth in production is possible through increased multiple cropping and realisation of higher crop yields per unit of area, both of which are heavily dependent on irrigation. The water use practices as followed in Himachal Pradesh are hardly based on scientific lines. Consequently they lead to huge wastage of water resources. This is particularly true in respect of surface irrigation projects.

The Major technical deficiency of the flow irrigation scheme is that the distribution system stops too soon and at a long distance from the fields to be irrigated. Flow within the outlet command is from field to field. Field to field irrigation results in considerable wastage of water and the plots situated at the end of distributaries do not get enough water. Water wastage inherent in the system of field to field irrigation during summer restricts the area that can be covered under different Rabi crops. Experiments conducted under the Water Management Programme have indicated the possibility of increasing the irrigated area upto 25% by irrigating through field channels and arrangements for proper drainage. In Himachal Pradesh all irrigation schemes will have in-built field distribution channels so that water utilisation is the optimum and it reaches every field in the command area.

Out of a total geographical area of 55,673 sq. km. of Himachal Pradesh, about 10 percent is the net area sown. It has been estimated that about 3.35 lakh hectare of net area sown can be economically brought under irrigation. By March, 1980, 36,847 hectare of land was covered by the minor irrigation schemes executed by Public Works Departments at a cost of Rs. 20.00 crore. In addition to this 78,993 hectares of Land was provided irrigation facilities by private Kuhls and the schemes executed by the Rural Development Department. Thus in all an area of 1.16 lakh hectare was provided assured irrigation upto March, 1980.

In Himachal Pradesh, the fields are terraced, slopy and small in size. Minor irrigation is most suited in such conditions. During the Sixth Five Year Plan, it



was envisaged to bring an additional area of 22,000 hectares under irrigation at a total investment of Rs. 1975 crore. The achievements made during the first three years of the plan as also the targets for 1983-84 are as under:

Year	Additional area brought under Irrigation (Hect.)
1980-81	4,888
1981-82	5,407
1982-83	4,000
1983-84 (Target)	5,000

It is expected that by the end of 1983-84, the target of 5,000 hect. is likely to be achieved upto 88 percent. Originally, a target of 4,100 hectare was fixed by the State for the year 1983-84 which was revised to 5,000 hectare as per directive of the Planning Commission.

The plan outlays for the 6th Five Year Plan under medium irrigation is Rs. 10.45 crore to provide assured irrigation to 6,000 hectare. The physical achievement by the end of March, 1982 was 6,180 hectare. We have thus exceeded our plan target by 3 percent. The above physical achievements could be possible by completion of Medium Irrigation Projects, Giri in Sirmour and Bhabour Sahib Phase-I in Una district.

The work of construction of Balh Irrigation project sanctioned at a cost of Rs. 3.02 crore has been started. This project envisage utilisation of beas water from the bye-pass channel of Beas-Satluj link Hydrel channel at Baggi. When completed this project will provide irrigation to 2,410 hect. of Bath Valley in

Mandi District. Besides the above projects, the project report of Bhabður Sahib Phase-II in Una district

is under correspondence with the Central Water Power Commission.



Pump Irrigation

As a result of settlement of Shah Nahar dispute with the Government of Punjab, an alternate project to provide irrigation facilities to the existing and potential areas of 15,287 hectare is being finalised. This will be the first major irrigation project in the State.

Besides creation of irrigation potential, emphasis is being laid for the optimal utilisation of existing potential created. For this purpose, Command Area Development programme is proposed to be implemented which is being finalised for irrigation projects. For the minor irrigation schemes already completed, better utilisation of the facilities is being ensured by taking suitable measures. The utilisation aspects in the schemes already completed were not emphasized earlier. This is relatively a new dimension which has been added to the programme in the State.

To augment the resources of the State, possibilities are being explored to get the financial assistance

from U.S. Aid, who have visited the State twice in the recent past.

The targets fixed for the 6th Five Year Plan under Minor and Medium irrigation are likely to be achieved. In fact achievements, may be exceeding the targets. Despite these achievements, a big gap of about 1.91 lakh hectares shall still remain to be bridged. It has been assessed that the cost of providing assured irrigation to these areas would be about Rs. 3480 crore. In fact, irrigation was accorded low priority earlier, but now, new awareness is emerging out for the development of this vital sector in consonance with the development in rest of the country. The infrastructure available for the development of irrigation potential and also its optimal utilisation is not adequate at present. This needs to be strengthened in a big way. Like adjoining States, there is need of an independent Department for irrigation in the State.

## DRINKING WATER SUPPLY

—Shri G.N. Ramaswamiah,  
Chief Engineer,  
Irrigation and Public Health, Himachal Pradesh.



### Rural Drinking Water Supply Schemes

Himachal Pradesh is Hill State having an area of 55,673 sq. km in which 16,916 inhabited villages exist, which are scattered over the entire Pradesh. Some of these villages are situated on high ridges and in deep valleys. To provide drinking water supply facilities to these villages is an uphill task. The area is difficult, snow bound and hazardous terrain for travel. The carriage of material is mostly on head load from the road head to the site of work involving long distance and lifts. In spite of all these difficulties our engineers have done marvellous work by providing drinking water supply facilities to 7,518 problem villages and 4,289 easy villages aggregating to 11,807 villages ending March, 1984. The position is tabulated as under :—

Sr. No.	Period	Problem & easy villages covered		
		P.V.	E.V.	Total
1	Total	11,137	5,779	16,916
2	Covered upto 31-3-80	3,322	3,103	6,425
3	Balance as on 1-4-80	7,815	2,676	10,491
4	Covered during 1980 to 1984	4,196	1,186	5,382
5	Total coverage upto 31-3-84	7,518	4,289	11,807
6	Balance as on 1-4-84	3,619	1,490	5,109

During the 6th Five Year Plan, there was an approved outlay of Rs. 3289 lakhs under (Minimum Needs Programme) and A.R.P. (Accelerated Rural Water Supply Programme) to the tune of Rs. 1,159.67 lakh were provided for works. Rs. 250 lakhs have been released under A.R.P. Programme during 1983-84. Seeing the accelerated progress on the normal targets fixed for the year 1983-84, and the physical achievement of 830 problem villages and 190 easy villages upto March, 1984. Government of India, has allotted incentive bonus of Rs. 2.00 crores.

The State is making every effort to cover as many problem villages as possible with the help of Govt. of India. To achieve the object, 2 projects under bilateral assistance viz. 15.55 crores from E.E.C. (European Economic Community) and Deot-sidh group of villages with assistance of Rs. 1.24 crores from Royal Netherland Government were sanctioned and agreements have been made. With all

these financial help we will be having a balance of 3,619 problem villages and 1,490 easy villages aggregating to 5,109 villages left after March, 1984 for providing drinking water. The State still needs nearly Rs. 75 crores for rural water supply schemes, and Rs. 50 crores for urban water supply schemes and some additional money for left out hemlets and sub-villages. As years roll on some schemes may require augmentation, extension and even replacement due to drying up of sources and shifting of sources on account of natural calamities such as drought/earthquakes etc.

Some of the noteworthy schemes completed by the Department in the recent past were W.S.S. Lag-walti Bomson and Deotsidh group of villages phase-I in District Hamirpur, Ramgarh water supply scheme in Una District and Lahru Bachwani in Kangra District etc. They are big schemes costing over Rs. 1.00 crore each.

Water Supply schemes in hills require high technical skill, complicated designs and challenging jobs for implementation. These involves high lift, long distances, laying of pipes in hill slopes, crossing valleys and ridges and difficult distribution system in hilly terrain. Coupled to this difficult task for engineers, the constructed schemes get damaged due to flash floods, rain, snow and avalanches, hill and rock slides and subsidence of soils. Most of the lift schemes need elaborate and well-planned transmission lines for power supply negotiating dense forests, steep slopes, deep gorges making the task quite a stupendous job.

Not only the surface water but also the ground water resources such as spring and deep tube wells are exploited for use.

### Urban Water Supply Schemes

As per 1981 Census, 46 towns (including cantonment Boards) identified as urban area in the State having population of 3.26 lakhs. The water



Drinking Water Supply Scheme

supply schemes in most of these towns are utterly inadequate and need augmentation immediately. There was a provision of Rs. 540.00 lakhs in the 6th Five Year Plan period for water supply schemes. After the re-organisation of the Districts the towns of Hamirpur, Una and Solan gained importance being the District towns whereafter pace of urban water supply are being stepped up. Except Bilaspur and Mandi, Manali and part of Shimla, sewerage and sanitary system are non-existing. To provide sewerage system to urban areas, it is essential to provide drinking water @ 136 litres per capita.

#### Prospective for future developments

Most of the balance villages which are to be provided with potable water are difficult problem villages to be tackled. To these villages mostly lift schemes shall have to be provided. This will involve higher per capita cost. The cost is ranging as high as Rs. 1,400 per person for lift schemes and Rs. 900 per person in gravity schemes.

Problems are too many for providing water supply to all the villages and to the satisfaction of the

people besides financial constraints. Other problems are non-availability of pump sets which are in many cases of special type, turbulent water during rainy seasons, high silt factor carried by the stream/river, fluctuating voltages in transmission lines and high cost of maintenance have posed a challenging position for the Department.

It is hoped that with the co-operation of general public and the encouragement given by the State Government, National Government at the Centre and dedicated work of the engineers and staff of the Department, the remaining task would be achieved on priority basis. Being one of the important item under 20 Point Programme of the National Government, much importance is attached for speedy execution of water supply schemes and training of Pumps Operators and maintenance of schemes to the required standard. Supplying of water has been considered by the State Government more as a human essential requirement and recoveries for supplying this water is hardly 3% to 4% of the annual maintenance cost.

# ELECTRICITY BOARD-ITS CREATION, ACHIEVEMENTS, ON-GOING ACTIVITIES AND ROLE OF HYDEL POWER IN HIMACHAL PRADESH

—Sh. S. L. Duggal  
Chief Engineer  
H.P.S.E.B.



## Introduction

After the attainment of independence, Himachal Pradesh was formed in the year 1948 by merging 31 princely States. Himachal being situated in a difficult terrain ranging from 350 to 6,975 metres above Mean Sea Level in the Western Himalayas, had practically no means of communication and facility of electricity was almost non-existent, except in a few princely State headquarters such as Mandi, Chamba and Jubbal. Till the year 1964, the Electricity Wing was part of the Public Works Department. It was only in early 1964, when Dr. K.L. Rao, Union Minister for Irrigation and Power, visited the Pradesh that we could pursue the idea of exploiting our own vast Hydel Power potential. Therefore, with the active interest of H.P. Government, the Department of MPP & Power was created for Survey of power potential, to carry out field investigations, prepare schemes and execute river valley projects for generating hydro electric power and also to execute medium/large irrigation projects.

In the year 1966, some more hilly areas were merged with Himachal Pradesh, as a result of reorganisation of erstwhile State of Punjab. Punjab State Elec. Board was dissolved and the Transmission and Distribution system located in the merged areas was also transferred alongwith Bassi Project to H.P.

On 25th January, 1971 Himachal Pradesh attained State-hood and a shadow Electricity Board was created w.e.f. 1st April, 1971. The Electricity Board in functional form came into existence on 1-9-1971 when the main functions of MPP & Power Department were transferred to H.P. State Electricity Board.

## A. Achievements

### I. Hydel Potential & its Exploitation

From preliminary hydrological, topographical and geological investigations, so far carried out it has been estimated that the five major river basins of H.P. i.e. Chenab, Ravi, Beas, Sutlej and Yamuna can be economically harnessed to generate about 12,345 MW of power. In fact if detailed investigations and surveys are carried out in the areas hitherto not identified, the hydel potential shall be lots more. In any case out of the identified potential, 3,307.5 MW has already been harnessed in Himachal Pradesh including Bhakra,

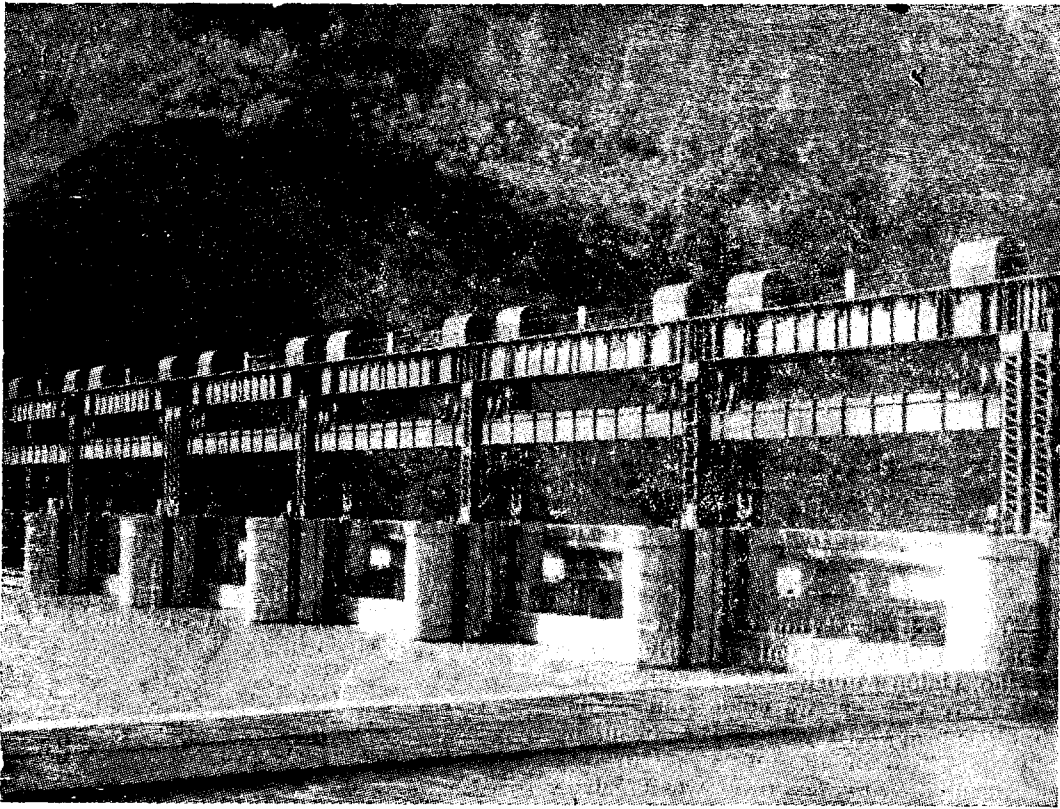
Beas & Baira Siul Projects. The installed capacity under the control of HPSEB was 1.10 MW during 1968-69 and it touched a figure of 126.52 MW during 1980-81. This capacity mainly constitutes of Bassi and Giri Power Houses of 60 MW each and the remaining is from Micro Stations in the Pradesh. The list of Power House in HP under the control of HPSEB is given in Table I.

TABLE I

Sr. No.	Name of Power House	River Basin	Installed capacity (MW)
1	2	3	4
1	Giri Hydel Project . . . .	Yamuna	60.00
2	Uhl Stage-II ((Bassi) . . . .	Bassi	60.00
3	Nogli Hydel Project . . . .	Sutlej	2.50
4	Rukti Hydel Project . . . .	Sutlej	1.50
5	Chaba Power House . . . .	Sutlej	1.75
6	Chamba Power House . . . .	Ravi	0.20
7	Gharola Power House . . . .	Ravi	0.05
8	Bharmour Power House . . . .	Ravi	0.02
9	Billing Power House . . . .	Chenab	0.20
10	Shansha Power House . . . .	Chenab	0.20
11	Sissue Power House . . . .	Chenab	0.10
			126.52

The challenge of exploiting the balance of its vast hydel potential thus devolves largely on H.P. Govt./HPSEB. Since the Board came into existence in 1971 it has taken upon itself power Development Programme within its resources. At present four hydel generation projects with an installed capacity of 143 MW viz. Sanjay Vidyut Pariyojna-Bhaba (120 MW), Binwa Hydel Project (6 MW), Andhra Hydel Project (15 MW) and Rongtong Hydel Project (2 MW) are under execution. On completion these projects shall





Giri Bata Power Project at Jateon

generate 562 MU annually valued at Rs. 21 crores at the present rate of tariff. All these four projects

would be completed by the year 1986-87. The brief salient features of these projects are shown in Table 2.

TABLE 2

*Salient Features of On-going Projects*

Sr. No.	Description of item	Bhaba	Binwa	Andhra	Rongton
1	2	3	4	5	6
1.	Installed Capacity (MW)	120	6	15	2
2.	Estimated cost (Rs. in Cr.)	125.62	11.76	25.40	10.61
3.	Length of tunnel (m)	5,565	2,154	6,532	1,000
				(Water conductor system)	
4.	Diam of tunnel (m)	2.5 (Horse shoe)	1.8 (D)	2.3 (D)]	—
5.	Diurnal pondage capacity (m <sup>3</sup> )	2,60,000	18,000	5,000	40,000
6.	Design head (m)	928.5	225	299	57
7.	Design discharge (comecs)	21.20	3.23	6.5	4.25
8.	Annual generation (MU)	435	29	89	Shall depend upon requirement.
9.	Scheduled year of comm	1986-87	1983-84	1985-86	1985-86



Three new project viz. Baner (6 MW), Gaj (10.5 MW) and thirot (3 MW) have been sanctioned during 6th Plan and preliminary works on these have been initiated. The brief salient features of these projects are given in table 3.

TABLE 3  
Salient features of New Projects

Sr. No.	Description of item	Gaj	Baner	Thirot
1	2	3	4	5
1	Installed Capacity (MW)	10.5	6	3
2	Estimated cost (Rs. in Cr.)	12.86	7.205	4.345
3	Length of tunnel (m)	2,000	1,587 (Water Conductor)	2620
4	Diam of tunnel (m)	1.8(D)	1.8(D)	—
5	Reservoir capacity (m <sup>3</sup> )	58,550	35,000	—
6	Head (m)	208.50	218.50	256.00
7	Design discharge (cumecs)	6.30	3.40	1.45
8	Annual generation (MU)	38.31	28.00	22.62

## II. Rural Electrification

There are in all 16,916 census villages in HP as per the 1971 census. Out of these 2,904 villages stood electrified upon March, 1972. The figure of village electrification went upto 8,921 No. by the end of March, 1980. During the sixth Five Year Plan (1980—85) a target for electrification of 5,460 villages was fixed by the Planning Commission. During the first three years of the plan 3,873 villages were electrified bringing the total of electrified village to 12,794 i.e. 75.63% of total inhabited villages. During the current financial year 648 villages have been electrified upto Dec., 1983 against a target of 720 villages.

## III. Electrification of Harijan House

For electrifying 27,000 Harijan Houses in the Pradesh a scheme costing Rs. 512 lakhs was prepared and submitted to Government of Himachal Pradesh for provision of subsidy. During the year 1980-81 Rs. 50 lakhs were sanctioned for electrification of 2,000 houses. Against this target 2,268 houses were electrified during that year. During the year 1981-82, 5,147 Harijan houses have been given the facility of electricity against a target of 5,000 houses. For the year 1982-83, a target to electrify 5,500 houses was fixed against which 5,980 houses were electrified. Target to extend electricity to 3,200 Harijan houses has been fixed for the year 1983-84 and 3,895 houses have been electrified upto Nov., 1983.

## IV. Pumpsets Energisation

Himachal Pradesh mostly consists of hilly terrain and ground water is not easily available. Tubewells/pumpsets can only be installed/energised in the plain

areas which are adjacent to Punjab, Haryana and UP. As the extent of plain area is very much limited, the applications received for pumpsets/tubewells energisation in the Pradesh are very few. However, energisation of pumpsets is being done on priority as and when the applications are received. Upto March, 1972, 809 pumpsets were energised and this figure went upto 1981 by the end of March, 1982. During the year 1982-83 ending March, 1983, 149 more pumpsets were energised and during the year 1983-84, 122 pumpsets have been energised upto 12/83 against a targets of 100 Nos.

## V. Power Generation Consumers and revenue from sale of power

The generation during the year 1981-82 was 431.68 MU and during the year 1982-83, as against a target of generating 525 MU fixed by the Planning Commission 540.45 MU were generated. This represents an increase of nearly 25% of power generation over the previous year without any addition to the installed capacity and is an all time record. During the year 1983-84, 517 MU have been generated upto Dec., 1983 against a target of 592 MU for the year.

The figures of energy generated, consumer served and revenue from sale of power etc. for the year 1982-83, viz. a viz. the figures for the year 1971-72 are depicted in table 4.

TABLE 4

Sr. No.	Item	1971-72	1982-83
1	Installed capacity (MW)	47.10	126.52
2	Generation (MU)	137.6	540.457
3	Consumers (Nos.)	1,79,616	5,31,927
4	Per capita consumption (Kwh)	42	76.0
5	Revenue from sale of electricity (Rs. in lakhs)	218.78	2,696.20

## B. Board's Policy for Exploitation of Hydel Potential

H.P. State Elec. Board has already drawn a comprehensive perspective plan in consultation with the Central Elec. Authority for the execution of the small medium and large projects in the future years. It is proposed to generate about 4,700 MW by the year 1995 by taking up the projects of this programme in a well considered sequence. These projects comprise the Parbati Stage-I (1150 MW) Kol Dam (600 MW), Karcham-Wangtoo (600 MW), Baspa Stage-II (250 MW) Gyspa (240 MW) Largi (120 MW) and Bassi Stage-III (68 MW) besides other medium and small projects and have an estimated outlay of Rs. 5,000 crores. To implement this plan effectively a hand in hand investigation and construction programme need to be taken up on a massive scale with the utmost speed. It is stated that an average investment of Rs. 3 to Rs. 4 crore would be required annually to complete only the investigation for these projects and an average investment of Rs. 400 to

Rs. 500 crores per year would be required to construct and commission these projects by the year 1995. Such a large amount of investment is not possible from within the resources and power plan of HP. Even if, successive doubling of the present power Plan size of Rs. 139.73 crore is assumed for the further plans the availability of funds will still fall short of the requirement. The exploitation of this large untapped potential cannot therefore be possible unless additional funds are allocated to HP by the Govt. of India. Outside the State Plan or HP is permitted to mobilise resources from within or outside the country to enable phased execution of these projects.

Various offers have been received from foreign firms for rendering assistance for execution of some of these projects on turnkey basis. In the first stage proposals for investigation and preparation of feasibility reports shall be submitted by the firms and after these are accepted by Govt. of India, further modalities for execution of these projects could be worked out under guidance from Govt. of India.

A great advantage of induction foreign assistance would be the reduction in the gestation period of the bigger projects through quicker investigations and project formulation by the adoption of the latest geophysical and geo-technical methods and the use of modern construction machinery and the latest project management techniques. By so doing, it will be possible to complete the investigations of projects for project formulation from the present time frame of 2 to 3 year to 9 months or a year. At present the larger projects in difficult geological terrain take about 8 to 10 years for completion and the smaller projects 5 to 7 years. By employing sophisticated techniques of construction it would be possible to reduce this period to 5 to 6 years for the larger projects and 3 to 4 years for the smaller projects.

In addition to above proposals of raising finance within and from outside the country for execution of these projects bilateral arrangements are being made/discussed with neighbouring states/Govt. of India, such as with Govt. of India for Nathpa Jhakri Project (1020 MW) and with Punjab and Rajasthan for Kol Dam Project. Broad understanding has already been reached regarding Karcham-Wangtoo (600 MW) and Baspa Project (400 MW) with Punjab Govt.

Beside this for promoting micro hydel generation in the Pradesh, particularly in remote and hilly locations, project reports of mini/micro schemes namely Sal-I (8.25 MW) Sal-II (2.25 MW) Larji (3 MW), Khuli (10.5 MW), Sarveri (10.5 MW) Sholding (15 MW), Nauti (4 MW) Minus (7.5 MW) and Ghanvi (15 MW) have been submitted to Central Elec. Authority for approval.

### C. Role of Hydel Power

As already stated earlier, the projects identified in the Perspective Plan comprise the larger projects namely the Parbati Stage-I (1150 MW), Kol Dam (600 MW), Karcham-Wangtoo (600 MW), Baspa Stage-II (250 MW), Gyspa (240 MW) and Larji (120 MW) besides other medium and small projects like Uhl Stage-III (68 MW) Dhamwari-Sunda (60 MW), Malana (50 MW), Allain (48 MW), etc. When commissioned these projects will generate about 25,000 MU of energy which will enable HP to earn a gross revenue amounting to Rs. 1,000 crores every year. Besides this if the work of these projects is taken up it would provide employment opportunities to another 1 lakhs personnel within a span of 6 years.

For major projects of about 500 MW to 1,000 MW capacity the total annual profits from sale of power after allowing for interest, operation and maintenance charges would be at least 10%. As such if offers of foreign investment are allowed to be accepted for such projects, it will be possible to repay the loan alongwith interest in 9 to 10 years.

In addition to above, huge indirect benefits will also flow from the power generated from these projects. As per the estimation, when 4,700 MW are added to the Northern Grid annually there will be an increase of nearly Rs. 9,400 crores in the industrial and agricultural production in the region which would be truly phenomenal.

There is thus a very strong and positive case for allowing HP to raise loans from within and outside the country as are being offered by various firms and Govts. to execute the power programme as envisaged, in the perspective Plan, in the shortest possible time.

## SOCIO-ECONOMIC ASPECT OF HOUSING

Shri M. L. Bansal,  
Secretary-cum-Chief Engineer,  
H.P. Housing Board

Despite man's unprecedented progress in industry, education and science, the simple refuge affording privacy and protection against the elements is still beyond the reach of most members of the human race. The unevenness of man's advance from the lower species is best illustrated in his struggle for shelter.

One reason for this lag is the population surge that has more than doubled the world's numbers in a century. Thanks to modern medicine, sanitation and food production, the life span is being extended for an ever-increasing number of people who otherwise would have died before they could proliferate. A population that remained virtually steady during the first eighteen hundred years, is rising by fifty to sixty million annually. Less than forty years hence, an estimated six to seven billion people will some how have to be housed, fed and clothed.

With the frittered farmland no longer yielding enough food for the growing number of mouths and with escape to frontier countries shut off, the cities within each country have become the most obvious prospect for distributing the human surplus. The first problem for the people who swarm into the cities is to get a roof over their heads. Land and housing are, therefore, assuming a new importance in the struggle for subsistence.

The world has strived hard to develop economically but as far as housing is concerned, the whole world has remained under developed. It has been seen that after the family pays for food, clothing, utilities and other essentials, there is little money left for housing.

### Housing as an instrument of economic development

While there are no accurate yardsticks to measure its impact, housing should be acknowledged as a necessity of life. Housing also plays a major role in stimulating employment direct and indirect, it activates other industries and adds to local purchasing power. Whether 'social' or 'economic' it may be a wise expenditure simply in terms of balanced growth.

One of the main needs of under developed countries has been to absorb unemployment, particularly in cities where there has been influx of migrants. When rural migrants come to the cities, they are apt to look to the construction industry as one of their primary sources of livelihood. Because of the prevalence of extensive unemployment during the formative period, a housing programme properly organised that



uses a maximum of domestic materials could be the principal means of employing people.

Thus the significance of housing in the developing countries is being increasingly appreciated. Some of the basic micro-economic or performance variables in judging the significance of housing in general are (i) share of housing in national income, (ii) share of housing in gross fixed capital formation, (iii) employment generation, (iv) input-output ratios and inter-industry linkages. The growth stimulus that housing generates in other sectors of economy may be judged in relation to these performances.

The National Accounts statistics of the developing countries reveal that the share of housing in the national income varies between 2 and 10 per cent. In India, the share of housing in the National income in the last two decades has been 3 to 5 per cent. Whereas the share of housing in the gross fixed capital formation during the period 1960-61 to 1976-77 has been of the order of 10 to 15 per cent as revealed by the National Accounts Statistics of India. The tables relating to contribution of housing to national income and share of construction in capital formation are given below.

Contribution of housing in national income

(Rs. in crores)

Year	Gross value added from housing*		Gross domestic product at factor cost	
	At 1970-71 prices	At current prices	At 1970-71 prices	At current prices
11	2	3	4	5
1970-71 . . . . .	1,357	1,357	36,736	36,736
1971-72 . . . . .	1,387	1,467	37,313	39,263
1972-73 . . . . .	1,411	1,596	36,910	43,241
1973-74 . . . . .	1,445	1,750	38,646	53,772

1	2	3	4	5
1974-75 . . .	1,476	1,931	38,979	63,263
1975-76 . . .	1,508	2,103	42,677	66,448
1976-77 . . .	1,550	2,358	43,319	72,061
1977-78 . . .	1,590	2,584	46,973	81,326
1978-79 . . .	1,636	2,940	49,723	87,128
1979-80 . . .	1,669	3,280	46,960	94,870
1980-81 . . .	1,707	3,562	50,682	1,14,271

\*Refers to Gross Domestic Product originating from ownership of dwellings.

Source :—National Accounts Statistics 1970-71 to 1977-78  
February 1980, January 1981, February 1983

Housing industry is particularly important in the context of employment generation, mainly because it tends to be a labour-intensive activity and can provide larger employment per unit of expenditure as compared with many other sectors of the economy of the developing countries, where there is abundance of unemployment and unskilled workers. As per the estimates prepared by the National Building Organisation an investment of one crore of rupees in building construction is capable of generating on site employment of the order of 923 man-years and off. Site employment of 1,477 man years. The housing industry can thus serve as an interim solution for the problem of unemployment in the developing countries like India.

*Employment in the organisation sector under building construction and Maintenance of Building including aerodromes.*

(In thousands)

Year (ending march)	Number of workers employed in Construction Sector			Building construction and maintenance including aerodromes		
	Public sector	Private sector	Total	Public sector	Private sector	Total
	2	3	4	5	6	7
1975 . . . . .	955.5	127.0	1,082.5	334.9	74.2	409.1
1976 . . . . .	992.0	94.1	1,086.1	332.3	58.3	390.6
1977 . . . . .	1,008.6	83.1	1,091.7	326.8	44.2	371.0
1968 . . . . .	997.7	82.6	1,080.3	331.8	42.9	374.7
1979 . . . . .	1,032.3	83.0	1,115.3	335.2	49.1	384.3

Source : Employment Review, DGE&T, New Delhi.

*Employment in Public and Private Sectors. (At the of the March)*

(In lakhs)

Industry	Public Sector						Private Sector					
	1961	1971	1977	1978	1979	1980	1961	1971	1977	1978	1979	1980
1. Agriculture, hunting etc. . . . .	1.80	2.76	4.76	6.28	7.77	10.82	6.70	7.98	8.38	8.53	8.41	8.74
2. Mining & quarrying . . . . .	1.29	1.82	7.57	7.58	7.71	7.89	5.50	4.04	1.30	1.27	1.24	1.25
3. Manufacturing . . . . .	3.69	8.06	12.26	13.55	14.16	14.44	30.20	39.55	41.65	43.21	44.33	43.94
4. Electricity, gas, water . . . . .	2.24	4.35	5.63	5.99	6.34	6.58	0.40	0.46	0.35	0.34	0.34	0.35
5. Construction . . . . .	6.03	8.80	10.09	9.98	10.32	10.65	2.40	1.39	0.83	0.83	0.83	0.73
6. Wholesale, retail trade . . . . .	0.94	3.28	0.76	0.83	0.99	1.07	1.60	3.04	2.75	2.74	2.81	2.75
7. Transport, storage communication . . . . .	17.24	22.17	24.67	25.20	25.97	26.45	0.80	0.96	0.71	0.61	0.71	0.71
8. Financing, insurance real estate . . . . .	..	..	5.34	5.80	6.47	6.84	..	..	1.86	1.80	2.01	2.10
9. Community, social personal services . . . . .	37.27	56.07	67.68	69.80	70.71	72.21	2.80	10.00	10.86	11.10	11.40	11.74
	70.50	107.31	138.76	144.41	150.45	156.94	50.40	67.42	68.67	70.43	72.08	72.32

Source :—Economic Survey 1980-81

The N.B.O. study on 'Economics of Housing' has revealed that among the 20 sectors of Indian economy, construction ranks third in terms of sectoral contribution to the growth output as well as final demand in the economy as a whole, 'agriculture' and 'other services' sector being the only two sectors ranking higher than the construction. It has also been established by the NBO study that construction sector has fairly strong direct backward linkages in the developing countries. In India, this sector ranks 4th as regards to the backward linkages, it ranks 10th with regard to forward linkages with other sectors of the economy. This clearly indicates that the total requirement of housing construction sector's output for support over all expansion of the economy is significantly high, specially in terms of its inter-industry use. The study also points out that the sectors which receive higher degree of growth stimulus on account of increased investment in housing are mining, wood and wood products, non-metallic minerals, basic metals and metal products, electrical machinery, chemicals, electricity transport and services.

### Housing as an instrument of Social Development

Housing has social benefits also. An inadequate dwelling, absence of water and sewerage facilities or lack of access to income earning opportunities, contribute to low family incomes, poor health and low ability to absorb education. Well planned housing, on the other hand, can increase national productivity, economize on urban space and minimise the cost of urban infrastructure, improved location of dwellings in relation to jobs, leads to reduction in traffic congestion and increased household take home pay by reducing commuting expenses.

Research studies into the socio-economic impact of improved housing in India and some other developing countries in ESCAP Region have brought out streams of social and personal benefits from better housing they are:—

- (i) Improvement in standard of living and health of the individual.
- (ii) Upgradation of the environment and reduction of blight making for improved social cohesion.
- (iii) Increased capacity or desire to work resulting in higher productivity in the form of increased out put per person per annum and lower absenteeism.
- (iv) Stronger incentive to save more and an increase in household savings.

(v) Better sense of living with human dignity.

(vi) Creation of assets to an individual and better social status.

(vii) Stabilisation of population etc.

Though the social and economic benefits of housing discussed above apply to the economy or society as a whole, yet housing has been found to have more potential to benefit the low income families particularly the women, economically and socially backward groups etc. The benefits which housing provides to these groups specifically are the following:—

The first and the foremost direct benefit which housing can provide is the stability at one place in terms of permanent settlement which reduces the migratory/floating population from one place to another.

Secondly house in the village of work or in the town of work or near the workplaces in cities will enable those workers to live in their families, who come from far-off places.

Housing is one of the strongest instruments of generating a sense of community or group living. The group living then develops social and cultural belongings to one another and thus provides safeguards to social and cultural identities of the workers in addition to good citizenship qualities. Thus besides providing social and cultural security a house is an asset and a status symbol in the society.

It has been found that adequate housing and community facilities have enabled the families to organise themselves in a more comprehensive and better way. The organised way of workers, men or women either in the form of trade unions, groups, formal or informal, has greatly benefited the workers whether they are agricultural workers or industrial workers etc., in improving their bargaining power for increased wages and welfare.

Adequate housing necessarily leads to better access to essential facilities like drinking water, lighting, latrines etc. in addition to community facilities like formal and informal education centres, dispensaries and hospitals, transport, markets etc. In other words, adequate housing facilities will provide the low income families better living environments and healthy living.

Better health and well being of the family is achieved by providing houses which greatly help in promoting higher productivity. As foster rate of industrialisation are being realised in the developing countries, increase in productivity of labour is a matter of great significance to national economy.

## STRIDES IN AGRICULTURE PRODUCTION IN HIMACHAL PRADESH

—Shri I. S. Kingra,  
Director of Agriculture, Himachal Pradesh.



Agriculture is the major occupation of the people of Himachal Pradesh as about 76 per cent population depends directly on it. The income from the agriculture sector is about 50 per cent of the Net State Domestic Product. In view of the importance of this sector in the economy of the Pradesh, it has received due attention of the Government and steps were initiated as early as 50s to increase the productivity of foodgrains and other cash crops like off-season vegetables, vegetable seeds, ginger etc. Most of the areas in Himachal Pradesh is not available for cultivation due to the difficult hilly terrain and is only suitable for raising forests, pastures and grazing lands. Only about 11 per cent of the total geographical area is available for cultivation. In order to get optimum yield per unit area per unit of time, the Department of Agriculture, Himachal Pradesh took up the production programmes in such a way so as to get more than two crops in one year from the cultivated area. Resultantly, the state of Himachal Pradesh has emerged as a glass-house for the country in respect of seed potato, vegetable seeds etc. In the area of foodgrain production as well, the achievements are significant. From the total production of 7.04 lakh tonne of foodgrains during 1966-67, the production has now reached a level of more than 12.0 lakh tonne of foodgrains in the state and is striving very close to self sufficiency in the foodgrains. Efforts are, however, being made to raise the foodgrain production level still further through the implementation of various schemes of dry farming, water harvesting technology, introduction of high yielding varieties, plant production measures and improved implements and machinery, etc., in a phased manner.

### Agro-climatic conditions

Agro-climatic conditions in Himachal Pradesh vary from sub-tropical to humid temperate. The cold desert conditions also exist in the areas bordering Tibet. The average annual precipitation ranges from 20 cms in cold desert zone to 250 cms in Kangra valey, about 75% of which is received from June to September.

Soils are almost natural in most of the areas but acidic in the high rainfall region like Kangra Valley. The soil texture varies from clayey loam in high rainfall areas to sandy loam in cold desert (Spiti area). Based on agro-climatic conditions, the state can be broadly divided into four major zones as under :

### 1. Shivalik Hill Zone

It consists of foothills and valley areas upto an elevation of about 800 meters above sea level with sub-tropical climate. It occupies about 35% of the geographical area and about 33% of the cultivated areas of the State. The soils are mostly sandy loam in texture with scattered loamy patches. The area is highly erodable due to weak geological formation and scanty vegetation. The moisture retentive capacity is poor. The area receives about 150 cms of annual precipitation, 75% of which takes place during monsoon season. The crops usually face moisture stress during the remaining period of the year due to inadequate and irregular rainfall. Sheet, Rill, Gully and Stream Bank types of erosion are commonly met. The irrigation facilities are provided by lifting water from streams, shallow dug wells and deep tube-wells in valley areas and by impounding water in the water storage structures constructed in the micro-watersheds. The main crops grown are wheat, maize, paddy, gram, sugarcane, mustard, potato, vegetables, barseem and sub-tropical fruits like orange, mango, gauva, litchi and citrus, etc. The crop rotations under rainfed conditions are mostly maize-wheat, maize-gram, maize-mustard-sugarcane etc. However, under irrigation conditions, the following crop rotations are practised :—

- (i) Maize-Wheat;
- (ii) Maize-Toria-Wheat;
- (iii) Maize-Potato-Wheat;
- (iv) Paddy-Wheat;
- (v) Paddy-Barseem; and
- (vi) Maize-Mustard-Sugarcane; etc.



Maize Cultivation

## 2. Mid Hills

This zone extends from 800 meters to 1600 meters above sea level having mild temperate climate, with annual precipitation of about 180 cm, 70% of which is received during monsoon season. The soils vary from sandy loam to loam in texture. It occupies about 32% of the total geographical area and about 53% of the cultivated area of the State. The irrigation potential is being exploited by harnessing perennial streams, springs and by constructing water storage structures. The area is relatively less subject to moisture stress conditions. Major portion of the uncultivated area is under grasslands, mostly on the southern and Western slopes. The forests are mainly met with on northern and north-eastern slopes. The output of grasslands per unit area is poor both quantity and quality due to lack of improved forage legumes and species of grasses, the introduction of which is also handicapped due to low temperature during winter and dry and desiccating spell during summer. The common field crops grown are maize, wheat, mash, beans, barley, paddy etc. This zone is very potential for the cultivation of cash crops like off-season vegetables, ginger and stone fruits like peach, plum, apricot and walnuts etc. It is also ideally suited to the production of quality seed of temperate vegetables like snowball cauliflower and root crops. The wild fruit species like wild pear, fig, pomegranate and olive etc. growing on waste lands and field batters can be top-worked to

get fruit of economic value. The types of erosion commonly met are sheet, rills, gullies, land slides and slips. Mini valley with good irrigation are found along the banks of streams and rivulets. The mainly practised crop rotations are as under:—

- (i) Maize-Wheat;
- (ii) Paddy-Wheat;
- (iii) Maize Mash-Wheat/Barley;
- (iv) Maize Beans-Wheat/Barley;
- (v) Ginger-Wheat/Barley;
- (vi) Maize-Vegetables; and
- (vii) Vegetable-Wheat.

## 3. High Hills Zone

It lies above 1,600 meters above sea level with humid temperate climate and alpine pastures. The soils are mostly Clayey loam to loam in texture with vary mild acidic reaction. This zone covers about 25% of the geographical and about 11% of the cultivated area of the State. The annual precipitation varies from 100 to 150 cms., 60% of which takes place during monsoon season. There is a sheet erosion and land-slides in this area but to a lesser extent than other zones. Most of the cultivated area, being located on

higher reaches, lacks irrigation potential is exploited by harnessing perennial and springs on a limited scale. The commonly grown crops are wheat, barley, lesser millets, pseudo-cereals (buckwheat and amaranthus) and maize etc. The area is ideally suited to the production of quality seed potato, temperate vegetables and some fruits like apple, pears, etc. There are good pastures and meadows which support rearing to a considerable extent.

#### 4. Cold Dry Zone

It comprises of Lahaul Spiti and Kinnaur districts and Pangl Tehsil of Chamba district lying above 2,700 meters above sea level. It occupies about 6% of the geographical and 3% of the total cultivated area of the State. The area is endowed with dry temperate conditions having precipitation less than 20 cms during summer and very heavy precipitation in the form of snow during winter. Being a single cropped area, the cultivation is carried out only in summer season under irrigated conditions. It is ideally suited to the production of quality seed potato, temperate and European types of vegetables and temperate fruits like apples, grapes, almonds, walnuts and apricot, etc. Wheat, barley and pseudo-cereals like buckwheat and amaranthus are also cultivated for domestic use. Irrigation is provided by harnessing perennial streams and springs. The soil strata is very loose and is prone to heavy erosion due to glaciers and avalanches. Vegetative belts (man-made) are mostly found along the water courses, which are used fuel and fodder purposes.

#### Constraints

Due to difficult hilly terrain of the State, the problems of hill forming are far more complex than in the plains. There are numerous factors and constraints which inhibit raising the productivity to the desired level. Some of these constraints are:—

- (i) High rate of soil erosion i.e. washing away of the fine soils and plant nutrients due to torrential monsoons;
- (ii) High cost of development of land i.e. adoption of soil conservation measures, etc.
- (iii) Lack of resources of the farmers for development of land to exploit its potential fully;
- (iv) very weak cooperative structure for supply of easy credit handling and distribution of agricultural inputs properly and timely;
- (v) poor purchasing and risk bearing capacity of the farmer for making investment in farming due to difficult hill terrain and frequent occurrence of natural calamities;
- (vi) low benefit cost ratio on investment of land development viz. soil conservation and farms operations in the initial years;
- (vii) small and scattered holdings;
- (viii) inadequate communication and transport facilities due to which agricultural inputs including the technology do not reach the farmers adequately and timely;
- (ix) inadequate agricultural extension service suited to topography of the State;
- (x) lack of suitable agricultural technology and research support of hilly areas i.e. varietal, agro-climatic and agricultural implements and machinery;
- (xi) lack of adequate marketing infrastructure and facilities;
- (xii) rainfed conditions and dependence of farming on rains in 80% of the cultivated area;
- (xiii) high cost of irrigation.

#### Remedial measures undertaken by the Department of Agriculture.

1. *Soil & Water Conservation Measures*—This includes land leveling, shaping, bench, terracing, contour stripes, construction of embankments and spurs for training of streams, retaining walls for the control of land slides, gully plugging, exploitation of surface and ground water, water management, proper disposal of run-off and construction of water storage structures in micro watersheds for utilization of run-off for irrigation purposes and vegetative purposes. Adoption of effective soil conservation measures in Himachal Pradesh has a direct bearing on the lands of adjoining states towards minimizing the flood hazards and siltation of big dams and reservoirs. Due to limited resources of the State Government, only about 2,800 hectare land is being brought under soil conservation measures annually. Till date about 34,000 hectares area has already been brought under soil conservation measures in the State. However, an Integrated Hill Area & Land Development Project is being considered for funding by the USAID.

2. *Strategy for improving productivity of land*—The Department of Agriculture has adopted such a strategy during the Five Year Plans so as to;

(i) *Make the State sufficient in foodgrains including cereals and pulses*—Toria DK-I variety, which is a short duration variety is being popularized as a cash crop immediately after harvesting maize crop, which provides additional income to the farmers and after harvesting toria in the end of November/beginning of December, Sonalika variety of wheat is being taken by the farmers. Already about 18,000 hectares area has been brought under Maize-Toria DK-I Sonalika Wheat.

(ii) *Development of Cash Crops like off-Season vegetables and vegetable seeds*—Himachal Pradesh has gained reputation for the cultivation of off-season vegetables and production of quality seeds of various vegetables. There is a great demand of off-season vegetables in the plains. Special emphasis has been laid on the development of off-season onion and peas. In the mid hill zone, Arkal variety of peas, which is of



short duration is being taken immediately after Harvesting of maize crop by which the residual moisture of monsoons is fully utilized for timely sowing. After the harvesting of green peas, Sonalika variety of Wheat crop is sown. During the current year about 2,000 quintals of Arkal variety of peas seed is to be sown in the Pradesh.

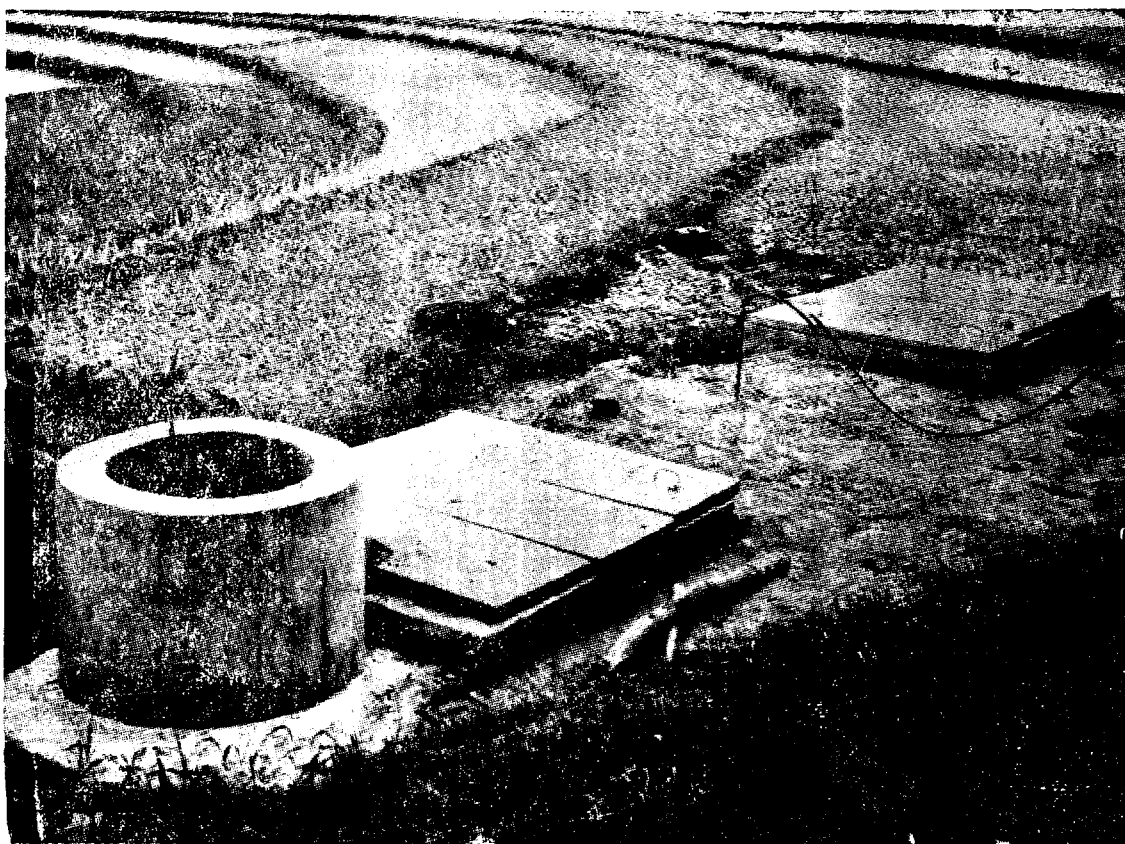
(iii) *Dry land Farming*—The rainfed areas in the Shivalik hill zone are prone to frequent droughts. In fact in the entire state more than 80% area is rainfed but critically drought prone area exists in mid and low elevations. The farmers of this area have got no other cash crops except the cultivation of cereals, pulses, oilseeds, etc. The economy of these area can only be improved by adopting improved practices under dry land farming programme. The programme of dry land farming in Himachal Pradesh is being popularised with the farmers as under :—

- (i) Introduction of suitable cropping pattern;
- (ii) To conserve moisture in the field by proper land preparation and mulching after harvest of kharif crops;
- (iii) Adjustment of time of sowing with suitable crops and varieties;

- (iv) Seed rate;
- (v) Fertilizer use;
- (vi) Method of sowing;
- (vii) Introduction of mixed cropping;
- (viii) Weed control;
- (ix) Use of proper agricultural implements;
- (x) Contingency crop planning; and
- (xi) Water harvesting and its recycling.

The area of 40,000 to 50,000 hectares is being brought under dry land farming in the state annually under the New 20-Point Programme of the Hon'ble Prime Minister.

(iv) *Providing alternative source of energy by developing bio-gas plants and tackling the fuel problem of the rural masses through bio-gas plants*—The State has emerged as a pioneer state in the implementation of this programme under the new 20 Point Programme and has been assessed as one of the top states in the country. Yearly level of installation of 1,000 bio-gas plants has already been achieved.



A Bio-Gas-Plant

(v) *Massive assistance to the small and marginal farmers and scheduled caste and scheduled tribe farmers in the shape of 100% transportation subsidy and adequate cost subsidy*—This programme helps these categories of farmers to come over the poverty line.

(vi) *Encouraging mixed farming at the holding to provide adequate income and employment at the farm site to the farmers*—The holdings in the State are small and the climate is such that the hill farming is, by and large, subject to weather vagaries. Under such conditions the hills farmers specially the small and marginal farmers have been provided a suitable mixed farming technology in order to provide them full-time employment at their own farms and get a sizeable income from different sources of farm operations almost throughout the year. Each hill farmer has got 15 to 20% waste land in the form of slopy grass land, field bunds and batters and gullies. On the boundaries of fields and slopy land the farmer is encouraged to plant some fruit trees and wild fruit species grown are to be top worked with improved species to supplement income in the near future. On the slopy lands

and bullies, farmers plant fodder trees and bamboo species, where moisture is good cottage industry can be developed to supplement the income. Besides, the farmers are advised to keep two milch cattle of improved breed so that fodder and farm by-products can be converted into milk for domestic use for supplementing the income.

(vii) *Providing adequate marketing facilities*—Regulated markets and market sub-yards are being established in the Pradesh under the H.P. Marketing Board and free grading service is provide for the grading of Seed Potato so as to fetch optimum prices to the producer.

(viii) *Development of irrigation sources by employing the technique of water harvesting and construction of water storage structures in the State*—The area under irrigation at present is 1.05 lakhs hectares and if additional area of 85,000 hectares for which potential exists, is brought under irrigation, the area under irrigation can be raised to the maximum extent of 1.90 lakhs hectares which comes about 34% of the cultivated area. This means 66% of the cultivated area would



Spraying of Plants

still remain as rainfed which is subject to drought conditions almost throughout the year except in monsoon season.

In case the excess rain water received during the monsoon season is harvested for irrigation purpose by adopting water harvesting techniques, the existing potential can still be raised by providing life saving irrigation to the crops in both kharif and rabi seasons.

The Department of Agriculture has carried out trials of water harvesting successfully but this pro-

gramme cannot be extended due to funds. There is a vast potential for extending water harvesting technology throughout the state through the construction of water storage structures and if massive financial assistance is made available from the Central Government, this potential can be harnessed and utilized for not only raising agricultural production but also to improve the environmental conditions by providing good vegetative cover which would also help in minimizing the flood hazards in the northern plains of the country.

## ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

—Dr. V. L. Mehta

Director of Animal Husbandry, Himachal Pradesh.



The nature has bestowed upon Himachal Pradesh, the Ideal agro-climatic conditions for rearing of the best of the livestock. Himachal has a total livestock population of 47.9 lakh as per 1977 census in addition to 3.30 lakh of poultry, the density of the livestock per sq. km. being 86 animals as against 76 human beings. 91.5 per cent of the families are rearing livestock and Poultry. At country level the contribution from Animal Husbandry is estimated at about 6 per cent towards the national income, whereas in Himachal Pradesh the relative contribution by Animal Husbandry towards the State Income comes to 12 per cent which itself is ample proof of livestock importance in the State.

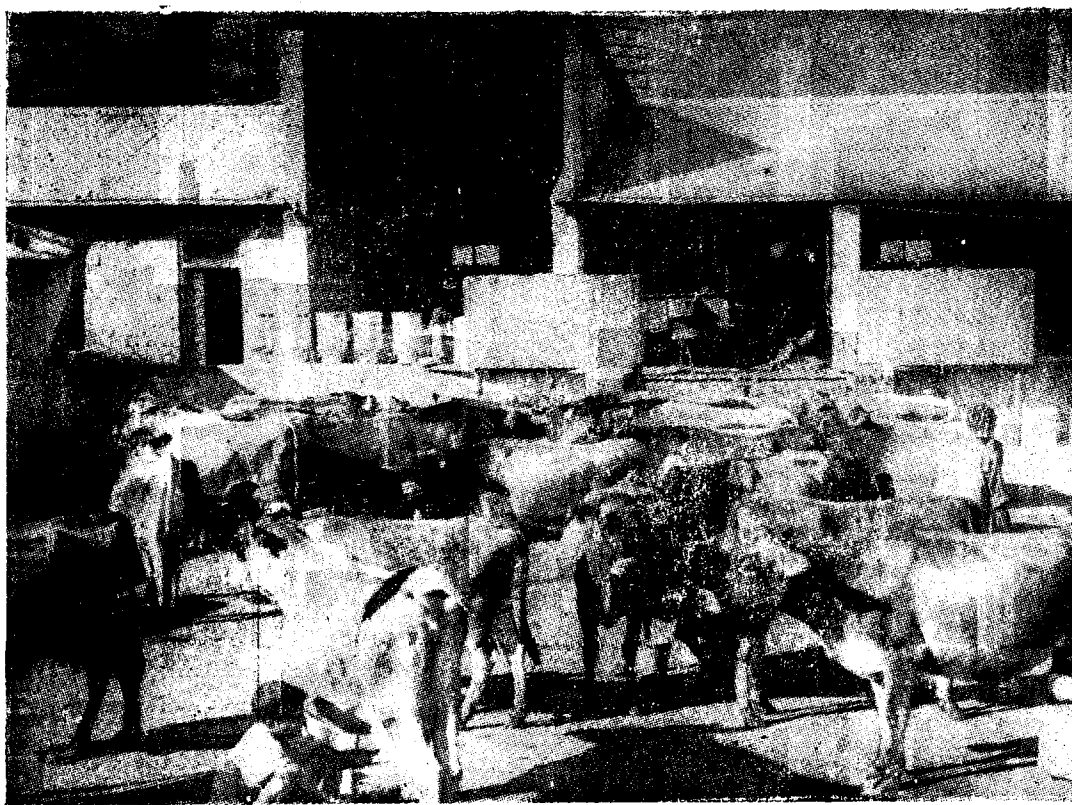
When Himachal Pradesh came into being in 1948, there were only nine Veterinary Hospitals, and nothing else, which could be turned the overall Animal Husbandry activities, but now there is a net work of 182 Vety. Hospitals, 357 Vety. Dispensaries, 48 out-lying Dispensaries, 14 Mobile Dispensaries, 61 Key Village Units, 37 Units of Hill Cattle Development Scheme, 46 Artificial Insemination Centres, 22 I.C.D.P. Centres, one Gosadan, four Vety. Check-posts, Two Disease Investigation Laboratories, 5 Clinical Laboratories, 6 Cattle Breeding Farms, 2 Deep Frozen Semen Laboratories, 3 Liquid Nitrogen Plants, 6 Sheep Breeding Farms/Centres, 2 Wool Analysis Laboratories, Transit Camps, 7 Milk Supply Schemes, 19 Milk Chilling Centres and 2 Dairy Plants. In addition, there are 2 Training Centres and 14 Poultry Farms/Centres. 36 Cow Bull and 81 bulls are being maintained at places where it is not possible to provide artificial insemination facilities for cross breeding work.

### Strategy for Development for the Seventh Plan

(I) *Animal Health*—With the improvement in Livestock, the owners of such animals require easily available Veterinary aid. Thus in so far as hills are concerned, the criteria for opening of new Veterinary Dispensaries should not be linked with the Livestock Population but the distances involved for availing Veterinary aid, should be the main criteria. At present,

in Himachal Pradesh, one institution is available in an area of 70 Sqms. This shall have to be reduced to 60 Sqms. during the Seventh Plan period. For achieving this end, the Department would require 150 more dispensaries to be added during the next Five Year Plan. Although the Department professes free Veterinary aid but the funds allocated for the purchase of drugs are too meagre to meet the requirements. For efficient health coverage more funds shall have to be allocated for purchase of medicines and instruments.

(II) *Breeding Facilities for Cattle and Buffaloes*—In order to maintain and improve the milk production potential of cattle and buffaloes, there is a need for increasing the number of breeding stations. The Department has so far created these facilities by way of introducing artificial insemination but the area of coverage through Artificial Insemination is limited to those stations which have road links. This is necessary because regular supply of semen/liquid nitrogen etc. can only be maintained to those places which fall on the road head or in the vicinity of roads. Thus the area which are away from the roads can not avail of improved breeding facilities. To overcome this problem, the department started supplying bull calves free of cost to the interested breeders but the response to this scheme has been poor primarily because the cost of maintaining a breeding bull is high in comparison to the fees received in lieu of services rendered by the bull. Another factor which has been contributory to the non-acceptance of this scheme has been the limited forage resources with an individual farmer. Lately the Department has introduced a scheme for providing subsidy of Rs. 50 per month for maintenance of such bulls but it is apprehended that even this incentive would not attract many private parties to keep the breeding bulls. To overcome this, the Department is of the view that the Govt. shall have to keep the breeding bulls at its institutions irrespective of cost. However, the present arrangement of supply of bull calves free of cost can also be continued with some more attractive subsidy for the keeper of such bulls.



Dairy Project Palampur

In case of Artificial Insemination, the role of Inseminator is very important. In order to infuse enthusiasm amongst inseminators some incentive in the shape of bonus on number of calves born shall have to be introduced.

(III) *Incentive for Producing and Raising cross Bred Calves*—It has been observed that the cross bred animals are being marketed from neighbouring states whereas Himachal Pradesh offers good opportunity for production of such cross bred animals and the local breeders can substantially meet the requirements of animals being supplied under various programmes. To involve the local breeders in this vocation liberal financial assistance is desirable. This assistance shall have to be for purchasing parent stock, feeding them during pregnancy period and feeding of cross bred calves.

(IV) *Sheep Development*—In case of sheep, efforts shall have to be made to produce more rams. Since the departmental farms have limited capacity to produce such rams, as such the possibility of creating private nucleus flocks of *marino sheep* is required to be looked into. Once these private nucleus flocks are built up then more number of rams reared under rural conditions can be made available for further dissemination.

Raising of Pashmina goat can become the profitable vocation for the tribals but little efforts have been made for the introduction of pashmina goat in the

tribal areas which otherwise can sustain rearing of these goats. Although the Department have time and again been making the proposals for establishment of a pashmina goat farm, but with no success, because the land required for establishing this farm could not be procured. The Department should find out the possibility of taking up pashmina goat rearing on an experimentation basis either in conjunction with existing sheep breeding farms or even as separate unit at Chhitkul (Kinnaur) where the department had put up structure for keeping yaks.

The major source of animals protein in this Pradesh is goats but little attempts have been made to introduce the strains of mutton sheep which can grow at a quicker speed and thus better quality of meat is available to the meat eaters. If no attempts are made in this direction, it is apprehended that meat would become scarce commodity in the years to come which can tell upon the health of the people. Alternately efforts are required to be made for popularising broiler type of rabbit which grows quickly and can convert roughage into valuable animal protein. To begin with, such type of rabbits shall have to be supplied free of cost to the interested farmers irrespective of their economic status, even the cages required for rearing these rabbits shall have to be subsidised so that the species are made popular.

(V) *Feed and Fodder*—No doubt, concrete and adequate efforts/steps have been taken for improving the genetical make up of cattle, sheep and other animals

but the production potential for such animals is directly linked with the quantity and quality of feed available with them. Unfortunately no systematic and sincere efforts have been made for improving the fodder resources for large animals and grazing resources, for small animals. The Forest Department and Agriculture Departments who have been entrusted with the responsibility of taking care of improving the fodder have their own priority of work and programmes and they hardly paid any attention and importance to this programme. It is, therefore, imperative i.e. suitable methodology for implementing feed and fodder improvement programme is required to evolve at the national level so that the gains made by improving genetical make up are fully made use of, otherwise

even the improved animals in the absence of good nutrition are bound to deteriorate.

(VI) *Poultry Development*—Poultry farming is gaining a good momentum in the Pradesh but the desirable progress have not been made because of non-availability of balanced poultry feed in the villages, support price of eggs and poultry meat in commensuration with its cost of production. If we are in position to remove these constraint poultry farming can pick up with not only adult farmers but even the school going children can take it up as their hobby and thus earn their pocket money and also supplement the family income.

## HEALTH AND FAMILY WELFARE

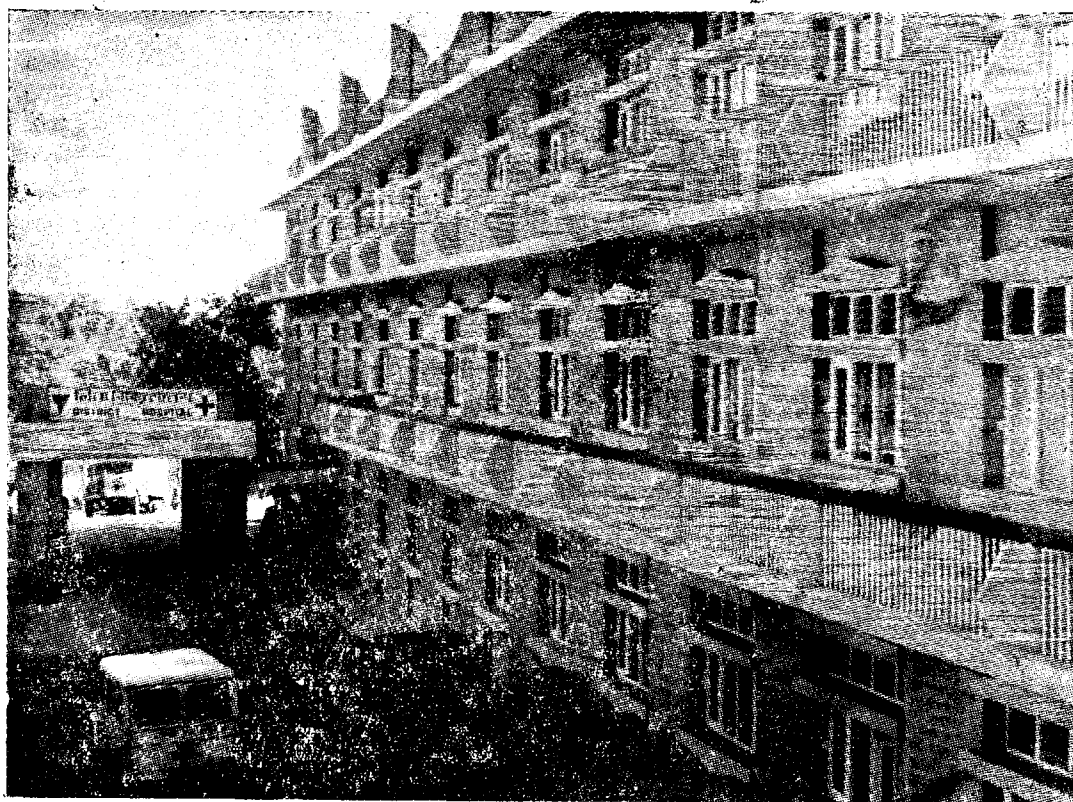
—Dr. J. C. Sharma,  
 Director of Health  
 and Family Planning, Himachal Pradesh



Himachal Pradesh came into being on 15th April, 1948, as a centrally administered territory, at that time, the State has only 4 districts, namely Chamba, Mandi, Mahasu and Sirmaur and its area was 25,839 sq. kms. population 11,09,466 (1951 Census) and there were only 91 Medical Institutions in the State with indoor facilities for 455 patients and only 85 Doctors/ Vaidis were serving. Since then a lot of change has occurred. Himachal Pradesh attained State-hood on 25th January, 1971. It has now 12 districts namely Bilaspur, Chamba, Hamirpur, Kangra, Kinnaur, Kullu, Lahaul & Spiti, Mandi, Shimla, Sirmaur, Solan and Una with a population of 42,80,818 (1981 Census) and area 55,673 sq. kms. With the passage of time the num-

ber of Medical Institutions increased considerably as per detail below—

Type of Institutions	No. as on 31-12-1983
1. Hospitals (Govt. & Others)	25
2. Primary Health Centres	79
3. Upgraded Health Centres	22
4. Subsidiary Health Centres	23
5. Allopathic Dispensaries	222
6. Ayurvedic Dispensaries	428
7. Sub-Centres	1,295
8. Ayurvedic Hospitals	5
9. Beds available (excluding Ayurveda)	5,425



Hamirpur Hospital



The Department of Health and Family Welfare beside providing curative services to the ailing persons is also actively participating in all the National Programmes like control of communicable diseases programmes, Family Welfare etc. etc. in the state and the achievements made under these programmes are as follows—

### National Family Welfare Programme

The Family Planning Programme was introduced in the state in the year 1956-57 with an aim of controlling the alarming growth of population. The programme is based upon the idea of motivating the people to accept small Family norm, by means of accepting various Family Welfare methods like Vasectomy,

Tubectomy, Laproscopic operations or IUD insertions or accepting any contraceptive devices for spacing the births. The programme was made target oriented since 1966-67 and the programme is also given top-most priority in the new 20-Point Programme set by our beloved Prime Minister, late Smt. Indira Gandhi.

Though the achievements made under this programme during the past year is quite encouraging and the State is achieving the targets allotted to the Pradesh as shown below, yet a lot more is required to be done to attain the goal of 60% eligible couple protection by the end of year 1991-92 as upto 30-6-1983 we have been able to protect only 28% of the eligible couples.

#### Achievements under the Programme for the Last 4 Years

Year	Sterilisation			IUD			C.C. Users		
	Tgt.	Ach.	% age	Tgt.	Ach.	% age	Tgt.	Ach.	% age
1980-81 . . . . .	15,800	14,972	94.75	4,300	6,999	162.77	13,600	16,385	120.47
1981-82 . . . . .	15,800	22,599	143.03	4,300	7,591	176.35	13,600	13,984	120.88
1982-83 . . . . .	26,000	33,467	128.72	9,000	9,671	107.45	15,000	15,112	100.75
1983-84 . . . . . (Upto Dec, 83).	36,000	18,066	50.18	15,000	7,210	48.07	19,000	12,756	67.14

To promote the programme in the State more vigorously the Govt. H.P. announced many community awards and incentives for Districts, Panchayats, institutions for best performance.

### National Leprosy Control Programme

At present whole of Himachal Pradesh is covered by 6 Leprosy control units with 75 peripheral clinics in the 6 Hyper-epidemic districts and the remaining 6 districts where the incidence is low are covered by 15 S.E.T. centres out of which a centre is functioning in tribal areas. Beside this there is one Urban clinic one 20 bedded temporary hospitalization ward attached with Medical College Shimla.

The targets and achievements made under the programme during the last 5 years are as follows—

Year	New cases detected		Cases Detected	
	Target	Achievement	Target	Achievement
1979-80 . . . . .	1,700	298	1,000	520
1980-81 . . . . .	1,200	180	1,000	302
1981-82 . . . . .	1,500	407	500	299
1982-83 . . . . .	500	401	900	296
1983-84 . . . . . (upto 12/83)	500	245	200	220 (upto 12/83)

### National T. B. Control Programme

This programme is being carried out in the Pradesh through 2 T.B. Sanatoriums 11 District T.B. clinics,

85-M/J(N)37H.P.Govt.

6 T.B. sub-clinics and 1 T.B. Survey-cum-domiciliary, treatment centre is also given to the children in the age group of 0—2 years. The target & achievements under this programme is as follows—

Year	No. of new cases detected	
	Target	Achievement
1982-83	10,000	11,900
1983-84	12,500	9,808 (upto 12/83)

### National STD Control Programme

This programme is being carried out in the Pradesh through 72 STD institutions to control this disease steps have been initiated in the State in 1948 when Mass V. D. campaign was launched in the State. The sero positivity rate which was 37.4% in 1952 has been reduced considerably to 1.42% in 1983.

### National Programme for Control of Blindness

The National Programme for control of blindness was started in the Pradesh during the year 1977-78 as centrally sponsored scheme. Under the programme two mobile units have been allotted to the State. The target and achievements under the programme is as follows—

Contract Operations Programme		
Year	Target	Achievement
1982-83	8,475	7,318
1983-84	6,000	2,737 (Upto 12/83)

## PANCHAYATI RAJ FOR GRASS ROOTS DEVELOPMENT

—Shri Hari Singh,  
Special Secretary, A.P.C. Branch,  
Himachal Pradesh.

Panchayati Raj Institutions are a grass root democracy in our Country. They have provided a new dimension to rural development and democratic decentralisation in direct administration. By involving these Institutions for the development of the rural areas, maximum utilisation of human and material resources is possible. These institutions provide initiative and leadership to the rural youth. The development works done by these Institutions are sound and stable as they know their problems better than anybody else.

For the better working of these Institutions, Gram Panchayats should be made an exclusive agency for development works at the village level upto the extent of Rs. 25,000. At least one Junior Engineer should be provided for the office of District Panchayat Officers in order to look after and execute the constructional works taken up by the Gram Panchayats out of their own funds and Government grants, because the Block Junior Engineer can not spare his time from the works already taken up by the Block Offices.

A trained Panchayat Secretary should be provided to every Panchayat so that the public could be facilitated for obtaining informations and get their problems redressed.

Sufficient financial resources should be made available to them for which village shamlat lands should be vested in the Gram Sabhas.

The Pradhans, Up Pradhans and Panches should be imparted training regarding working of these bodies with-in a period of two years after the conduct of the Panchayat elections. More training centres are needed to be established in Pradesh under the control of Panchayati Raj Department to impart timely training regarding functions of Panchayats and speedy implementations of 20 point economic programmes and centrally sponsored schemes.

For proper control over the working of these bodies adequate audit and supervisory staff should be appointed. A Planning Cell for the execution plan schemes, should be created soon at the Directorate and at least one Assistant should be appointed in the offices of each District Panchayat Office.

Our Country which is wedded to the concept of democratic way of life, strengthening of Panchayati Raj Institutions at the grass root level is a must. Human and material resources in rural areas, are



available in abundance which are required to be utilised for the welfare of the rural Masses by involving the Gram Panchayats. The Panchayats are to play vital role for the economic and social activities of the people for which delegation of powers and responsibilities, adequate financial resources should be made available to them. Until and unless 80% population which resides in the rural areas is not developed by providing them adequate facilities such as linking the villages by roads, drinking and irrigation facilities, establishment of schools, relief for the poor under 20 Point Economic Programme, public health and Sanitation, development of Agriculture/Horticulture, village Industries, construction of Panchayat Ghars and community centres, providing pesticides for weeding out diseases affecting the Agriculture and Horticulture produce, allotment of places for preparation and conservation of manure and encouraging the rural folk for starting bio-gas plants, pounds for animals, establishment of Libraries and reading rooms, construction and maintenance of culverts and bridges and development of village forests, the dreams of Ram Rajya of Mahatma Gandhi well remain unfulfilled.

(I) Since Himachal Pradesh came into being in 1948, the Panchayati Raj Institutions have been functioning in one way or the other. In 1953, the first Panchayati Raj Act, 1952 was promulgated and statutory powers and responsibilities were entrusted to the Panchayati Raj Institutions. The Gram Panchayat under this Act and Rules made there under the area of jurisdiction of a Gram Panchayat was reduced and more than one Panchayat was established by bifurcating/re-organising the old Panchayats. Before the re-organisation of the State, there were 638 Gram Panchayats and 29 Tehsil Panchayats and 6 Zila Parishads. But now the number of Gram Panchayats have raised to 2357 and there are 69 Panchayat Samitis and 12 Zila Parishads. After the inclusion of erstwhile areas of the Punjab three tier Panchayati Raj Samitis was introduced in the Pradesh.

According to the old system there was a separate Judicial Panchayat for each Gram Sabha area, the system of which latter on was changed and the Judicial



work is also being done by the Gram Panchayats, under the amended Panchayati Raj act in 1978. The Judicial powers given to the Panchayats have proved, very beneficial by providing timely and cheap justice to the poor village masses. Nearly 10,000 cases of criminal and civil are being deaded annually.

From the inception of the Panchayati Raj system in Himachal Pradesh, the Gram Panchayat was made an agency at the grass root level for carrying out all development works in its jurisdiction. The development schemes executed by the Gram Panchayats are better and sound as compared to the works done on contract basis. For about a decade also, the Panchayats have been authorised to execute the development works upto Rs. 5,000 only and a very few works fall under this small amount. Most of the works are being executed through contractors which are not upto the mark since the contractors are interested in making money for themselves. There is a resentment among Panchayats in this behalf. In order to create initiative and spirit of leadership, involvement of Panchayats for their own development is very essential and all development works upto the extent Rs. 25,000 should be entrusted to them. The following achievements will speak itself, that the role of Panchayati Raj system in H. P. has proved fruitful so far as the grass root development of the villagers is concerned.

(1) Under the different schemes since 1976 to 3/83 a total loan amounting to Rs. 32.43 lakhs were advanced and Rs. 56.94 lakhs were given as matching grant-in-aid to the Panchayati Raj Bodies. 155 Panchayat orchards were established and 112 Panchayat stalls and residential quarters were constructed. As such these institutions have benefited from these schemes & built up their permanent financial sources. Besides this a sum of Rs. 10.48 lakhs were given for the construction of Panchayat Ghars. One Panchayat Bhawan at Shimla, was constructed and has started providing lodging facilities to the Panchayat functionaries at cheaper rates. Panchayat Bhawan at district level are under construction at Kullu and Mandi. These Bhawans will be constructed in each district.

(2) The Panchayati Raj system has proved very successful at the grass root level as the Panchayat also provided cheap and quick justice to the rural masses in addition to their executive functioning. Though it has not functioned effectively at the Panchayat Samiti and Zila Parishad level. Most of the Panchayat Samitis are not functioning in the Pradesh due to lack of quarum and other administrative reasons. Except one Zila Parishad in Kinnaur District, nowhere it is functioning. So much so its election/cooption could not be completed. Since one member from each Panchayat Samiti was to be elected which was not possible as elections of members, Chairman/Vice Chairman could not be completed due to several writ petitions pending in the High Court. It is suggested that the election of the Primary member of the Zila Parishads should also be elected out of the Panches, Pardhans and Up Pardhans of Gram Panchayats in addition to the Chairman Panchayat Samiti. By adopting this measure every Zila Parishad will start functioning in which Panchayat Samitis and Gram Panchayats of the District will directly participate. The Zila Parishad should be in a

position to have sound control and proper supervision over the functioning of the Panchayat Samitis and Gram Panchayats.

(III) (a) Gram Panchayat should be made an exclusive agency for development works at the village level.

(b) The areas of operation of the Panchayats should be co-terminus with the Patwar Circle. Thus it can deliver goods in a better way.

(c) A Panchayat Secretary should be posted for each Panchayat so that he may be available to the public for all the working days.

(II) (i) In India, as a whole the Panchayats are facing lack of financial resources. In the Himachal Pradesh the following resources have been provided to them which are quite meager :

(a) Grants-in-aid :

1. 20% Land Revenue.
2. Local Rate.
3. Matching grant in lieu of House tax.
4. Fees, fines and forefietures.
5. Library books.
6. Construction of Panchayat Ghars.
7. Cattle Pounds and Ferries.
8. Pay of Panchayat Secretaries.
9. Pay of Chowkidars.
10. Prize competition of Panchayats.

(b) Creation of remunerative assets under which loan @ 3% interest is provided to the Panchayats for the following purposes :

1. Construction of stalls and residential quarters
2. Establishment of Saw mills, flour mills, oil seeds mills etc.
3. Establishment of orchards.

Interest free loans are provided in backward areas.

(c) By imposing taxes under section 42 of the Himachal Pradesh Panchayati Raj Act, 1968.

(d) Donations and contributions.

(e) Sharamdan.

(ii) Income derived from Shamlat lands should be given to the Panchayats and some other resources may also be provided in order to improve their financial position.

(iii) If a trained Panchayat Secretary is posted for each and every Panchayat, the working of all the development departments concerning the rural people can be coordinated in a better way through the agency of Gram Panchayats.

(iv) In order to have proper supervision over the functioning of the Panchayati Raj Institutions, a detailed annual audit/Inspection is very essential for which one Auditor for each Development Block should be provided who will function under the administrative control of the District Panchayat Officer of the District concerned. This system will prove more beneficial to the Government as well as to the Panchayati Raj Bodies.

Organisation of Panchayat Sammelan/Seminars is very essential not only for understanding and solving their problems by way of group discussions and debates but also help the Government to realise practical rural problems in their day to day working. The Department had organised Sammelans/Seminars at State, District and Block levels in the past as a result of which many problems were solved and their working improved.

In order to create competitive spirit among the Panchayats in the field of their overall developmental activities and progress made in inaugurating their sources of income for raising the standard of living of the common folk, a scheme for competition at District and State level has been introduced which has proved a great incentive in this behalf. The prize at the State level is Rs. 7,000, Rs. 5,000 and Rs. 3,000 to the Panchayats standing first, second and third respectively. At the District level a prize of Rs. 1,000 is given to the best Panchayat of the District.

Two Panchayati Raj Training Institutes at Mashobra and Baijnath are imparting training to the office

bearers and employees of the Panchayati Raj Bodies as well as departmental officials so that they are well acquainted with the day to day working of these bodies. These two Institutes are not in a position to impart training to all the office bearers and employees of these bodies during their tenure of five years. It is suggested that Pradhans, Up Pradhans of Gram Panchayats, Chairman, Vice Chairman and members of Panchayat Samitis and Zila Parishads should be imparted training immediately after the election of these bodies is completed. That too, should not go beyond two years's duration. In case all the Panches of Gram Panchayats are to be given training atleast one more Panchayati Raj Training Institutes is required to be established in the Pradesh.

The Department brings out a monthly journal Panch Jagat through which the problems facing the Panchayati Raj Bodies are removed or clarified. The activities of the Panchayats are also high-lighted through this publication for the information of the general masses. Thus, through this Journal the Department envisages better working of these Institutions. For all the activities discussed above a provision under Head PLAN in the Departmental budget is kept every year.

In nutshell it can very easily be concluded that if the working of the Panchayats for grass roots development is strengthened the economy of the people and their standard of living can be improved to a great extent.

## INDUSTRIAL GROWTH

—Shri S. K. Sood,  
Director of Industries, Himachal Pradesh.



### Summary

The development of Small Scale Industries has been given priority in successive five year plans in view of its advantages in terms of low investment, high potential for employment generation and dispersal of industries especially in rural and semi-urban areas. The definition of small scale industry was revised during 1980 and as per the new definition all the units having investment in plant and machinery upto Rs. 20 lakhs are small scale units. In case of ancillary units, the investment ceiling is upto 25.00 lakhs. In 1982, the definition has been further extended to include service oriented enterprises/establishments which are not engaged in purely trading or commercial activities.

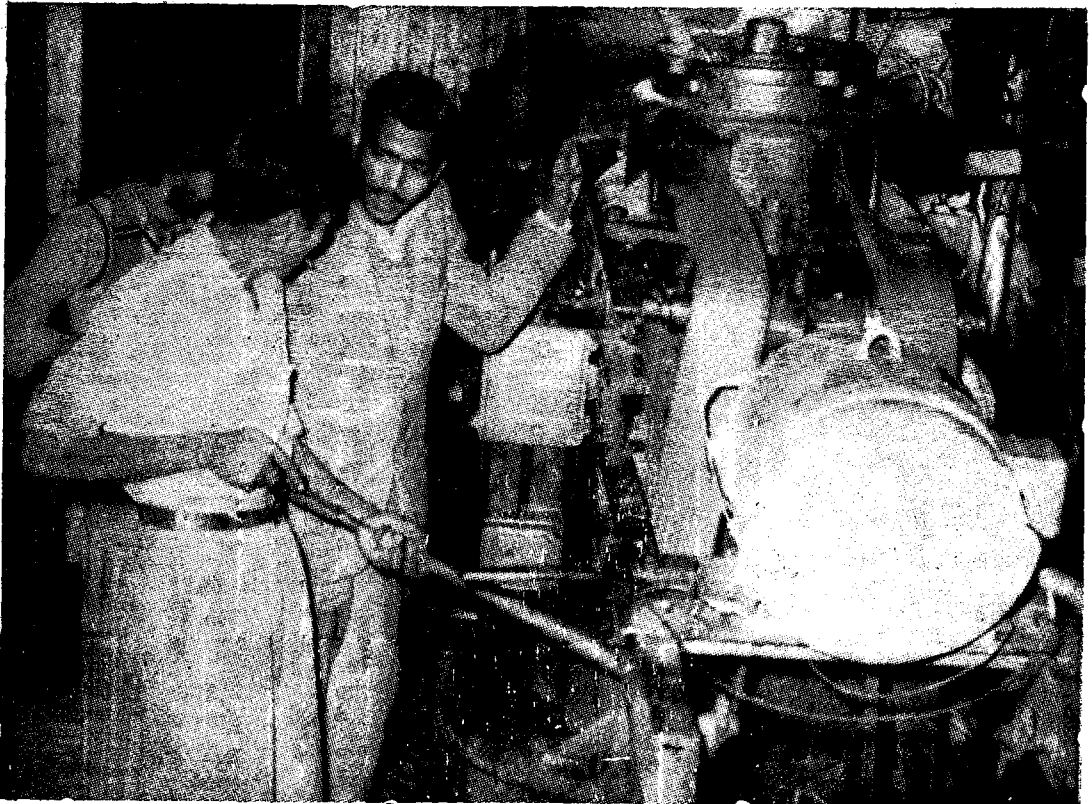
In Himachal Pradesh the secondary sector contributes about 16 percent of the State's domestic product. To reduce the pressure on the scarce land, it is essential to develop the industrial sector for which there is great potential in Himachal Pradesh due to plentiful availability of power and excellent climate of industrial relations. During the year 1983, the State Government approved about 39 projects in the Medium and Large Scale Sector involving capital investment of Rs 266.49 crores with employment potential of 9,456 persons. The Small Scale Sector has also achieved a high degree of sophistication and made significant progress in quality upgradation and standardisation. Beginning with simple consumer goods such as soap, detergents, leather goods, etc. this sector has now entered sophisticated fields of production including electronics and electro-medical devices. During the year 1983, 2,080 units were registered on provisional basis and 2,039 units were registered on permanent basis. At present there are 47 Medium and Large Scale industrial units functioning in the Pradesh, which provide employment to about 3,063 persons and have an investment of about Rs. 188 crores. In the Small Scale Sector, more than 6,400 small scale industrial units are functioning in the State, which provides employment to about 31,445 persons.

**Main Article**—Himachal Pradesh a small hilly State on the North-Western part of the Country is fastly coming up on the industrial map of the Country. The State has immense treasure of natural resources which are being harnessed for its economic development. The hydro electric potential of the five river basins

is estimated about 12,435 magawat. Out of this potential 3,307 magawat hydel power has been generated and many projects to harness more power are under construction. Thus adequate cheap power is available both for domestic and industrial use in the State, while many states in the Country are facing acute shortage of power for their industries.

The State has been gifted with dust free and cool climate which is very congenial for Engineering, precision and electronic industries. This kind of industries not only lead to higher value addition to the raw material but also generate higher level of skill among the people which enable them to earn more satisfying levels of income. Quite a good number of units for the manufacture of engineering and electronic items like micro-scopes, Video Cassette Recorders, Record players, electronic watches, film resistors AC/SR conductors, thermometers and watch jewels etc. have been established in the Pradesh. There is ample scope to set up such more units in the Pradesh. State Govt. has already set up an Electronic Complex at Solan for the development of electronic based industries. Testing facilities are being provided through this complex for such industries. A television factory of the State Mineral & Industrial Development Corporation is already functioning at Solan. About five more units for the manufacture of colour and black & white T.Vs. have been given approval.

An area of 21,142 square kilometers which is about 38% of the total geographical area of the State is covered under the forests. These forests produce valuable timber mainly of coniferous species, medicinal herbs and plants, resins and gums and several other major and minor produces. Though according to the new forest policy, emphasis is being laid for the conservation of forests, yet industries for the manufacture of medicines and life saving drugs and dhoop and aggarbatis etc. which do not drain out the forest resources have potential in the State.



Industrialisation of H. P.

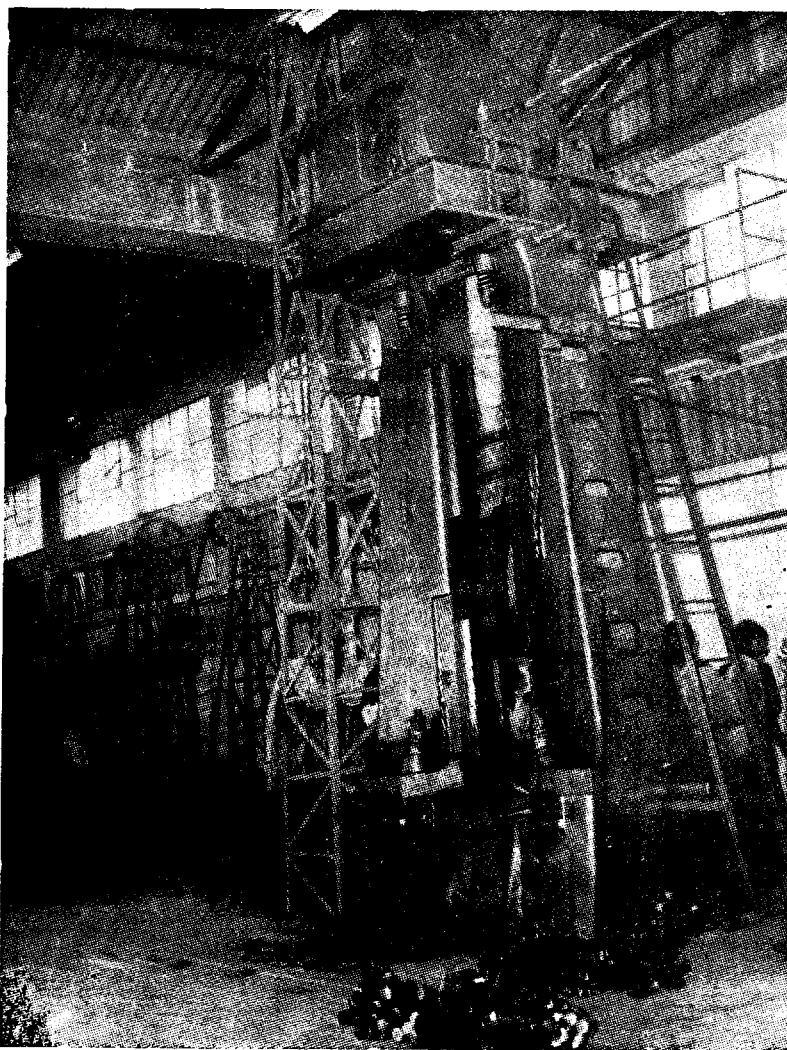
The Pradesh has huge treasures of mineral wealth especially lime stone deposits. These deposits are being exploited for the manufacture of cement. A 600 tonnes per day capacity cement plant has already started functioning at Rajban in Sirmaur District. Another cement plant of 1,700 tonnes per day capacity is almost near completion at Barmana in Bilaspur Distt. While approval for setting up similar plant for cement at Gaggal in Kangra Distt. has been accorded. Setting up of another cement plant in Chamba Distt. based on the lime stone deposits available there is under consideration. The State Government has also approved the setting up of 15 mini cement plants which will have about 7,89,000 tonnes annual capacity. With the completion of all these projects the demand for cement in the Country particularly in the Northern India will be met to a greater extent.

The State's Horticulture has taken long strides. About 1,08,676 hectares area is under fruits. The production of apples and other fruits was 1,47,000 metric tonnes and 38,768 metric tonnes during 1982-83 and 2,09,000 metric tonnes and 33,300 metric tonnes respectively during the current year upto December, 1983. Fruit pulp Jams, Juices and Jallies making industries can be based on the potential of the fruits available in the State. The processing of fruits

for these fruits products will ensure fair returns to the growers and employment generation. At present roughly 30,000 metric tonnes of fruits are being processed in the fruit processing plants of the H.P.M.C. Thus there is still further scope for setting up more fruit based industries in the State to utilise the surplus.

Many industrial projects in large and medium scale and Small Scale Sectors for manufacturing items like tractors, granuated compound fertilizer, cement, rosin and turpentine, vegetable ghee, steel rounds, electric meters, shuttles and bobbins etc. have already come up in the State and many are in the offing. These existing industries themselves need quite a large number of parts, components and such assemblies. Therefore, there is ample scope for setting up ancillary units to meet the requirements of the existing industries in the Pradesh.

Above all the State has hard working, peace loving and honest people. There is no labour unrest in the State, which is the most important factor. Many training institutions are functioning in the State which provide trained personnel for industries. There are two polytechnics, seven Industrial training Institutes and seven Rural Industrial Training Institutes which impart training in various technical and Industrial vocations.



Agricultural Implements Factory, Jachh

The State has been consciously striving for harmonizing of the material potential and resources for the development of various industries in the State. Appropriate climate for rapid industrialisation has already been created. The State has a net work of roads which connect all important places both within and outside the State. Already 18 Industrial Areas and six Industrial Estates have been set up. An attractive package of incentive is available to the entrepreneurs. The entire Himachal Pradesh has been declared Industrially backward and 25% Capital investment subsidy upto a maximum limit of Rs. 25.00 lakhs in each case is available now to the industrial units. 75% freight subsidy on transportation of raw material from broad guage rail head to the factory site of the unit similar subsidy from factory site to the broad guage rail head is also available on the transportation of finished products. Finance at concessional rate is also available as per policy of the Govt. of India to the industrial units in the Pradesh. Other incentives like subsidy for preparation of project reports, concession in sale tax

and seed capital assistance are also available. The tiny units are eligible for subsidy on rate of interest. The products of the industrial units located within the State are given price preference upto 17½% in the case of SSI units and 5% in the case of large and medium Scale units in Govt. purchases.

The State Government is promoting industries which do not disturb the ecological balance and cause water or air pollution. The industries are being promoted to provide employment opportunities to the people near their homes and hearths as far as possible to avoid migration of the youth to towns and cities in search of jobs which creates many socio-economic problems to them.

A conscious industrial culture is developing in the State. We invite the entrepreneurs from all over the country and the State to set up their industrial projects here.

## FISHERIES DEVELOPMENT IN H. P.

—Shri G. S. Chambial,  
Managing Director,  
Himachal Pradesh Road Transport Corporation.



### Summary

Inland Fisheries Production has a great role to play to meet the overall requirement of fish in India and for this purpose, its production is required to be raised by seven times in the next two decades. Himachal Pradesh is all mountainous and from the point of fisheries can be divided into 2 zones viz mountainous and sub-mountainous zone. While the former is important for the development of trout fishery, the later contribute to the main fish production of the State. The department has made great stride in fish production, which rose 14 times from 200 metric tonnes (1952) to 2800 metric tonnes (1983) in 3 decades. The main thrust of planned management had been towards increased fish production, production of fish seed and upliftment of fishermen. The plan expenditure has also increased considerably which was only Rs. 0.60 lakhs in first plan to an outlay of Rs. 180.00 lakhs for 6th five year plan (1980—85). The objectives set-up by the department before it have been fulfilled to a great measure and the efforts are continuing. The need for reorganisation in the set up has been explained so that managerial machinery in the State be further strengthened and quality of results improved.

### Fisheries Development in Himachal Pradesh

Fish is an important source of animal protein and as such has a vital role to play in the improvement of nutritional standard of the people. As a supplemental diet to bridge the gap between the availability and requirement of food, which is further being accentuated by the rising population, the development of fisheries assumes greater significance.

According to the study carried out by Indian Institute of Management, Ahmadabad, the domestic demand of Fish in India is estimated between 125 to 200 lakh tonnes by 2000 AD. To meet this demand, the marine catch was expected to contribute not more than half. Therefore, the balance would have to come from the Inland Fisheries sector, which means that the present production of fish would have to be increased by seven times in the next two decades against the growth of 3 times during the last 2 decades. The development of inland fisheries, therefore, deserves special attention and investment, to fully utilise the resources available in this sector so that the commitment made upon this sector could be fully met with.

Himachal Pradesh is all mountainous and from the point of fisheries development, it may be divided into two regions, namely:—

(i) *Mountainous Region*—This region extends from the foot hills of Himalayas in the west from Pathankot, and along the Shivalik range to the Doon Valley in the East. The elevation of this region ranges between 300 meter to 1500 meter and it has a net-work of rivers and streams which are inhabited by typical fish fauna of hill stream. The main fisheries is supported by Mahseer (*Tor putitora*) Gid (*Labdodero*) and Himalayan barbel (*Schizothorax plagiostomus*). These species are, however, not economical for pond culture and as such Mirror Carp (*Cyprinus carpio*) and its allied varieties were introduced for culture in this region. Incidentally, the bigger reservoirs namely Govind-sagar and Pong are also located here and consequently there is a great scope for extension of culture and capture fisheries in this region.

(ii) *Sub-Mountainous Region*—This region comprises area above 1500 meter having perennial and snow fed streams. This area is most suitable for culture and propagation of trout, the sporting quality of which is known all the world over. The culture and propagation of trout in the snow fed streams of this region has been taken up as a supplemental measure to boost tourism.

*Resources*—Himachal Pradesh has vast fisheries resources in the shape of river and streams, reservoirs and pond. The perennial rivers of the plain of Punjab viz. Chanab, Ravi, Beas and Satluj originate from the Himalayan range which borders the State. Ravi, Beas and Satluj rivers with its tributaries are thus the main riverine resources of the Pradesh in the west, while the tributaries of River Jamuna in the district of Sirmaur and Shimla are the main contributors to riverine fisheries in the west. The length of riverine resources is estimated at 3,000 km. of which about 600 km. length lies in the trout zone and the remaining 2,400 km. length in the Bream or valley zone of the Pradesh.

In the valley zone also lies the main reservoir resources of the State. The Pong dam and Govindsagar reservoirs which respectively have come up as a result of high dams across river Beas and Satluj, have an aggregate area of 40,000 hectares and are thus the main contributors to the fish production in the State. Besides, small reservoir at Pandoh and Jeton have also been created which are being developed for sport fisheries. So far, pond resources are concerned, these are scarce and are located in the areas adjoining the plains along the lower Shiwalik range.

*Development of Fisheries Since, 1948*—Prior to formation of Himachal Pradesh in April, 1948, none of the princely states except Mandi had a fisheries organisation. In Mandi too, the work was limited to running a small trout hatchery at Barot and management of river and streams with the employment of one Sub-Inspector of Fisheries and few guards. As such, when the department came into existence in August, 1950, the first and foremost task before it was to collect systematically all relevant data with regards to availability of resources, production and manpower engaged in fishing. Thereafter, conservation of fisheries so as to obtain optimum yield from the riverine resources was the first priority of the department. In order to achieve this objective, the Indian Fisheries Act, 1897 and Punjab Fisheries Act, 1914 were got extended to the Pradesh and all available waters were opened to general fishing on a rational licensing system. A set of rules for protection and regulation of fisheries was also promulgated, which among other things provided former fish size, mesh size regulations and prohibited wanton and wasteful methods of killing fish.

*Plan Investment and Achievement*—In the first five year plan, therefore, more emphasis had to be laid on the organisation and conservation, which task was successfully accomplished thus laying sound foundation for further development. The tanks at Nahan and Sarol were developed for Mirror Carp culture. The capacity of trout farm at Barot was increased to produce 50,000 ova annually for replenishing the trout waters. The level of annual fish production was raised to 200 M. T. while the number of registered fishermen was brought to 1200.

During the second five year plan, Mirror Carp culture was expanded and State became self-sufficient in the matter of fish seed of this variety of fish. A Trout Farm at Chirgaon with a capacity to produce 50,000 Trout ova was established and the Trout Farm at Barot was expanded to raise its capacity to one lakh ova annually. The number of registered fishermen was raised to 1300 and fish production to the level of 250 M. T.

Third Five Year Plan usher in an era of rapid development in fisheries sector. In order to tap the potentials created during the Second Five Year Plan, steps were intensified. The Govindsagar with an area of 16,000 hectare came into being on the completion

of Bhakra Dam across river Satluj. For meeting the fish seed requirement of this reservoir, construction of fish farm at Deoli (Bilaspur district) was completed at a cost of Rs. 3.60 lakh. The experimental fishing conducted by the department established the feasibility of commercial fisheries from this reservoir. In the field of trout culture, a Trout Farm with a capacity to produce 50,000 trout ova annually was established at Sangla (Kinnaur district). The number of registered fishermen rose to 1,350 who produced 450 M. T. of fish annually.

During the year 1966, the reorganisation of the Punjab State took place and the hilly areas of Kangra, Kullu, Shimla and Lahaul & Spiti were transferred to Himachal Pradesh, with the result that the fisheries resources of the Pradesh were almost doubled.

During the Annual Plan 1966-67 to 1967-68, development of reservoir and trout fisheries received adequate attention and the fishermen who had been rendered jobless due to Bhakra Dam were re-settled in the job of fishing from the reservoir. The number of fishermen rose to 6,500 who on average produced 630 M. T. of fish annually.

During the Fourth Five Year Plan 1969—74, the gains made in the previous plans were consolidated and production of fish from the reservoir was considerably increased. This was mainly possible because of extensive stocking, conservation and scientific method of exploitation. As large marketable surplus became available, the government considered the needs of proper marketing of fish, so that the lot of poor fishermen could be improved. The first two cooperative societies of the fishermen were, therefore, organised in Gobindsagar during the year 1972. The number of registered fishermen rose to 6,700 who made available 700 M. T. of fish annually.

During the Fifth Five Year Plan 1974—78, another big reservoir having an area of 24,000 hectares called Pong Dam reservoir came into being in Kangra district. The policy of fishing in the reservoir thereafter, under went a radical change and from 1st April, 1976 fishing in the reservoir was brought completely under the cooperative fold. The fishermen members of the societies now catch fish and market the same through their own cooperative societies. The societies pay a fee of 10 to 15 per cent of their gross sale of fish to the government. This policy resulted in higher revenue to the State exchequer and at the same time assured remunerable price to the fishermen. The number of fishermen rose to 7,500 who made available 1850 M. T. of fish annually.

During the Annual Plans 1978-79 and 1979-80, the main emphasis remained to build-up infrastructure for fish seed production and strengthening of landing centres for improved marketing of fish. The number of fishermen rose to 7,600 who made available 2,200 M. T. of fish annually.



A tabulated description of achievements from First Plan (1951—56) to Annual Plan (1979-80) is as under—

Period	Expenditure (Rs. Lakhs)	Fishermen Registered (level) (No)	Mirror carp fry produced (Mill.)	Trout ova produced (lakh)	Fish production (Tonne)
1	2	3	4	5	6
First Five Year Plan 1951—56	0.60	1,293	..	..	830
Second Five Year Plan 1956—61	4.66	1,300	..	..	1,120
3rd Five Year Plan 1961—66	9.13	1,058	5.31	6.53	1,260
Annual Plan 1966—67	0.87	1,258	1.17	4.32	292
Annual Plan 1967—68	1.24	5,445	1.20	4.53	560
Annual Plan 1968—69	0.91	6,540	1.25	4.69	550
Fourth Five Year Plan 1969—74	33.25	6,999	2.00	5.00	800
Fifth Five Year Plan 1974—78	17.69	6,786	2.00	5.50	1,860
Annual Plan 1978—79	13.50	7,841	2.14	5.72	2,200
Annual Plan 1979-80	14.00	7,000	2.00	6.00	2,250

#### Sixth Five Year Plan 1980—85

The Sixth Five Year Plan of the Fisheries Department has been approved at an outlay of Rs. 180.00 lakhs which is proposed to be spent on the following schemes :—

Name of Scheme	Approved outlay 1980—85 (Rs. in lakh)
1. (i) Direction & Administration and Planning staff	12.00
(ii) Education and Training	5.00
2. Inland Fisheries	
(i) Fish Farm Carp Seed (including National Fish Seed programme.)	30.00
(ii) Fish Farm Trout Seed	25.00
3. Conservation	
(i) Reservoir	8.00
(ii) Riverine	6.50
(iii) Trout	5.00
(d) Trout Commercial Trout Farming of Bilateral assistance with foreign collaboration	32.50
4. Extension and Research	
(i) Rural Fisheries Development including Fish Farmer Development Agency	12.00
(ii) Grant-in-aid to H.P. University	4.00
5. Processing/Preservation & Marketing	40.00
<b>Total</b>	<b>180.00</b>

With the above outlay the fish production from all resources is proposed to be raised from 2,2250 M. T. (Base year 1979-80) to 3,200 M. T. by 1984-85. The carp seed production is also proposed to be raised from 3.50 million fry 1979-80 to 10 million fry by 1984-85. The trout eggs will be similarly raised from 6 lakhs to 12 lakhs.

#### Annual Plan 1980-81

The Annual Plan of Fisheries Department was originally sanctioned at an outlay of Rs. 14.00 lakhs which was subsequently raised to Rs. 14.70 lakhs. Against this, the expenditure incurred was Rs. 15.00 lakhs. Fish production of 2,300 M. T. was achieved 3.6 million of carp fry and 7.00 lakhs of trout eggs were produced at the various farms. Under the Special Scheduled Castes Component Plan an amount of Rs. 0.70 lakhs was given as 50% subsidy to assist 28 fishermen in Pong reservoir to purchase fishing equipments. Under the Tribal Sub Plan, Rs. 1.80 lakh were spent on the expansion of trout farm Sangla and for carrying out survey of fisheries potential in the tribal areas of Lahaul and Spiti, Bharmour and Pangl.

#### Annual Plan 1981-82

The Annual Plan 1981-82 was approved at an outlay of Rs. 30.00 lakhs which was subsequently revised to Rs. 29.50 lakhs. Against this, the expenditure was Rs. 28.76 lakhs. Fish production of 25.83 M. T. was achieved, 3.7 million of carp fry and 6.82 lakhs of trout eggs were produced at the various farms. Under the Special Scheduled Castes Component Plan, the entire sanctioned budget of Rs. 2.00 lakhs, was spent for providing as 50% subsidy to assist 200 riverine fishermen, 30 reservoir fishermen and 16 Rural Fish Farmers for the purchase of fishing equipments and renovation of tanks and Ponds. During 1981-82 Rs. 1.00 lakh has been given to the Agriculture University, Himachal Pradesh, Palampur for fisheries research. Under the Tribal Sub Plan Rs. 1.75 lakh was spent on the expansion of Trout Farm Sangla and for carrying out survey of fisheries potentials in the tribal areas of Lahaul & Spiti, Bharmour and Pangl.

#### Annual Plan 1982-83

The Annual Plan 1982-83 was approved at an outlay of Rs. 35.00 lakhs which was, however, later reduced to Rs. 30.18 lakhs, against which an expenditure of Rs. 30.84 lakhs is expected. Fish production of 2,870 M. T. was achieved, 4.8 million carp fry and 4.98 lakhs trout eggs were produced at the various farms. Under Special Scheduled Caste Component Plan, an amount of Rs. 2.89 lakhs was spent providing assistance to 66 fishermen/fish farmers.

#### Appraisal of Policy Frame Work

The development of fisheries in Himachal Pradesh has been taken up with the following objectives :—

- (i) Management of fisheries wealth;
- (ii) Conservation of natural fisheries through enforcement of fisheries legislation, creation of fish sanctuaries, and salvaging of fry from drying stretches of waters;



- (iii) The development of fish through culture and propagation including culture of exotic species of fish with a view to raise food potentials of the State;
- (iv) Organisation and vitalization of fisheries cooperatives to expand marketing of fish in an organised manner to ensure remunerative price to the producers and availability of fish to consumers at reasonable price;
- (v) Providing of technical assistance and training to fish farmers and subordinate personnel of fisheries department and rendering assistance to persons belonging to Scheduled Castes/ Scheduled Tribes, marginal and small farmers and educated un-employed to take up fish culture as subsidiary profession.
- (vi) Providing employment to the fisheries community in order to augment their otherwise meagre resources and to assist them in procuring fishing requisites to boost up fish production.

The department in its existence during the past 33 years has endeavour to achieve the above objectives to a great measure. The conservation of riverine resources have resulted in steady increase in the number of licensed fishermen which rose from 1,300 in 1952 to 6,700 in 1983. This has also resulted in the increased production of fish from 200 tonnes in 1952 to 2,870 in 1983. Due to scattered population of fishermen in the riverine resources, it had not been possible to organise their cooperatives but this has been achieved fully in the reservoir sector, where the whole process of exploitation and marketing has been fully cooperativised. The department has also done well in the field of fishing tourism, and the conservation and development of sport fisheries viz. Trout and Mahseer have resulted in increased in flow of fishing tourist to the Pradesh. The management of the reservoir resources have yielded commendable results. Gobindsagar reservoir in its genre of large reservoir has the highest per hectare production in India. As against the average All-India production of 10 kg/per hect., the production from Gobindsagar is as high as 80 kg/per hect. The Pong Dam reservoir is also steadily developing, it is hoped that with the managemental measures being taken it would overtake the production figures of Gobindsagar in near future. Fishing is an ancient profession embracing in its fold the poorest of the poor segment of the society, which is traditionally illiterate, highly superstitious and socially indebted. Their emancipation lies in removing their social and economical backwardness, for which the department has adopted schemes for their cooperativisation, providing of subsidy for obtaining means of production, and social security by way of accidental policy to persue their hazardous profession.

The investment thus made so far in fisheries sector has been wholly worth-while. The production of fish in the last 3 decades has risen by 14 times recording an average annual rate of growth of 16% (1972—82).

### Departmental Infrastructure & Reorganisation

The department of fisheries in Himachal Pradesh was organised on a permanent footing since 1952, but some-how, the department could not grow at the same speed as other departments did in the same span of time. For a long time, the department remained a wing within the Forest department, and thereafter for a short while, it was a part of the Agriculture department. In 1965, the Director of Fisheries was declared as the Head of Department which position continued till June, 1978, when he was replaced by the Director of Animal Husbandry, Himachal Pradesh as Chief Warden of Fisheries. Since retirement of the then Director of Animal Husbandry, H. P. the post of Chief Warden of Fisheries, H. P. has been held by Special Secretary in the APC Branch. Realising the importance of fisheries in view of the vast resources available for its development, the government has now sanctioned a post of Chief Warden of Fisheries as a Head of Department of Fisheries, which would be filled up soon. This step would go a longway to ensure proper and speedy utilisation of the fisheries resources, which would not only help in increasing fish production, more income to the State exchequer, increased tourist traffic but also to bring about improvement in the economy of the Pradesh. With the installation of an independent head of department, it is hoped that a proper organisational set up for the department would be developed which at present is weakly structured. In the field as well as the Directorate, the present staffing pattern is incapable of fulfilling the task assigned to the department and thus call for reassessment and complete reorganisation at all levels. The department is maintaining farms for trout and carp and is planning for new farms, but the present farms are starved of the functional staff. There is thus a need to evolve staffing pattern for each farm as per their need and capacity, so that maximum utilisation of infrastructure available at these institutions is ensured. The department has also created institution of District Administration of fisheries in the shape of District Fisheries Officer, but none of these offices have been so far provided with ministerial staff. The offices of Assistant Directors of Fisheries are also have a strength of one Accountant and two Clerks, which is too short of the actual requirement. There is no post of Deputy Director without which second line of administration has failed to grow. The department thus needs a thorough over-hauling without which the task before it cannot be accomplished fully.

The Pradesh has two large reservoirs namely Gobindsagar and Pong Dam which as stated above have been steadily developed. Their fish seed requirement alone come to about 56 lakhs fingerlings against which the present production is about 15 lakhs. To meet this huge requirement, a 10 hectare farm at Milwan (Kangra district) is being established under the National Fish Seed Scheme at a cost of Rs. 39 lakhs out of which 50% of the capital cost would be met by Central loan. In the field of cooperative organisation, through the Chief Warden of Fisheries, Himachal Pradesh has been given certain powers of Registrar Cooperative Societies, yet no organisation is at present available

the Directorate to implement the programme. A Danish Trout expert, Mr. Bregenballe who visited Kullu Valley of the Pradesh in 1978 indicated that Kullu Valley has favourable areas for development of trout farming in the State. Based on his recommendation, a Pilot Project costing Rs. 135.00 lakhs has been proposed to the Government of India for obtaining assistance from the Federal Republic of Germany. In the field of Pond fisheries too, a Fish Farmer Development Agency has been established at Una under a Centrally Sponsored Scheme, under which 100 hectare pond area would be renovated to boost up fish production in the rural areas.

In order to implement the above projects, the staff proposed and infrastructural facilities in the shape of fish farms, buildings are required to be provided in a phased manner, so that the department could fulfil its task fully in the economic utilisation of fisheries resources in the State.

The Department of Fisheries is thus standing at the threshold of a new era which would usher in rapid increase in fish production, greater involvement of poor fishermen in economic growth, and their emancipation from the continuing indebtedness in the past.

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## PUBLIC DISTRIBUTION SYSTEM

—Shri Y. R. Mahajan,  
Director of Food & Supplies, Himachal Pradesh.

Himachal Pradesh is a hilly State and in most of its parts production of essential commodities fall short of its requirement. The shortfall is met by importing these commodities from other states. A part of the deficit is imported through private trade channel but these are also supplied through Public Distribution System so that these are available on fair prices equitably. Under this system import of these essential commodities is regularized by the Government and made available to the consumers through a net work of fair price shops. Mainly, Wheat/Atta, Rice, Levy Sugar, Edible oils & Controlled Cloth is distributed on ration card. Besides, other essential commodities are also made available through fair price shops.

Essential commodities are stored in various parts of the Pradesh to keep the supplies regular. Department of Food and Supplies store Wheat and Rice in about 145 various owned and hired godowns, the storage capacity of which is about 19,506 Tonnes. Other essential commodities such as Rice, Edible Oils, Levy Sugar, Controlled Cloth, Atta, Pulses, Salt, Match boxes, Exercise Books, Soap, Kerosene Oil, Maida, Suji, Stationery, PVC Shoes, Cloths and Vegetable Ghee etc. are procured and distributed by HP State Civil Supplies Corporation. These commodities are made available to Fair Price Shops on their demand and availability. HP State Civil Supplies Corporation is storing essential commodities in about 77 wholesale points in the Pradesh for supplying to Fair Price Shops. The total turn over of the Corporation after its coming into existence yearwise is as under—

1980-81—Rs. 25.00 Lakhs.

1981-82—Rs. 16.36 Lakhs.

1982-83—Rs. 25.68 Lakhs.

1983-84—Rs. 29.64 Lakhs.

The figures itself speak of the contribution made by the Corporation towards Public Distribution System.

Wheat and Rice is made available by the Food Corporation of India at its principal Distribution Centres and these are further taken to various parts of the Pradesh by State agencies. Other essential commodities are lifted by Civil Supplies Corporation direct from the source. At present (March, 84) there are 2,776 fair price shops functioning in the State which are making above commodities available to the consumers. For equitable distribution of essential commodities monthly quantum of distribution has been fixed in



respect of some of essential commodities which at present is as under—

Wheat	Subsidized Areas	Adult (above 12 years) 10 kg Child (2 years to 12 years) 6kg Infants (below 2 years) NIL.
	Non Subsidized Areas.	Adult (above 12 years) 8 kg Child (below 12 years) 4 kg
Rice	1 kg per head.	
Levy sugar	425 grams per head.	
Edible Oils	3 kg per family upto five members.	
	5 kg per family more than five members.	

Other commodities are supplied according to demand. Any person who is residing permanently at a particular place is entitled to draw above commodities. For this purpose, one has to get a Ration Card which can be applied to concerned Distt. Food and Supplies Controller on prescribed printed form duly verified alongwith a fee of fifty paise. On finding the facts given in the application form true the Ration Card is issued and one can draw ration on it from the fair price shops.

Under the Public Distribution System a fair price shop is allotted to a Cooperative institution. Where Coop. Society fails to accomplish his task, State Civil Supplies Corporation is requested to open its retail outlet but this is only if there are considerable number of consumers so that the retail outlet becomes an economically viable unit. When none of above is in position to open its shop the distribution work is given either to an individual depot holder of Panchayat. In this Pradesh there is no area which is not being served by any fair price shop.

The Government is not satisfied only by allotting essential commodities but continuous efforts are made to ensure the distribution of essential commodities to the consumers. During the year, 1982 and 1983 about 4,500 and 6,300 inspections were made respectively in respect of fair price shops. Besides

under the new 20 Point Programme of Hon'ble Prime Minister of India, the efforts are being made to strengthen the Public Distribution System. Public Distribution Committees and Food Advisory Cum Grievances Committees have been constituted at various levels which regularly review the working of Public Distribution System and provide suggestions & directives to improve its working. In addition to it feed back reports from each fair price shop are collected

at State Headquarter so that it could be ascertained whether essential commodities are distributed or not. This situation is reviewed by a Task Force constituted in Himachal Pradesh Sectt. by drawing one Deputy Director from Food and Supplies Department and a Deputy Registrar from Cooperatives department. This Task Force always tries to remove on the spot any bottle-neck being experienced in the supplies of essential commodities.

## SOCIAL WELFARE IN HIMACHAL PRADESH

—Shri K. C. Chauhan

Former-Director of Welfare, Himachal Pradesh.

The concern of the State Government for the Welfare of the weaker sections of the Society will be evident from the fact that budget for Welfare Department in 1969-70 was only Rs. 80 lac and now it is Rs. 860.80 lac for the year 1983-84.

Top priority has been given to Child Welfare activities. The Government of India, in 1974, evolved the National Policy for children as follows :—

“The nation’s children are a supremely important asset. Their nature and solicitude are our responsibility. Children’s programmes should find a prominent part in our national plans for the development of human resources, so that our children grow up to become robust citizens, physically fit, mentally alert and morally healthy, endowed with the skills and motivations needed by society. Equal opportunities for development to all children during the period of growth should be our aim, for this would serve our larger purpose of reducing inequality and ensuring social justice.”

“It shall be the policy of the State to provide adequate services to children, both before and after birth and through the period of growth, to ensure their full physical, mental and social development. The State shall progressively increase the scope of such services so that, within a reasonable time, all children in the country enjoy optimum conditions for their balanced growth.”

In the sphere of welfare of the children, the State Government is running a number of institutions for orphans and semi-orphans and the destitute children. Balik Ashrams are functioning at Kalpa in Kinnaur District Sarahan, Mashobra, Sooni and Tuti Kandi in Shimla District, Sujampur Tihra in Hamirpur District and Pragpur in Kangra District. In these Ashrams, free boarding, loading and education is provided to the destitute children.

The State Government has enacted its own Children Act on the pattern of Central Act, the objective of which is to provide for the care, protection, maintenance, welfare, training, education and rehabilitation of the neglected and delinquent children and for the trial of delinquent children in Himachal Pradesh. Under this act, a Children Home at Sundernager in Mandi District is functioning. A special School at Haroli in Una District has been set up for giving reformatory treatment to the delinquent children.



300 Balwaris and Creches are being run by the Indian Council Child Welfare, the State Social Welfare Board and a few other Voluntary Organisations.

With a view to reducing the rate of mortality and morbidity among the vulnerable section of children, 1,100 feeding centres are being run in which 45,000 children from the impoverished socio-economic backgrounds and environments are being benefited under the supplementary nutrition programme.

The Integrated Child Welfare Scheme, has emerged as a very important programme in the field of Child Welfare. Twelve ICDS Projects are functioning in the State with about 1,000 Anganwadis in these projects. These Anganwadis centres serve the most vulnerable sections of the population and provide an integrated package of services for children below 6 including health care, nutrition, immunization, pre-school education. At the same time, nursing and expectant mothers from poor families are given nutrition and are also covered under Functional Literacy scheme. In these projects, 28,197 children and 6,447 mothers are getting Supplementary Nutrition. All the children in the age group of 0—6 in the projects are covered under the health check up programme.

11,360 children are being covered under pre-schools education. The research has revealed that from the stand point of intellectual and emotional development of a child, the first five or six years are most crucial. The pre-school education therefore is of great significant. The Kuthari Commission had taken cognizance and included a chapter on pre-school education.

Although, for hill areas the Government of India had fixed a population of 700 for an Anganwari Centre, but taking cognizance of peculiar topography of the hills and the climatic conditions, the Government of India was gracious enough to allow flexibility for setting up Anganwari for villages which are isolated for want of means of communications. An

Anganwari Centre for such villages can be established for a lesser population. Under the New Twenty Point Programme, the performance of the ICDS Project in the State has been adjudged a very good.

In the sphere of women welfare, the department of Welfare has established 5 State Homes at Kalpa, Mashobra, Mandi, Kangra and Chamba, in which destitute and deserted women and the girls in moral danger are provided free boarding and lodging apart from training them in Crafts to enable them to earn their livelihood when they leave these homes. For the rehabilitation of such women, financial assistance up to Rs. 1,000 per women is also provided. Schemes of diversification of training to inmates are being introduced to render the rehabilitation of the inmates smooth, and meaningful.

With a view to providing residential accommodation to the working women in the towns, the Government has sanctioned 11 working women hostels. One has

been completed at Mandi, the construction of the rest is in progress. On construction of these hostels, a total expenditure of about Rs. 1 crore is involved.

As a measure of social security, the widows without any age limit having none to support them are provided pensions @ Rs. 50 per month. About 5,900 widows are being benefited under this scheme. Similarly, arrangements have also been made for functional literacy to adult women in various ICDS Projects, 5 Family and Child Welfare Projects, 3 Welfare Extension Projects and 5 Mahila Mandals are also being run through H.P. State Social Welfare Advisory Board for the Welfare of women on grant-in-aid basis, 23 Community Centres are being run for welfare of women and children.

The State Government has accorded a high priority to the welfare of the disabled. There are schemes for providing artificial limbs for the Orthopaedically handicapped. Scholarships ranging between Rs. 40



Help to Disabled

to Rs. 120 are given to disabled students in schools and colleges. In the year 1981, which was the year of the disabled, Government prepared a comprehensive plan of action for providing a package of relief for the disabled. A home for the handicapped was planned and is under construction at Sundernagar in Mandi District at a cost of Rs. 22.67 lac. The 50 bedded hospital will provide facility for physiotherapy for the physically handicapped. A vocational Training Centre has been designed in this Home.

The Government has reserved 3% posts in Govt. service for the disabled. Free travel concession in HRTC buses is also permissible for the disabled having more than 50% disability.

During the year of the disabled 1981, Government decided to give disability allowance to all the disabled in the state whose annual income is less than Rs. 600 a year. Accordingly, 4,596 disabled are getting this allowance. The scheme of giving artificial limbs has been liberalised.

At Shimla, 2 institutions for teaching and training the deaf and dumb and blind children are functioning. There is a similar institution for the Adults at Kamlanagar (Shimla).

A school for polio affected children is being run at Dharamsala. All these Institutions are being run by the Indian Council for Child Welfare, H.P. Branch Shimla, which is given grant-in-aid by the Government. The Indian Red Cross Society is also running a Destitute Home for Children at Shimla. In two schools at Shimla, Mentally Retarded Children are being given Schooling.

It has been decided to set up a Home for Rehabilitation of the lepers at Mandodhar in Solan District. The productive activities like Weaving, Carpentry, Handicrafts and Tailoring etc. will be arranged apart from Agricultural and Horticulture pursuits.

Old Age Pension Scheme of the State is a major programme of social security. Aged persons above 60 years of age having Annual income Rs. 600 or less and having none to support them are given pension @ 50 p.m. and 46,000 old persons are being benefited under this scheme. Thus the Government has provided an amount of Rs. 3.37 crores in the budget for 1983-84 for old age pension, widow pension and disability allowance. The scheme is under review in the Gram Sabhas to ensure that only the deserving one get the benefit.

The Department is implementing a number of social legislations such as Anti-Dowery Act, Anti-Beggery Act, Suppression of Immoral Traffic Act, Child Marriage restraint Act.

It is essential to see what is being accomplished with the money spent. Constant Monitoring and Evaluation of the delivery of Welfare Services is necessary. In Hill areas, this is more difficult than in plain areas. For instance, to supervise the proper functioning of the 100 Anganwari Centres in an ICDS Project by a CDPO energetic officer with drive is required. For proper functioning of the supplementary Nutrition Programme, it is necessary to ensure continuity of the supply of nutrition of good quality at competent rates in all the feeding centres by effective channels of distribution during 300 days in a year. The

goal of correctional services for rehabilitation of social deviants in Society is to be realised and these services have to ensure socio-economic rehabilitation of the inmates rather than providing custodial services.

Government gives huge amount of grant-in-aid to Voluntary Organisations for implementing various schemes of welfare of women, children and other weaker sections of Society. It has to be ensured that these grants are used for the purpose for which these are sanctioned and that these organisations maintain reasonable standard of services. The Govt. has made the Himachal Pradesh Grant-in-aid to Voluntary Organisation Rules which prescribe submission of periodical progress reports and returns by these organisations and the inspections and checks by officers of the Welfare Department. Observance of these rules in letter and spirit would result in improvement of functioning of these organisations.

Although the activities of the departmental have increased manifold but the establishment has not increased proportionately. The various schemes required to be implemented have to be monitored regularly. Moreover, the new concepts and programmes of social welfare in the field of welfare of children, women and the disabled and being originated and developed. The department requires intelligent and dedicated officers capable of understanding these ideas and implementing the schemes. The department has started recruiting District Welfare Officers and CDPOs through the HP Public Service Commission to cope with the increasing need of officers. The District Administration is to be involved in the activities of the Welfare Department to the degree and extent as it is being involved in the rural integrated development programmes.

Apart from Tehsil Welfare Officers appointed in recent years, the Department has no agency in the field to implement its various schemes, therefore co-ordination with a number of departments like Land Revenue, RID, Public Health, PWD, Education etc. is required. Public participation in programmes like ICDS is of great importance. To elicit this co-ordination and participation officers having flair for good public relation are needed.

## YOUTH SERVICES & SPORTS ACTIVITIES

—Shri C. Balakrishnan,  
Former-Director of Youth Services and  
Sports Activities, Himachal Pradesh.



Our country launched upon a unique programme of Community Development plus Extension on October 2, 1952. It was a Community Development Programme because its major objective was to develop the village community socially and economically. It was an extension programme because it developed channels of trained personnel to carry scientific and technical knowledge to the villagers. The most important of our resources as in any development programme are people who live in the rural areas and who need to be taught to become self-reliant, co-operative and responsible citizens. Nationally accepted objectives such as socialism, secularism, democracy, national integration and development of scientific temper were to be popularised among the rural folk. How was it to be achieved. The Extension Worker could not be expected to visit each and every door and thus the organisation of young women and men in the forum called Mahila Mandals and Yuvak Mandals came to be set up one in each village. This was the forum where the Extension Workers started meeting youth of the villages community and started disseminating new ideas before this assembly of youth. These Yuvak Mandals propagated the ideas further among the rural population. This was the beginning of youth services.

Like any other independent country, the voice of youth in India also began to be heard. The first Asian Games were held at New Delhi in 1951 in which a total of twelve countries participated in six events. With this, a modest beginning in the field of sports. Youth were awakened towards sports activities. The period upto the end of the sixties was confined mostly in tackling the problems of student youth various Committees were appointed and Conferences were held to look to the needs of student youth. The first such Committee was appointed by the University Grants Commission in 1948 under the chairmanship of Dewan Anand Kumar. An Education Commission was set up under the chairmanship of Shri D. S. Kothari which presented its report in 1966 stressing upon the services for student youth. A Committee on Student Welfare and Allied Matters under the chairmanship of Dr. Trigun Sen presented its observations in 1967. In between the Conferences of Vice Chancellors and Educationists thought in terms of the welfare of students and methods of curbing indiscipline among students.

It was, however, the beginning of the seventies when attention was given to the needs of non-student youth. A conference of the representative of Youth Organisations, Youth Services Agencies and Youth Leaders was convened in New Delhi on April 30, and May 1, 2, 1969. This conference felt that the world of non-student youth presents special problems because of their much larger number, their larger rural composition and the absence of institutional facilities for their getting together as was possible in the case of student youth. The National Advisory Board on youth in its meeting held in December, 1970 recommended taking up a national programme for non-student youth. It was decided that some youth centres be established in selected districts, with the centres being called Nehru Yuvak Kendras and this programme was inaugurated on 14th November, 1972. The activities visualised for Nehru Yuvak Kendras were :—

- (i) Non-formal education including adult education, education in agriculture, family life education, vocational and technical training, reading room and library services.
- (ii) Social service including work for better rural environment, work in urban slums, cleanliness, construction/repair of roads and sanitations, etc.
- (iii) Sports and games and physical culture including identification of talents.
- (iv) Recreational and cultural activities by revival of traditional forms of recreation, use of modern media inter Regional exchange of cultural troops.

To wit, the objective of the youth services or youth welfare is to provide opportunities to the non-student youth for self-expression, self development and cultural attainment preparation and training for work and family life, enabling them to assume social and civic responsibilities, to develop in them a spirit



of comradeship and patriotism, and a cultural outlook and to facilitate their participation in planning and implementation of the programmes of community and national development.

In Himachal Pradesh, the activities of youth whether it was youth welfare or sports were being looked after by the Education Department. This Department had inherited a Degree College at Mandi and a few schools from the princely States. The people then were clamouring for education to go to the masses and the Department rightly went on multiplying the number of schools and colleges. The burden of general education on the exchequer was so great that the Education Department could not pay adequate attention to the needs of sports and youth welfare activities.

On the other hand, the then office of the Development Commissioner went on creating Yuvak Mandals and Mahila Mandals through the agency of the Block Development Officers. Due to the multifarious activities of this Department, it could not retain the interest that the Mandals created by this Agency actually required. The result was that these ultimately became dormant.

The increasing number of non-student youth and the dormancy of the Mahila Mandals and Yuvak mandals in the hill area left no option with the Govt. but to start a separate Department called the Youth Services & Sports Department. This Department was started in July, 1982 in Himachal Pradesh to achieve the following objectives :—

- (i) To wean away youth from destructive and anti-social activities.
- (ii) Check on migration of rural youth to urban areas by providing the basic facilities of sports, employment etc. in the rural areas.
- (iii) To develop youth leadership.
- (iv) Fuller utilisation of youth manpower in nation building programmes.
- (v) To encourage consultancy services by the educated youth in rural areas.
- (vi) To promote economic support programmes for the benefit of youth in co-ordination with other Departments.
- (vii) To promote vocational training programmes for youth.
- (viii) To streamline the procedure of recognising the youth Organisation in the State for the purpose of grant-in-aid schemes and also extending encouragement to such organisations for undertaking youth Activities.
- (ix) To encourage talented youth by way of giving them awards and rewards.
- (x) To celebrate the International Youth Year 1985 by providing certain landmarks like the Youth Centre and Cultural complex at Shimla.

- (xi) To evaluate and monitor youth services programmes.
- (xii) To provide infrastructure facilities for sports in the rural as well as urban areas.
- (xiii) To inculcate sports and health consciousness amongst the population with regular participation in games and sports.
- (xiv) To provide wider and better coaching facilities.
- (xv) To encourage sports persons by way of providing them awards and rewards.
- (xvi) To take sports to the Rural areas by enhancing the number of Rural Sports Centres.
- (xvii) To fully equip the Rural Coaching Centers and Sports Centres.

#### Organisational Set up

The Directorate is headed by a Director of Youth Services & Sports who is also the Joint Secretary of the Department. This officer is drawn from the I.A.S. cadres. There are two Deputy Directors to assist him at the Headquarters. One Deputy Director, drawn from the H.P.A.S. cadre is also the Under Secretary of the Department and looks after the Youth Services wing while the other is a qualified sports person and is responsible for the sport wing.

The Youth Coordinators of the Nehru Yuvak Kendras have been declared as the Youth Services & Sports Officers of the particular district in which the Nehru Yuvak Kendra is located. All the Districts except the following four are covered by the Nehru Yuvak Kendras :—

- (i) Mandi
- (ii) Shimla
- (iii) Sirmaur, and
- (iv) Lahaul-spiti.

The Additional District Magistrates at Mandi and Shimla have been designated as the Youth Services & Sports Officers for their respective districts. The Project Officer at Keylong has been designated as District Youth Service & Sports Officer for Lahaul-Spiti District and the Sports Officer Nahan has been designated as the District Youth Services and Sports Officer for Sirmaur District.

#### Schemes

*Construction of Utility Stadia*—The hardy and sports loving people of Himachal Pradesh can really make a mark in the Sports world but the lack of infrastructure has always stood in their way. There are no play grounds worth the name in the rural areas of the State. It is, therefore, proposed that each of the 69 Development Blocks will have one Utility Stadium with a good play field. During the year 1984-85 it is thus, proposed to construct 4 Utility Stadia throughout the State.

The Central Assistance for the construction of these Stadia will be 75% and upto a maximum of Rs. 2.50 lakhs per stadium.

The plan outlay for this scheme for 1984-85 will be as under—

	<i>Rs. in lakhs</i>
(i) total cost per Utility Stadium . . . . .	3.35
(ii) Central share per stadium . . . . .	2.50
(iii) State share per stadium . . . . .	0.85
(iv) Total plan outlay required Rs. 3.40 lakhs for 4 Stadia in Non-tribal areas.	

14. *Construction of play fields*—There are 2357 Panchayats in the State. It is proposed to construct one play field in each Panchayat in a phased manner. During 1984-85, 31 play fields will be constructed. These play fields will benefit the people living in the rural areas of the State. The amount required for the construction of each play field is as under—

(i) Total cost . . . . .	Rs. 27,000
(ii) Central assistance . . . . .	@75% or Rs. 20,000 whichever is less
(iii) State share . . . . .	Rs. 7,000

*Himachal Pradesh Sports Council*—The Himachal Pradesh sports Council has been functioning in the State since 1959-60. The activities of the Sports Council, in brief, are :—

- (i) State awards/cash awards to distinguished sports persons.
- (ii) Grant to State Sports Associations.
- (iii) Organising Rural Sports Tournaments.

Himachal Pradesh has earned a name in the following tournaments in the year 1983-84 :—

- (i) Top position in North Zone Volleyball Tournament.
- (ii) Top position in North Zone Boxing Championship.
- (ii) Top position in All India Services Kabaddi Tournament.

The Sports Associations which have been lying dormant for want of grants took active interest in organising various tournaments during 1983-84. This was largely because of the fact that the Himachal Pradesh Sports Council was in a position to provide adequate funds to the various associations.

*Youth Centre-cum Sports & Cultural Complex at Shimla at a cost of Rs. 70.00 lakhs*—This Youth Centre is to be completed by the year 1985 which has been declared as the International Youth Year by the General Assembly of the United Nations.

This Youth Centre will have a modern Auditorium having a capacity of 1000 besides of Gymnasium and Boxing ring.

*The State Youth Board*—A State Youth Board has also been formed in the State. Its objectives are to promote youth activities other than sports in the State by giving grant-in-aid to various Youth Associations. The folk culture and the folk traditions of the older generation are gradually dying out. It is incumbent on the Youth to keep up the cultural heritage, for which the State of Himachal Pradesh is well known, and this can only be done if the various youth organisations functioning in the field are adequately funded, so that they remain active.

#### Budget

Budget	Plan	Non-Plan	Total
1982-83 . . . . .	3.00	—	3.00
1983-84 . . . . .	60.00	8.00	68.00
1984-85 . . . . .	65.00	12.37	77.37
Grand Total . . . . .	128.00	20.37	148.37

The Directorate of Mountaineering and Allied Sports also forms a wing of the Department of Youth Services & Sports. This Directorate looks after Mountaineering, Skiing, Water sports and Hang Gliding. The Plan outlay for 1984-85 of the Directorate of Mountaineering and Allied Sports is Rs. 25.00 lakh.

## COOPERATIVE MOVEMENT IN HIMACHAL PRADESH

**Shri S. R. Bhardwaj,**  
Labour Commissioner,  
Himachal Pradesh.



### Introduction

The Cooperative movement has been playing a very important role in improving the socio-economic conditions of the rural population. In Himachal Pradesh, this movement gained momentum after the launching of First Five Year Plan in the year 1951. Prior to this, at the time of formation of Himachal Pradesh in 1948, there were 663 Cooperatives inherited by the Pradesh from the erst-while princely States. Many of these Societies were dormant. At present there are 3,353 different kinds of Cooperative Societies in the Pradesh, out of which 2,108 are the Primary Agri. Credit Societies. 83% rural population with 100% coverage of villages have been brought into the fold of Cooperatives by now in the Pradesh.

### Credit

There is a unitary system of Cooperative banking in the Pradesh. The H.P. State Cooperative Bank Ltd; Shimla which is the Apex Bank of the Pradesh is operating in 6 Districts of the Pradesh with its 40 branches including Head office at different places. The other two Central Banks functioning in the State, are Kangra Central Coop. Bank Ltd; Dharamsala and the Jogindra Central Coop. Bank Ltd; Nalagarh, Distt. Solan. The Kangra Central Coop. Bank Ltd; Dharamsala functioning in 5 Districts with its 54 branches including Head Office. The Jogindra Central Cooperative Bank is only functioning in Solan District with its 11 branches including Head Office.

Short and Medium term loans are being advanced by these banks to Primary Agri. Credit Societies, which further advance it to their members. Short term loan is advanced for the purpose of raising crops, upto a period of 15 months and medium term loan for a period of 3 to 5 years. The medium term loan in the Pradesh is being advanced for purchase of milch cattle, bullocks, pump sets etc.

At Apex level there is one Cooperative Land Development Bank and out of 12 Districts in the Pradesh it is operating in 9 Districts of the Pradesh with a net work of 18 branches. There is also one Primary Land Development Bank Kangra at Dharamsala and it is operating in 3 Districts through its 5 branches. Long term loan in the Pradesh is being given by these two banks. During the year 1982-83, these two

banks advanced long term loans of the value of Rs. 101.06 lakhs as against Rs. 88.73 lakhs of the year 1981-82.

### Primary agricultural credit societies

The PACs are the most important institutions supporting the programme of agricultural credit. The reorganisation programme of these societies is almost complete in the State and the number of these societies as on 30-6-83 stood at 2,108. The membership of these societies as on 30-6-83 was 6.52 lakhs. Out of the total membership of 6.52 lakhs, 5.06 lakhs members were of the category of weaker sections belonging to the categories of small and marginal farmers, rural artisans agricultural labourers etc. thereby forming 77% of the total membership. Also out of total membership of 6.52 lakhs, 1.53 lakhs belong to the category of scheduled caste and scheduled tribes thereby representing about 24% of the total membership.

The cooperatives have also been playing vital role in providing credit facilities to the weaker sections. Out of short terms and medium term loans amounting to Rs. 10.50 crores advances during the year 1982-83 Rs. 6.39 crores were advanced to the members belonging to the weaker sections forming 60% of the total loan advanced. Thus, it is the endeavour of the Cooperatives to assist the weaker sections to the maximum.

In order to assist the persons belonging to the scheduled castes and scheduled tribes the following specific programmes have been formulated:—

- (i) For enrolling members from the scheduled caste community as members of cooperatives societies, subsidy for the purchase of one share is being given under special Central Assistance for scheduled caste and scheduled tribes.

- (ii) Interest subsidy is also being provided to the PACs to make available short term and medium term loans on D.R.I. under the State Plan Schemes.

There has been significant improvement in the recovery of overdues in the State. During the year 1982-83 a number of steps were taken for the liquidation of overdues & as a result of these efforts, there has been remarkable **IMPROVEMENT IN THE POSITION OF RECOVERY OF OVERDUES** both at the bank level as well as at PACs level.

(in lakhs)

	Amount as on		%age of overdues to demand as on	
	30-6-82	30-6-83	30-6-82	30-6-83
1. Apex Bank . . . . .	166.77	101.93	82.0	49.7
2. KCCB . . . . .	38.28	80.42	35.9	25.83
3. JCCB . . . . .	47.67	43.43	53.5	49.9
4. PACS . . . . .	496.80	476.19	40.0	36.0

#### Deposit mobilisation

The deposit mobilisation by Cooperatives in the State at the Bank level as well as at the village level has been a regular feature. In this respect the cooperatives have made significant headway, as would be evident from the data given below:—

(in lakhs)

	Position as on	
	30-6-82	30-3-83
1. State Cooperative Bank . . . . .	1,897.55	2,276.80
2. Kangra Central Coop. Bank . . . . .	2,155.64	2,686.90
3. Jogindra Central Coop. Bank . . . . .	154.18	182.88
4. PACS . . . . .	1,471.26	1,637.96

#### Marketing and consumer business

4 tier system of Cooperative Marketing is working in the Pradesh. At Apex level in the Pradesh there is one H.P. State Coop. M&C Federation Ltd; Shimla. It mainly deals in sale purchase of fertilisers, potato, apple, cement and other controlled and non-controlled commodities on wholesale basis. At District level 11 Distt. Coop. Marketing & Consumer Federation functioning. At Tehsil level, 48 Tehsil Cooperative Marketing & Supply Unions/Marketing societies are functioning. At village level, the various types of Cooperative Societies are functioning as fair price shops. At present 2,064 fair price shops are functioning in the Cooperative Sector, out of 2,742, which is 75% of the total number of fair price shops.

During the year 1981-82 goods worth Rs. 2,440.11 lakhs were sold by these Cooperative fair price shops in retail against a target of 13 crores. Against a target of 18 crores consumer goods worth Rs. 2,943.99 lakhs have been sold by these price shops during 1982-83.

As regards the wholesale business done by the Apex Federation and the Distt. Federations during 1981-82 and 1982-83 the details are as under:—

(Rs. in lakhs)

	1981-82	1982-83
(a) Agriculture requisites supplied	1,237.99	1,083.67
(b) Consumer goods distributed	1,347.69	1,162.56

#### Storage

Upto the end of year 1982-83 the Govt. assistance for the construction of 920 rural and 119 marketing godowns were provided under the National Coop. Development Corporation programme. 793 rural and 101 marketing godowns have been constructed upto 30-6-83 having a storage capacity of 79,300 and 25,200 MT. respectively. 86 rural and 10 marketing godowns are under construction and the construction of 18 rural godowns is yet to be taken up. The societies have 1,149 hired godowns also with a view to ensure proper storage of marketing produce, agriculture requisite and consumer goods. The total capacity of societies godowns as on 30-6-83 was 1,15,075 MTs whereas that of hired godowns was of the order of 43,086 tonnes. The National Cooperative Development Corporation has included the state under World Bank Storage Programme. The total Project cost is estimated at about Rs. 9.75 crores. Under this Project 336 rural godowns and 22 marketing godowns were sanctioned during 1981-82 and 1982-83 as per details given below:—

#### No. of godowns sanctioned under the World Bank Storage Project as on 30-6-83

Year	Rural	Marketing
1981-82 . . . . .	177	6
1982-83 . . . . .	159	16
	336	22

#### Process of construction work of godowns

Sr. No.	Different stages of	Rural	Marketing	Capacity of completed godowns	
				Rural	Marketing
1	Lay out given . . . . .	131	11		
2	Construction taken up . . . . .	46	11		
3	Reached upto plinth level and above . . . . .	40	5		
4	Reached upto roof level & above . . . . .	20	5		
5	Godowns completed . . . . .	25	5	1250MT	6500MT
6	Construction work not started as yet. . . . .	74	11*		
		326	43	1250MT	6500MT

NOTE \*In addition to above tender invited of 6 out of it work allotted in 5.

## Fisheries

Keeping in view the potential of fishing in the Bhakra Lake and to save the poor fishermen from the clutches of the middlemen, 19 fisheries societies were organised, mostly in the Bilaspur and Una Districts of the Pradesh in the past years. The societies have further organised a fisheries Distt. Coop. Federation with Headquarter at Bilaspur. The main purpose of this Federation is to arrange collection and sale of fish from the Primay Fisheries Societies.

The value of fish caught and sold during the year 1982-83 was Rs. 95.01 lakhs and 103.43 lakhs as compared to Rs. 81.28 lakhs and Rs. 88.73 lakhs during the previous year 1981-92 respectively.

## Cooperative tea factories

Kangra Distt. provides suitable climate for growing of tea bushes. In the past, the tea growers of the area were not getting reasonable rates of tea leaves and of the processed tea. Hence in the past, 3 tea processing factories in the Coop. Sector at Bir, Baijnath and Palampur were set up. The fourth tea factory is also being set up at Dari (Dharamsala). The total membership of all the 4 factories is 785. Paid up share capital Rs. 93.04 lakhs and project cost of these factories is 143.57 lakhs. The total manufacturing capacity of these factories per year is eleven lakhs kgs of made tea. The Rational Coop. Development Cooperation has provided finances in the shape of share capital and loan to these factories through State Govt. These factories sold made tea worth Rs. 81.60 lakhs during 1982-83 as compared to Rs. 57.09 lakhs of the year 1981-82.

## Processing societies

Himachal Pradesh has its own place in the country in apple cultivation. In order to improve the financial condition of the growers of the Pradesh, in the apple cultivation Belt, by providing reasonable price of the cull-fruits, processing Coop. Societies have also been organised in the Pradesh. At present there are 6 processing Coop. Societies in the Pradesh with a membership of 1,305 paid up share capital Rs. 106.61 lakhs and working capital of Rs. 125.10 lakhs. These societies purchase fruits from their members and non-members and process them for further sale in the shape of Jam, Juice etc. Processed goods worth Rs. 4.59 lakhs were sold by these societies during 1982-83.

## Milk Cooperative Societies

There are 122 Primary Milk Coop. Societies, 6 Milk Unions and one Milk Federation at the State Headquarter in the Pradesh. These Primary Milk Coop. Societies at the village level collect/purchase milk from members and non-members. During the year 1982-83 these societies collected milk worth Rs. 95.91 lakhs. The milk collected by the societies is being purchased and sold by the Department of Animal Husbandry except in Una District where this work is being done by the Una Distt. Coop. Milk Union w.e.f. 2nd Oct., 1983. This work has been taken up by the H.P. State Cooperative Milk Producers Federation Ltd., Tutu in 6 Districts of the Pradesh. The Pradesh has been included in the

operation Flood II programme for Dairy Development. This scheme costs Rs. 3.33 crores and will be operative in 7 Districts of the Pradesh.

## Sixth Five Year Plan

The outlay for the Sixth Five Year Plan under the Sector of Cooperative has been fixed at Rs. 675.00 lakhs. The main scheme in the Plan includes share capital contribution to the societies, assistance for the appointment of competent personnel in the societies, assistance of the construction of storage capacity, assistance for subsidising rate of interest on short and medium term loans to schedule caste and schedule tribes etc. The item-wise break up of provision made given here as under :—

Sr. No.	Head of Development	Sixth Plan	Exp. during		Anticipated Exp. during 1983-84
			1981-82	1982-83	
1	Credit Cooperatives	131.00	55.16	30.72	43.93
2	Warehousing, Marketing & Storage	207.00	38.85	47.32	46.00
3	Processing Cooperatives	50.00	6.29	7.89	7.00
4	Consumer Cooperatives	70.00	15.67	14.66	8.00
5	Fishermen Cooperatives	7.00	2.52	1.99	2.00
6	Industrial Cooperatives	20.00	2.32	2.15	2.00
7	Dairy Cooperatives	20.00	2.58	2.20	1.25
8	Training & Education	20.00	4.62	5.15	4.00
9	Direction & Administration	100.00	23.35	21.80	26.66
		675.00	150.36	133.88	140.84

Within the above outlay, the programme approved under tribal Sub Plan and special plan for scheduled castes for sixth Plan is of the order of Rs. 81.00 lakhs and Rs. 100.00 lakhs respectively.

In addition to total outlay of Rs. 675.00 lakhs under the State Sector, outlay approved under special central assistance programme for tribal area and for scheduled caste is of the order of Rs. 74.00 lakhs and Rs. 20.00 lakhs respectively.

The break up of this outlay and expenditure thereof is as under :—

Sl. No.	Head of Development	Sixth Plan outlay	Exp. during				Anticipated during 1983-84		
			Tribal areas	Sch. caste	T.A.	S.C.	T.A.	S.C.	
1.	Credit Cooperatives	14.00	4.00	1.75	1.80	3.73	2.16	4.00	2.00
2.	Marketing & Storage	52.00	—	10.58	—	10.76	—	10.00	—
3.	Consumer Cooperatives	8.00	—	0.51	—	0.41	—	1.00	—
4.	Industrial Coops	—	11.00	—	0.60	—	0.35	—	0.50
5.	Dairy/Fishermen coops	—	5.00	—	0.60	—	0.49	—	0.50
		74.00	20.00	12.84	3.00	14.90	3.00	15.00	3.00

# STATE INCOME-ITS GROWTH IN HIMACHAL PRADESH AND COMPARISON OF PER CAPITA INCOME WITH OTHER STATES

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## Summary of the article

The paper defines the term 'State Income' and gives its relationship with the net state domestic product. It traces the history of the preparation of State Income estimates in different states and reviews the present positions. The uses of state and per capita income estimates have been discussed.

The growth of State Domestic Product in Himachal Pradesh has been given in three phases. First phase covers the period 1950-51 to 1965-66 and relates to old Himachal Pradesh while the second and third phases pertaining to present Himachal Pradesh cover the period '1967-68 to 1969-70' and '1970-71 to 1982-83', respectively. The estimates have also been given by broad sectors for three different points of time. Lastly, the per capita income of different states has been given for latest three years alongwith a comparison with the per capita income at the national level.

## Introduction

State Income or the Income of the resident population of a state measures in monetary terms the totality of commodities and services produced during a given period of time within the geographical boundary of the state counted without duplication plus the net income received from other regions. Adjustment for net income from outside the State is almost impossible due to the open boundary of the States and the difficulty in collecting the relevant data regarding inter-state transfer of goods and services and flow of funds. Thus estimates of income accruing to the normal residents of a State which incidentally provide a suitable measure of their welfare are not possible to compile with the present availability of data. The State Income estimates available are, therefore, the measures of income originating within the boundaries of the states and are appropriately termed as net state domestic product at factor cost.

## Development of estimates of state income

The work on preparation of State income was first started in Bihar, Uttar Pradesh and West Bengal sometimes around 1948-49. The estimates for these states for some of the years were published in early

fifties. Following the publication of the First and Final Reports of the National Income Committee in 1951 and 1954 respectively, a number of other states like Assam, Madhya Pradesh and Punjab prepared their first estimates broadly following the methodology adopted by the National Income Committee. In Himachal Pradesh, the work of State Income was initiated in 1959-60 and first set of estimates for the Pradesh covering the period 1950-51 to 1960-61 were brought out in the publication 'State (National) Income of Himachal Pradesh' in 1963.

With the progress of time, the work of estimation on state income has considerably improved and expanded in different states. Today, practically all the states except Meghalaya, Nagaland and Sikkim and a few Union Territories are preparing state income estimates on a regular basis. The State Statistical Bureaus are generally preparing the estimates following the standard methodologies laid down by the Central Statistical Organisation, (Govt. of India) working group on state income from time to time and modified subsequently by the committee on Regional Accounts taking into account all recent available data. These estimates are prepared both at current and constant prices.

## Uses Present and Potential

The estimates of state income are by far the most important single indicator of the economy of a state. These estimates over a period of time reveal the extent and direction in the level of economic development. Sectoral composition gives an idea of the relative position of different sectors in the economy and their comparison over a period of time provide a measure of structural changes in the pattern of production and services which is of vital importance for purpose of economic analysis. The sectoral estimates of SDP (State income) are also used for policy formulation in given sectors. The income generated in agricultural activities, for

example, is used for purposes like measuring productivity differentials among districts of taxable capacity. Thus the estimates of agricultural output per hectare in different districts is one of the indicators used for identifying backward districts and formulating agricultural development programmes. These estimates for the agricultural sector are also used for studying the incidence of prevailing agricultural taxes, potential for agricultural taxation and revision or rationalisation of agricultural income tax rates. In states where the contribution of registered manufacturing industries to total SDP is comparatively high, the estimates of income originating in registered manufacturing industries at current and constant prices are used for watching the growth of the sector. The development of small scale manufacturing industries is one of the accepted policies for increasing employment opportunities. The study of the part played by the unregistered manufacturing sector in the development of the state economy and the assessment of the fund required for increase in its contribution to state income is not only helpful in formulating the investment policy but also in directing the progress of the state economy along desired lines.

In budgetary work also the estimates of state income are often used for studying the scope of resource mobilisation from different sectors of the economy and for shaping the fiscal policy in a rational basis. For assessment of tax burden, taxable capacity and tax efforts, per capita income and income at the sectoral level are often made use of. Similarly before introducing a new tax or increasing any prevalent tax or determining a new source of taxation, the levels of output at the sectoral level becomes an important point for consideration. State income is also used for assessing the impact of budgetary transactions on the state economy.

The estimates of per capita state income are regarded as an important tool to measure regional disparities and is now being increasingly used by various policy makers. The planning Commission has been using per capita income at the state level as one of the criteria for determining the extent of central assistance to each individual state. Thus nearly 20 per cent of the total assistance to the states is based on the estimates of state income which is determined in the following manner :—

- (i) 10 per cent is allocated on the basis of per capita income (over 3 years). For purposes of measurement of tax efforts only the state taxes are taken into account. The rates of the state tax receipts to state income determines the direct proportion on the basis of which the allocation is made.
- (ii) Another 10 per cent of the total assistance is allocated to the states having average per capita income (over last 3 years) below the all India average. The procedure

of allocation is the deviation method according to which each state is allocated an amount  $A_i$  which is obtained as.

$$A_i = \frac{T}{P} \left( 1 + \frac{X - X_i}{X} \right) P_i$$

Where T= Total amount to be distributed

P= total population

$\bar{X}$  = average per capita income of all states.

$X_i$  = Average per capita income of the state.

$P_i$  = Population of the state.

The fifth and sixth Finance Commissions have also considered per capita income in a state as an important yardstick for obtaining an idea of development and have used this measure as the criterion for assessing the relative economic position of the states. The Seventh Finance Commission have used the per capita state income alongwith 1971 population as the criterion for determining the share of each state in additional duties of excise from sugar and tobacco. This Commission has also used per capita net state domestic product as one of the criteria of allocation of divisible pool of Union Excise Duties.

The estimates of domestic product when available for areas smaller than the states become one of the more important indicators for studying the stage of development of such areas. Some states use per capita domestic product at the district level as the primary indicator in this respect. But some studies have indicated that per capita income by itself may not be sufficient as an indicator for assessing the differentials in the stage of development of regions in as much as state/district with high per capita income but associated with low population density may not necessarily be economically advanced and state/district with low per capita income but having high population density may not be very backward. However, for a satisfactory assessment of the stage of development indicators other than per capita income should also be taken into account. Thus indicators like gross value of agricultural output per person in rural areas, net area sown per agricultural worker, cultivable area per agricultural worker, irrigated land, and number of manufacturing establishments using electricity etc. have been used by the Planning Commission and the state government for determining the backward areas. The other indicators which could be used for the purpose are incomes of different sections of the population within regions, details of savings by households, sectorwise factor incomes with corresponding employment and the like. The use of several indicators, however, raise the question of their aggregation into a single index and this question has not been answered satisfactorily by the planning authorities either at the centre or at the regional level.

### Growth of State Income of Himachal Pradesh

As already mentioned estimation of state income in Himachal Pradesh has been attempted from 1950-51 onwards. This series of SDP has been compiled upto 1965-66 covering the first three five year plans both at current and constant (1950-51) prices. In 1966-67, the Pradesh underwent territorial changes with the re-organisation of erstwhile Punjab State when hilly areas of that State were added to Himachal Pradesh. With this change over a new series of SDP was developed for the years 1966-67 to 1969-70 at current and 1960-61 prices. SDP estimates for the year 1966-67 are, however, not good enough to be used for any comparisons because this was the year of territorial change taking place in November, 1966 as a result of which basic data for certain sectors could not be made available for the complete year. Presently the Bureau of Economics and Statistics is compiling a revised series of estimates from 1970-71 onwards at current and 1970-71 prices. The discussion of growth of Pradesh's economy has been discussed in three phases in the following paragraphs, the first phase relates to SDP estimates of old

Himachal Pradesh for the period upto 1965-66 while the second and third phases relate to the present Himachal Pradesh and cover the period 1967-68 to 1969-70 and 1970-71 to 1982-83 respectively.

### Growth during 1950-51 to 1965-66 (Old H.P.)

The SDP of old Himachal Pradesh increased from Rs. 26.49 crores in 1950-51 to Rs. 40.20 crores in 1965-66 at constant prices. Thus during this period of 15 years, the SDP recorded an increase of 51.7 percent. If these end years alone are considered, the average annual simple growth rate works out to 3.4 percent. The per capita income rose from Rs. 240 in 1950-51 to Rs. 389 in 1965-66 at current prices. At constant prices, the per capita income rose to Rs. 281 in 1961-62 but again fell down to Rs. 240 in 1965-66. The estimates of state and per capita income for the years 1950-51 to 1965-66 both at current and 1950-51 prices as well as percentage increase in these estimates over the previous years at 1950-51 prices are given in the following table :

Year	State Income		Per capita income		Percentage increase over the previous year at 1950-51 prices	
	At current prices (Rs. crores)	At constant (1950-51) prices (Rs. Crores)	At current Prices (Rs.)	At Constant (1950-51) prices (Rs.)	Total	per capita
1	2	3	4	5	6	7
1950-51	26.49	26.49	240	240	—	—
1951-52	26.25	25.49	235	229	(—)3.8	(—)4.6
1952-53	24.23	23.61	215	210	(—)7.4	(—)8.3
1953-54	27.56	26.17	242	230	10.8	9.5
1954-55	26.38	27.04	229	235	3.3	2.2
1955-56	30.21	28.39	258	243	5.0	3.4
1956-57	34.14	30.14	286	253	6.2	4.1
1957-58	35.68	30.31	293	249	0.6	(—)1.6
1958-59	40.60	31.75	325	254	4.8	2.0
1959-60	43.10	33.62	335	261	5.9	2.8
1960-61	47.81	35.16	359	264	4.6	1.1
1961-62	55.02	38.84	398	281	10.5	6.4
1962-63	48.62	36.15	337	251	(—)6.9	(—)10.7
1963-64	56.29	39.34	373	261	8.8	4.0
1964-65	62.71	41.06	396	265	6.7	1.5
1965-66	65.09	40.20	389	240	(—)4.2	(—)9.4

### Growth during 1967-68 to 1969-70 and 1970-71 to 1982-83 (Present Himachal Pradesh)

On the basis of figures of state domestic product for the years 1967-68 to 1969-70 at constant (1960-61) prices the growth rate works out to

7.7 percent in 1968-69 and 2.0 percent in 1969-70. In terms of per capita income the growth was 5.4 percent during 1968-69 while there was no change during 1969-70. The following table gives the total and per capita income alongwith the percentage change over the previous year at 1960-61 prices:—



Year	State income		Per Capita income		Percentage increase over the previous year at 1960-61 prices	
	At current price (Rs. crores)	At constant (1960-61) prices (Rs. crores)	At Current prices (Rs.)	At Constant (1960-61) prices (Rs.)	Total	Per Capita
1	2	3	4	5	6	7
1967-68	171.34	101.04	532	314	—	—
1968-69	189.37	108.81	576	331	7.7	5.4
1969-70	196.59	110.98	586	331	2.0	—

The state income of the Pradesh during 1970-71 was Rs. 232.40 crores, which according to quick estimates, increased to Rs. 824.51 crores and Rs. 303.41 crores at current and 1970-71 prices, respectively, in 1982-83. The per capita income at current prices rose from Rs. 678 in 1970-71 to Rs. 1865 during 1982-83 while at constant prices it increased to Rs. 686 during the same period. The following table gives the estimates of total and per capita income both at current and 1970-71 prices from 1970-71 to 1982-83.

Year	Total Income		Per Capita Income	
	At Current Prices (Rs. crores)	At constant (1970-71) prices (Rs. crores)	At Current prices (Rs.)	At constant (1970-71) prices (Rs.)
1	2	3	4	5
1970-71	232.40	232.40	678	678
1971-72	250.52	237.73	716	680

1	2	3	4	5
1972-73	274.78	239.11	769	669
1973-74	341.65	252.89	936	693
1974-75	390.79	252.76	1048	678
1975-76(P)	410.47	280.98	1079	738
1976-77(P)	399.54	266.16	1029	686
1977-78(P)	466.56	288.81	1178	729
1978-79(P)	523.13	299.70	1295	742
1979-80(P)	530.67	262.11	1289	637
1980-81(P)	644.14	290.12	1521	685
1981-82(P)	767.25	314.98	1773	728
1982-83(P)	824.51	303.41	1865	686

P—Provisional.

Q—Quick.

## PER CAPITA INCOME

RUPEES

2100

1800

1500

1200

900

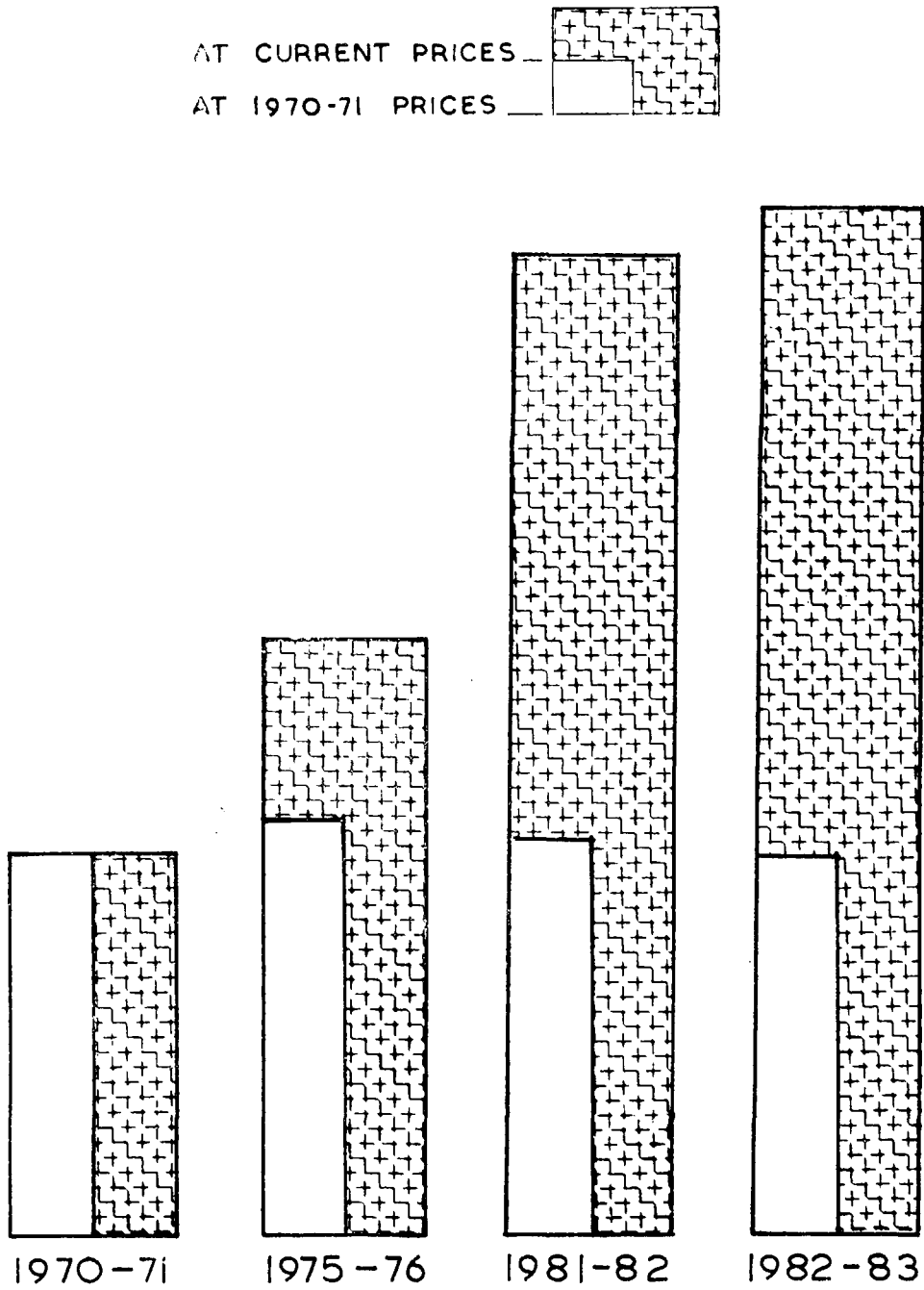
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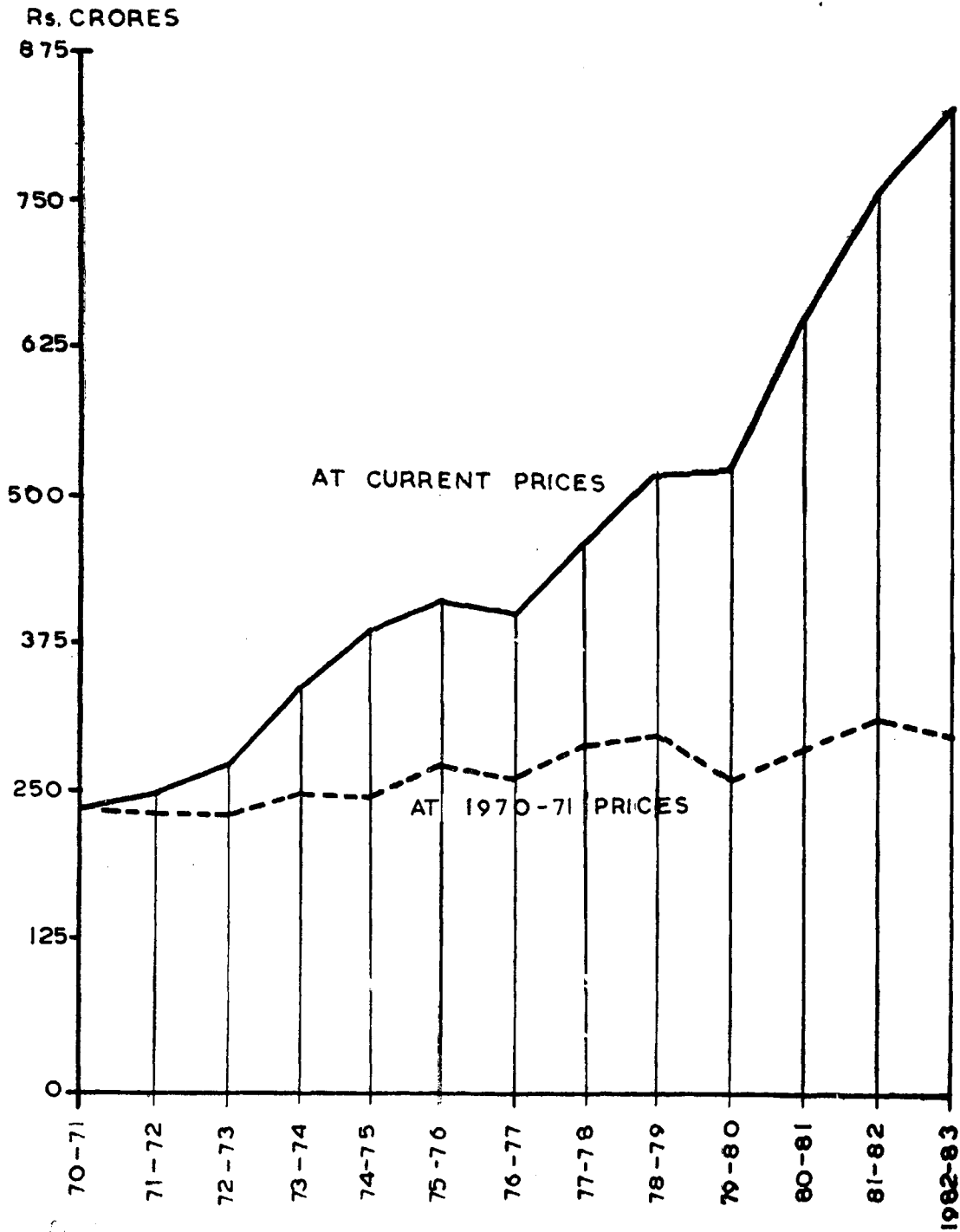
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AT CURRENT PRICES

AT 1970-71 PRICES



## STATE DOMESTIC PRODUCT



The average annual rate of growth along with simple average of percent changes over the previous years in total and per capita state domestic product

at 1970-71 prices are given in the following two tables :—

*Average annual rate of growth in state domestic product at 1970-71 prices*

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
1970-71	2.29	1.44	2.88	2.15	3.95	2.41	3.28	3.34	1.58	2.49	3.04	2.48
1971-72		0.58	3.17	2.10	4.36	2.44	3.45	3.49	1.49	2.51	3.12	2.50
1972-73			5.76	2.86	5.62	2.90	4.02	3.98	1.62	2.75	3.40	2.69
1973-74				(-0.05)	5.56	1.95	3.59	3.62	0.93	2.32	3.11	2.35
1974-75					11.16	2.95	4.80	4.54	1.13	2.72	3.56	2.65
1975-76						(-5.27)	1.62	2.34	(-1.38)	1.03	2.29	1.44
1976-77							8.51	6.14	(-0.09)	2.61	3.80	2.56
1977-78								3.77	(-4.39)	0.64	2.62	1.36
1978-79									(-12.54)	(-0.93)	2.24	0.76
1979-80										10.69	9.63	5.20
1980-81											8.57	2.45
1981-82												(-3.67)

*Average annual rate of Growth in per capita state domestic products at 1970-71 prices*

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
1970-71	0.29	(-0.67)	0.75	0.03	1.79	0.32	1.17	1.24	(-0.47)	0.33	0.87	0.32
1971-72		(-1.62)	0.99	(-0.06)	2.17	0.32	1.31	1.38	(-0.56)	0.34	0.93	0.32
1972-73			3.59	0.72	3.43	0.81	1.90	1.88	(-0.41)	0.58	1.22	0.52
1973-74				(-2.16)	3.35	(-0.12)	1.48	1.54	(-1.08)	0.15	0.92	0.18
1974-75					8.85	0.90	2.69	2.46	(-0.86)	0.54	1.36	0.47
1975-76						(-7.05)	(-0.39)	0.33	(-3.29)	(-1.12)	0.11	(-0.73)
1976-77							6.27	4.03	(-2.03)	0.36	1.54	0.33
1977-78								1.78	(-6.19)	(-1.61)	0.36	(-0.86)
1978-79									(-14.15)	(-3.31)	(-0.11)	(-1.53)
1979-80										7.54	6.91	2.68
1980-81											6.28	0.26
1981-82												(-5.77)

For studying the sectoral shifts in state domestic product, economic activities have been broadly/divided in three district sectors viz. primary, secondary and tertiary. Primary sector includes agriculture; forestry and logging; fishing and mining and quarrying while secondary sector includes manufacturing (registered and unregistered); construction and electricity, gas and water supply. Tertiary sector is further split into (i) transport, communication and trade; (ii) finance and real estate; and (iii) community and personal services. The total and percentage contribution of these sectors is given in the following table for three different points of time.

*Net State Domestic Product by sectors*  
(at current prices)

Sector	1970-71	1975-76	1981-82
1. Primary	132.85 (57.16)	226.06 (55.07)	413.62 (53.91)
2. Secondary	39.24 (16.89)	72.88 (17.76)	140.01 (18.25)

Sector	1970-71	1975-76	1981-82
3. Tertiary	60.31 (25.95)	111.53 (27.17)	213.62 (27.84)
(a) Transport, storage, communications trade, hotels and restaurants	20.45 (8.80)	32.95 (8.03)	57.55 (7.50)
(b) Banking and Insurance, real estate and ownership of dwellings	8.33 (3.58)	19.86 (4.84)	48.58 (6.33)
(c) Public administration and other services	31.53 (13.57)	58.72 (14.30)	107.49 (14.01)
Total	232.40 (100.00)	410.47 (100.00)	767.25 (100.00)

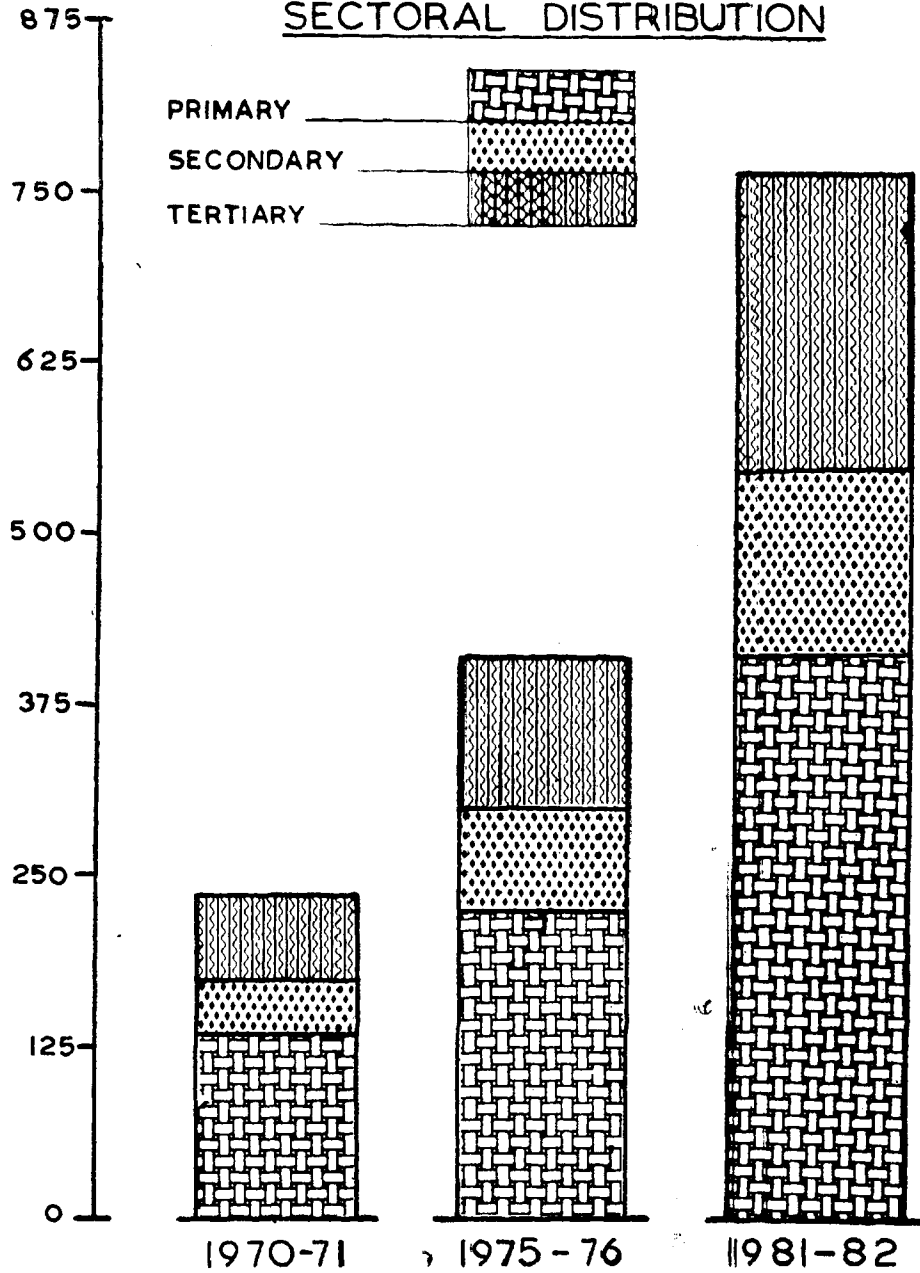
Figures in brackets indicate percentage to total.

# STATE DOMESTIC PRODUCT

AT CURRENT PRICES

## SECTORAL DISTRIBUTION

Rs. CRORES



### Comparison of per capita income of different states

The comparative per capita net state domestic product at current prices for different states as prepared by the respective State Statistical Bureaus have been given in the table below for the years 1979-80 to 1982-83. The table reveals that Punjab has the highest per capita income during 1982-83 (Rs. 3484) followed by Haryana (Rs. 2798) Maharashtra (Rs. 2525) and Gujarat (Rs. 2182). Himachal Pradesh occupies fifth place with a per capita income of Rs. 1865 in 1982-83. Bihar has the lowest per capita income of Rs. 870 in 1980-81 amongst all the states for which the estimates are available.

#### Per Capita Income of different states in India (At current prices)

Name of States	(Rupees)			
	1979-80	1980-81	1981-82	1982-83
1. Andhra Pradesh . . . . .	1,167	1,313	1,536	..
2. Assam . . . . .	1,063	1,221	1,302	1,501
3. Bihar . . . . .	795	870	..	..
4. Gujarat . . . . .	1,641	1,828	2,192	2,182
5. Haryana . . . . .	1,949	2,331	2,581	2,798
6. Himachal Pradesh . . . . .	1,289	1,521	1,773	1,865
7. Jammu & Kashmir . . . . .	1,301	1,496	1,630	..
8. Karnataka . . . . .	1,208	1,314	1,541	1,559
9. Kerala . . . . .	1,271	1,426	1,436	1,521
10. Madhya Pradesh . . . . .	864	1,134	1,217	..
11. Maharashtra . . . . .	2,034	2,261	2,496	2,525
12. Manipur . . . . .	945	1,052	1,045	..
13. Meghalaya . . . . .	..	..	..	..
14. Nagaland . . . . .	..	..	..	..
15. Orissa . . . . .	931	1,147	..	..
16. Punjab . . . . .	2,611	2,768	3,164	3,484
17. Rajasthan . . . . .	1,030	1,238	1,441	1,574
18. Sikkim . . . . .	..	..	..	..
19. Tamil Nadu . . . . .	1,280	1,271	1,427	1,376
20. Tripura . . . . .	..	..	..	..
21. Uttar Pradesh . . . . .	965	1,280	1,313	1,439
22. West Bengal . . . . .	1,399	1,549	1,615	1,767
All India . . . . .	1,333	1,559	1,758	1,891

The estimates can be studied differently when the per capita income at current prices of different States are expressed as relatives of the 'All India' per capita income. These relatives provide a measure of disparities of income among states and are presented in the table below. It may be observed that during 1981-82 the states of Punjab, Haryana, Maharashtra Gujarat and Himachal Pradesh have their indices higher than the all-India index. Rest of the states have per capita income lower than that at the national level.

#### Relative indices of per capita net State Domestic Product—1981-82 (At current prices)

States	Relative index
Punjab . . . . .	180
Haryana . . . . .	147
Maharashtra . . . . .	142
Gujarat . . . . .	125
Himachal Pradesh . . . . .	101
All India . . . . .	100
Jammu and Kashmir . . . . .	93
West Bengal . . . . .	92
Karnataka . . . . .	88
Andhra Pradesh . . . . .	87
Rajasthan . . . . .	82
Kerala . . . . .	82
Tamil Nadu . . . . .	81
Uttar Pradesh . . . . .	75
Assam . . . . .	74
Orissa . . . . .	74*
Madhya Pradesh . . . . .	69
Manipur . . . . .	59
Bihar . . . . .	56*

\*Figures relate to the year 1980-81.

## WATERSHED MANAGEMENT IN HIMACHAL PRADESH

—Dr. M.P. Gupta,  
Chief Conservator of Forests,  
Himachal Pradesh

### Introduction

Himachal Pradesh occupies a strategic position as the watershed of important rivers of northern India. The prosperity of the reperiian States like Haryana, Punjab, Uttar Pradesh. etc. depends upon the quality and quantity of water which is made available from these watersheds. A large number of multi-purpose River Valley Projects have either been completed or are under execution. Huge investments on such projects can be sustained and justified economically only when their life is maintained to the desired extent by managing watersheds on scientific lines. Heavy floods in September, 1978 brought out the necessity of managing such areas for flood protection also.

Under the Indian conditions, soil and water conservation and watershed management have almost become synonymous. This work has traditionally been carried out by the Forest Deptt. though the strategy has undergone change in the recent past. It is recognised that no tangible results can be obtained unless land under different uses is simultaneously treated by different diciplines in an integrated manner breaking inter departmental barriers.

### Past-Experience

Punjab Land Preservation Act was brought on the statute in the year 1900 for the protection of hills. The works which were executed under the provision of this Act were mostly passive and comprised closures and restricting grazing by goat, camels etc. Some works by way of increasing vegetative cover through planning, sowings, contour treching, contour buding, terracing of fields, construction of small engineering structures like check dams & spurs etc. were also executed. The technique followed made good impact and was generally acceptable to the people. Large areas were treated in the Shiwaliks in Hoshiarpur, Kangra, Ambala Districts etc.

During the Third Five Year Plan, a Centrally Sponsored Scheme for Soil Conservation in the catchments of River Valley Projects was launched. Eighteen important catchments were taken up in the Country under this Scheme. Satluj, Beas & subsequently Giri Bata were covered in Himachal Pradesh

Thereafter Himachal Pradesh Land Preservation Act, 1978 and Himachal Pradesh Land Development Act, 1973 were enacted.



Subsequently, concern was expressed on the general degradation of the ecology and the environment of the hilly areas. In the year 1977-78, another Centrally Sponsored Scheme "Soil Water and Tree Conservation in the Himalayan Region" was launched. As a flood protection measure, execution of watershed management in the flood prone areas of Indo-Gangetic Basin was also taken up during the year 1981-82. Now these Centrally Sponsored Soil Conservation Schemes are being executed apart from State Schemes for the purpose. The funds for the Centrally Sponsored Schemes are made available to the State Governments on the basis of 50 percent subsidy and 50 percent loan.

### Strategy for the Treatment of such Areas

On the basis of experience gained in the last two decades primarily with the Centrally Sponsored Schemes concerning soil conservation in the catchments of River Valley Projects, a Strategy has been developed for the execution of such works and the same are being carried out accordingly.

All India Land Use Soil Survey Organisation has carried out quick reconnaissance survey by the study of aerial photographs to fix priorities for the execution of soil conservation works on the basis of silt and surface runoff. Soil Conservation works are now required to be carried out only in the priority areas indicated by this survey.

It is desired that the area should be divided into self-contained sub watersheds each of 1000 to 4000 hectares in extent. A detailed work plan is required to be prepared wherein areas needing treatment are listed and a programme drawn up. Each such sub-watershed is required to be treated to saturation over a period of 3 to 5 years allowing another 2 years for maintenance of the old works. Sedimentation and hydrological studies are also required to be carried out to monitor the results of such works.

Guidelines for the evaluation of such works being formulated as recommended by the Public Accounts Committee of the Lok Sabha. The advantages which accrue by way of protection increased protection from agricultural, forests, grazing and other lands and ensuring stability to the available land and soil resources in the area are required to be quantified together with the employment which is generated for the people both on permanent basis and of

casual nature. This work is to be carried out in consultation with the Institute of Management, Ahmedabad.

### Works Executed Todate

The works which have been executed in Himachal Pradesh under different Schemes since First Year Plan are indicated below :—

#### Physical and financial Achievements since

Scheme	Period	1951-52 Physical targets (ha)	Financial targets (Rs. in laks)
1	2	3	4
<b>A. State Sector</b>			
Soil & Water Conservation Scheme— Ist Plan		6,512.00	6.42
Protective Afforestation Soil Conser- vation & Demonstration	2nd Plan	40,135.00	42.86
	3rd Plan including Annual Plan (1966 to 1969)	24,964.00	240.34
	4th Plan	13,195.00	135.56
	5th Plan	11,597.00	162.86
	Annual Plan (1979 to 1980)	6,528.00	101.29
	6th Plan		
	1980-81	3,056.00	61.19
	1981-82	2,588.16	149.02
	1982-83	2,737.45	198.19
	1983-84 (Proposed)	4,000	258.00
	<b>Total</b>	<b>1,15,312.61</b>	<b>1,355.73</b>
<b>B. Central Sector</b>			
1. Centrally sponsored Scheme of Soil Conservation in the Catch- ments of River Valley	3rd Plan	34,229.00	264.21
	Annual Plan (1966 to 1969)	16,069.00	151.12
	4th Plan	27,761.00	261.86
	5th Plan	12,816.00	277.00
	Annual Plan (1979 to 1980)	7,706.00	191.98
Projects of satluj, Beas & Giri-Bata	6th Plan		
	1980-81	2,336.00	118.99
	1981-82	1,972.50	128.59
	Agr. Land upto 1981-82	7,989.73	—
	1982-83	1,817.27	133.37
	1983-84 (Proposed)	4,444.25	128.00
	<b>Total</b>	<b>1,17,140.75</b>	<b>1,655.12</b>
2. Centrally Sponsored Scheme of Soil, Water & Tree Conservation in Himalayan Region "Operation Soilwatch."	1977-78	596.00	7.16
	1978-79	1,875.00	9.25
	1979-80	2,275.00	84.82
	1980-81	2,068.00	91.85
	(Afforestation)	3,314.50	110.06
	Agriculture	515.00	
	1982-83	3,807.00	124.44
	1983-84 (Proposed)	5,740.00	140.00
	<b>Total</b>	<b>20,190.50</b>	<b>567.58</b>
3. Centrally Sponsored Scheme of in- tergrated Watershed Management in the Catchment of Flood Prone River of Indo-Gangetic Basin.	1981-82	33.50	9.95
	1982-83	3,420.79	59.97
	1983-84	5,022.00	110.00
	(Proposed)		
	<b>Total</b>	<b>8,476.29</b>	<b>179.92</b>
<b>Grand Total States &amp; Central Sec- tors</b>		<b>2,61,120.15</b>	<b>3758.35</b>

Large area have however, been treated in the past as is clear from the table given above.



### **Integrated Multi-Disciplinary Approach**

Soil Conservation or watershed management has to be made broad based. Apart from bringing in specialists from other disciplines like agriculture, horticulture, animal husbandry, minor irrigation, etc. the socio-economic and sociological aspects have also to be properly analysed.

Study carried out during preparation of same projects, establish that the causes for the present degradation can primarily be traced down to excessive removal of bio-mass to meet the requirements of the local people in terms of timber and fuelwood and excessive grazing by un-productive and useless cattle. The necessity to meet the essential needs to the people is appreciated. The available supplies have to be increased. The method for decreasing population of useless cattle has to be developed along with genetical improvement of the potentially productive herds. The availability of fuelwood has to be increased and at the same time method to conserve fuelwood by using improved chulas has to be also adopted.

This is the main platform on which Dhauladhar Farm Forestry Project being executed with the assistance of Federal Republic of Germany and watershed Management Project for Giri Catchment to be

executed with the assistance of the World Bank have been drawn up. The potential of the soil has to be tapped by increasing area irrigation and making recent advances in agricultural technology available to the people by increasing supplies of in-puts and through intensive extension services. Avenues for alternate employment have also to be developed.

### **Conclusions**

Watershed management has assumed the status of area development programme where all facts of human activity directly impinging on land are developed in an integrated manner. No single discipline is to be allowed to work in isolation.

The investments which are required to be made for watershed management are to be quite heavy for restoring ecological balance and to meet the needs of the people. The average expenditure to be incurred on the basis of area to be treated will be of the order of about Rs. 2,500 per hectare in view of the special infrastructure which are required to be created for the implementation of such ambitious integrated programme apart mounting cuts of inputs. Such investment can be justified only if there is an inbuilt mechanism for detailed monitoring and evaluation after the projects are drawn up in consultation with people keeping in view their requirements and aptitudes.

## MINERAL RESOURCES FOR THE DEVELOPMENT OF HIMACHAL PRADESH

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Mining is second only to the agriculture as the world's oldest and most important industry. The gradual transformation of the style and standard of living from the stone age to the present nuclear age through iron age, bronze age and steel is intimately linked with the increasing sophistication and utilization of mineral resources. These advances in the technology of exploration, exploitation and utilization of mineral resources have directed the course of history of industrial civilisations and the economic strength of nations. The demand and consumption of mineral are closely related to the rate and pattern of development economy.

From the early days, in India, Mineral wealth has been considered as belonging to the entire community. Kautilya (4th Century B.C.) in his Arthshashtra went to the extent of saying:

“Besides collecting from mines, the twelve kinds of revenue the Government shall keep as state monopoly both mining and commerce in minerals.”

Himachal Pradesh representing mountainous to sub-mountainous terrains with complete succession of Himalayan ranges from Shiwalik range in the south to Tibetan zone in the north has a vast scope of studying of the geosciences. There are rich potentials of mineral resources in the Pradesh and a number of industrially important and strategic minerals have been reported from various parts of Himachal Pradesh. Number of old mines from which silver (Jari, Distt. Kulu Copper, cobalt and nickel, Garsa Valley in Kulu), lead or zinc (Tons valley in Sirmaur) iron (Lana Cheta, Distt. Sirmaur, Rohru, Distt. Shimla and Uhl valley in Districts Kangra and Mandi) etc. have been reported from Himachal Pradesh indicating the technological and metallurgical sophistication of the habitants of these areas.

The Geological Survey of India, whose primary responsibility is to undertake systematic geological mapping of the country, has reported indications of occurrence of several minerals in the Pradesh though it has covered an area of only 38000 Sq. Kms. out of the total area of 55673 sq. kms. of the Pradesh.

Some of the important minerals reported by the Geological Survey of India are as follows :—

District	Minerals
1. Bilaspur	Limestone, Coal, Quartzite/Glass, sand, Gold, Pyrites.
2. Chamba	Copper, Coal, Gypsum, Limestone, Magnesite Phosphate, Pyrites, Sulphur, Slates, Talc etc.
3. Kangra	Asbestos, Bismuth, Coal, Glass sand, Gold Copper ore, Iron ore, Limestone, Rock salt, Slate, Natural Gas.
4. Kinnaur	Beryl, Copper, Flourspar, Kyanite, Lead, Gypsum, Silver, Steatite.
5. Kulu	Copper, Iron, Lead, Silver-ore, Limestone, Mica, Nicle, Cobalt, Pyrite, Beryl, Kyanite Uranium etc.
6. Lahaul and Spiti	Asbestos, Antimony, Gypsum, Copper, Iron Ore, Lead, Sulphur, Zinc.
7. Solan	Barytes, Coal, Lead, Phosphate, Gypsum, Limestone, Copper.
8. Una	Glass sand, Calctufa,
9. Mandi	Coal, Copper, Gold, Iron ore, Limestone, Rock salt, Slates etc.
10. Hamipur	Uranium, Calctufa, Glass sand, Oil and Natural Gas.
11. Shimla	Asbestos, coal, lead, Barytes, Limestone, Glass sand, Slates and Iron etc.
12. Sirmaur	Barytes, Bauxite, Lead, Copper, Gold, Silver ore, Phosphate, Pyrite, Steatite, Zinc, Limestone, Gypsum etc.

It is obligatory on the part of the State Government to prove or disprove the economic viability/potential of these minerals, so as to accelerate the pace of industrialisation of the State.

There are considerable potentials of Atomic Minerals in the Pradesh which are being exploited in Hamirpur and Kulu Districts. In addition, Geothermal potentials are being explored for energy potentials and used energy to be recycled in running referigeration plant in Manikaran area of Kulu District.

It may be mentioned that one cement plant at Rajban has already gone in production producing 600 tonnes of cement per day and another at Bilaspur will go in production with a capacity of producing 1700 tonnes of cement per day by the end of 1983. With the establishment of these two plants alone, the income by way of royalty Rs. 51 lakhs, Central Sales Tax Rs. 250 lakhs to the State Government and Central Excise Duty of Rs. 1024 lakhs will accrue to the Central Government per year. In addition to creation of industrial climate, these plants are giving employment directly and indirectly to more than 2000 people. Punjab, Jammu and Kashmir, Haryana and Himachal alone will need about 10,000 tonnes of cement per day at 10% growth rate by 1988. Unless the additional capacity for cement production is built up in Himachal Pradesh, the only State with known cement grade limestone deposits in the region, cement will have to be transported from southern and western regions at a great cost for transportation with unbearable strain on railways, or this region would remain underdeveloped for cement and consequently under developed. It is, therefore, not only imperative but living compulsion to explore and prove more and more deposits of cement grade limestone because atleast five more cement plants each with 2000 tonnes capacity per day will be required by the turn of this decade to meet the demands of the region alone.

Several small scale units manufacturing hydrated lime, lime, calcium carbonate, pulverised barytes and limestone and gravel crushing units are in operation in the Pradesh.

In addition, more than 1000 minor mineral quarries are in operation in the State producing sand, building stone, bajri and roofing slates. These quarries which are, (for that matter all the mining activity) in operation in the rural areas giving employment to approximately 25000 people near their homes.

### Regulation of Minerals

The regulation and development of minerals is controlled under the Central Act known as "Mines and Minerals (Regulation and Development) Act, 1957" and rules made thereunder. Mining leases, contracts by auction or tenders and permits for exploitations of industrial minerals and building minerals are granted under the Mineral Concession Rules, 1960 and H.P. Minor Minerals (Concession) Revised Rules, 1971. The responsibility of the wing is not only confined to regulate the mineral extraction but also to see that mines and quarries are worked scientifically so that these irreplaceable natural resources are not wasted and illegal extraction of minerals which generally is haphazard and unscientific is reduced to minimum.

Mining generally generates employment in rural areas and for weaker sections of society. However, sever restriction cause much hardship and encourage illegal extraction of minerals which are vital for the

developmental andl constructional activity. Illegal mining activity in the absence of legal sanctions breed contempt for law and loss of revenue to the State.

The revenue realised from minerals on account of royalty etc. since 1st April, 1970 when the entire control of mineral regulation was transferred to this Department is as under :

Year	Income
1970-71	Rs. 9,17,402
1971-72	Rs. 10,13,380
1972-73	Rs. 15,72,190
1973-74	Rs. 25,23,077
1974-75	Rs. 32,22,035
1975-76	Rs. 34,44,062
1976-77	Rs. 44,67,390
1977-78	Rs. 38,67,739
1978-79	Rs. 39,16,489
1979-80	Rs. 42,15,000
1980-81	Rs. 43,80,700
1981-82	Rs. 84,06,880
1982-83	Rs. 65,75,000

The work of regulation of minerals is proposed to be improved by posting more mining staff in the field, creation of a flying squad to conduct surprise checks and establishment of check posts at strategic points from where the movement of minerals is maximum.

### Engineering Geology

In addition to this, the Geological Wing has been carrying out various engineering geology projects entrusted to it by the H.P.P.W.D., State Electricity Board, Shimla Municipal Corporation and Revenue Department from time to time. Experience in Himachal Pradesh has shown that in the unstable hills disregard for geological consideration leads to structural failure afterwards. Keeping this in view, the Government in 1974, created Engineering Geology unit within the Geological Wing.

So far this unit has carried out several geotechnical studies but due to inadequate staff and machinery more than 120 projects are still pending.

### Ground Water

Geological information is very important in the ground water exploration and exploitation. The geological features can commonly give positive guidance for location of wells thus avoiding the expenses of unsuccessful wells. The study of movement of ground water, correct estimate of safe yield of water annually, Excess water discharge from wells and tube wells lead to drying up these wells after some years. The study of movement of ground water, correct estimate of safe yield, proper development, regulation and conservation of this key natural resources is essential to ensure its continued supply. Though initially the wing was entrusted with ground water

exploration of the State but eventually due to paucity of funds and staff this work was transferred to H.P.P.W.D. It will not be out of context to mention that without adequate geological background, it will not be possible to undertake ground water studies of different basins.

### Impact of Mining on Ecology

Ecology is primarily a science dealing with the inter relationship of organism with their environment. Mining as it tampers the natural environment does disturb the ecological balance. Although conservation is frequently defined as affecting the harmony or balance between man and his environment, such a goal can never be achieved in an industrial society, because industrial society by its nature consumes and changes its environment. However, worthwhile the preservationist movement might be in some instances, in others, it is unrealistic in asking present society to pay too high price for past. The preservationist live in our modern society and enjoy its benefits. These are not without their price. Likewise preservation of a potential rock quarry site as a wood land glad constitutes elimination of a valuable mineral resources and costs society a substantial amount in lost taxes. If crushed rock must be hauled a long distance because a more conveniently located

resource is denied to society, then construction cost in the area rises accordingly. This point has been well expressed by Fish :

'the amenity of a person alongside a quarry may be adversely affected but the person using the house, office, school, factory or hospital built with the quarry products enjoys an improvement in amenity.'

In line with the multiple use concept, the rock could be quarried over economic life of the deposits and thereafter the area could be landscaped and restored to other use. The question is, what is the price of preservation and can we afford to pay it? In some cases, we can and should pay the price, in others the price is too high. The mineral industries are probably the most productive in terms of contributing the highest value from the smallest acreage.

In the overall view of men's development, the use of minerals has been of such immense benefit as to render inconsequential the local injurious environmental effects. The only answer is not to deny the society the use of mineral but to minimise the injury. It does not make any sense to kill the industrial culture to preserve the environment. For whom, would it be preserved ?

## SOCIO-ECONOMIC SPECTRUM OF TRIBALS IN HIMACHAL PRADESH

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### Introductory

Tribal areas, as have 50 percent or more scheduled tribe population in them are the districts of Kinnaur and Lahaul-Spiti and Pangi and Bharmour Tehsils of Chamba district. Together these are situated in the north and north-east of the Pradesh forming a contiguous border belt bounded by Tibet in the east, Chamba and Kangra districts in the west, Jammu and Kashmir in the North and Kullu, Mandi and Shimla districts in the south. In terms of C.D. blocks, the blocks included are Kalpa, Pooch and Nichar (Kinnaur district); Lahaul and Spiti (Lahaul-Spiti district); and Pangi and Bharmour (Chamba district). Prior to re-organisation of States on 1st November, 1966; Lahaul Spiti district fell in the erstwhile Punjab, while the other remaining areas formed a part of the erstwhile Himachal Pradesh Union Territory, which came into being as a result of the merger of 30 and odd princely states on 15th April, 1948. Snow, glaciers, high altitudes and highly rugged terrain, criss-crossed by fast flowing rivers and their tributaries are the peculiar striking features of the tribal belt. For centuries the people of the tribal areas lived in seclusion, across the high mountains, in the inner Himalayas. Climate in the valleys varies from mild cold to extreme cold in different seasons but is never hot. The inaccessibility of these areas for more-than-half (for areas excepting Kinnaur district) the year has far-reaching effects on the economy of these areas and socio-economic conditions of the people residing there. They have been, by and large, illiterate and have remained cut off from the modern civilisation for centuries. These areas were left to themselves due to severe climate, remoteness, inaccessibility, lack of means of communication, sparse population and the centuries of alien rule in the country.

Prior to independence very little attention was paid to these far-flung areas but with dawn of freedom, these areas started receiving the best of attention, from the very start of the planning era under the various developmental programmes, which aimed at bringing these comparatively backward areas at par with the rest of the state. As social environments have far-reaching effects on the economic conditions of the people the living conditions and the cultural life of the tribals are discussed in the subsequent paragraphs.

### Physical Features

*Kinnaur district*—Kinnaur district consists of series of mountains and precipitous ravines descending



rapidly to the bed of the Sutlej. The Two Chains of lofty summits which branch off in a south-western or southern direction from the elevated ridge of the left bank of the Indus fall within district and are known as Parasala and Purgeol. The Parasala is estimated to be about 6,300 metres high and the height of Purgeol at two points is about 6,789 metres and 6,746 metres. The Kailash mountain is the most elevated land in the district. Sutlej, the principal river of the district, arises in the Himalayas and enters the Kinnaur district from the Tibetan territory. The main tributaries of the river in the district are Lee or Spiti, Baspa, Tidong, Wangar and Darbung.

*Lahaul Spiti district*—The district was reorganised on 14th January, 1975 when areas comprising four Patwar/Panchayat circles, viz., Tindi, Udaipur, Trilokinath and Miyar Mala from Pangi tehsil of Chamba district were transferred to Lahaul Sub-division. These transferred areas were constituted into the Udaipur sub-tehsil on 24th January, 1980. Lahaul and Spiti valleys differ from each other in their physical features to some extent in that while Spiti Valley is broad, enchanting and completely rugged without any verdure worth the name, of late Desert Development Project has had success in creating green belt here and there, the Lahaul Valley is narrow and at once steep but studded with green patches of poplar, willow and other coniferous forests. The Spiti Valley has minimum altitude of about 3,000 metres at the entrance to 4,800 metres near Kunzam La. Lahaul valley has a low elevation ranging between 1,950 metres to about 4,200 metres. But both the valleys have very high rugged mountains covered with massive snow and glaciers rising as high as 6,000 metres above sea level. Both the valleys are indeed star-studded with enormous rivers and rivulets. The main amongst the numerous rivers in Lahaul are Chandra and Bhaga which meet at Tandi and beyond Tandi, it is the river Chenab. In the Spiti Valley, as the name indicates, the main river is the Spiti river which originates from the heights of Kunzam La and swallows on its way numerous rivers and rivulets. The other famous river joining it is the Pin river which has its source near

Bhava pass and ultimately joins Spiti river from right side. From the left side the rivers that join Spiti river are Lingti, Gumto and Parechu.

*Pangi*—Sansari nullah on the western side separates Pangi from the Lahaul-Spiti district. The valley is surrounded by high mountain ranges. The lowest of the five passes by which the Pangi tehsil is connected by direct route with the rest of the district of Chamba is about 4,932 metres above the sea level. The five passes are Sach, Darati, Chaini, Kalicho and Chopia. These passes remain closed for traffic practically half the year. The Chandra-Bhaga flowing into the valley from Lahaul runs through its whole length. The valley has vast untapped potential which should be rapidly harnessed after the Chenab Valley road provides all the year round link to the valley with Jammu and Kashmir on the side and Lahaul on the other. Contemplated tunnels under Chaini and Rohtang passes will also provide alternate link to the valley via Manali in Kullu district.

*Bharmour*—The area to the South-east of the Tundah spur comprises that part of the valley of the Ravi, from below Bara Bhangal, with its tributaries, the Bhodhil and the Tundah, as far down as the Chirchind nullah, near Chhatarari, which is called the Bharmour tehsil, and it is the oldest portion of the district containing the ancient capital. It is also called "Gaddeeran" abode of the Gaddis.

Kinnaur district is situated between 31°—05'—55" and 32°—05'—20" north latitude and between 77°—45'—0" and 79°—00'—50" east longitude. The Lahaul-Spiti district is located between north latitude 31°—44'—57" and 33°—42'—54" and between longitude 70°—56'—29" and 78°—41'—34" east. The Bharmour tehsil is situated approximately between the north latitude 32°—11' and 32°—41' and between east longitude 76°—22' and 76°—53'.

Together the tribal belt is spread over an area of 23,654 (42.49%) sq. Km. with a population of 1,33,432 (3.40%) according to the 1981 Census.

### Tribes and Their Religion

The major scheduled tribe inhabiting the Kinnaur district is known as Kannaurea or Kinnaurea. The religion of the most of the tribals is Hinduism but they have no distinction of caste. Broadly speaking, the people in the southern part of the district follow Hinduism, in the north Lamatic Buddhism and in the middle a mixture of the two systems is being followed. Lama acts as the family priest like a Brahmin elsewhere and even more. Bhot or Bodh and Swangla are the major scheduled tribes inhabiting the Lahaul-Spiti district. Buddhism is the leading religion of the people in the Lahaul-Spiti district followed by Hinduism. Pangwals and Gaddis are the Chief tribes of Pangi and Bharmour respectively. The Pangwals are God fearing and superstitious tribe, having tremendous faith in the supernatural powers and their predominant religion is Hinduism. Their Chief Gods are Devi, Nag and Shiva whom they propitiate at all occasions. Gaddis of Bharmour are mainly Shaivas but also worship Durga and other minor Gods. It is believed that Mani-Mahesh, a mountain peak and a place of pilgrimage in Bharmour, is one of the abodes of Shiva. The people of Bharmour also believe in the supernatural powers of the spirits. The Chela or the oracle is believed to speak on behalf of the deity and his word is obeyed as a command from the God. The share of the God is given to the priest before the harvested crops are taken home. Temples are the main places of Worship. Some of the people, however, keep idols to worship at their residence.

Tribe-wise composition of population in 1971 was as in the following table.

*Scheduled Tribe population by Tribes (1971 Census)*

Schedule Tribe	Kinnaur	Lahaul	Spiti	Pangi	Bharmour	Total
1	2	3	4	5	6	7
1. Gaddi . . . . .	5	3	—	46	19,559	19,613
2. Gujjar . . . . .	2	—	—	1	199	202
3. Jad, Lamba, Khampa and Bhot or Bodh . . . . .	529	9,195	5,962	1,172	2	16,860
4. Kannaurea . . . . .	33,546	—	—	—	—	33,546
5. Lahaula . . . . .	6	—	—	2,517	23	2,546
6. Pangwala . . . . .	1	—	—	8,831	5	8,837
7. Swangla . . . . .	—	2,767	—	—	—	2,767
8. Unspecified . . . . .	1	6	18	23	21	69
Total . . . . .	34,090	11,971	5,980	12,590	19,809	84,440

### Migratory Habits

The Gaddis of Bharmour and some sections of the people of Kinnaur district usually leave their homes during the winter months along with their flocks of sheep and goats to the lower hills in search of food and fodder and to avoid the sting of severe winter. Some of the Gaddis have acquired permanent grazing rights in the places of their migration. During migration, besides grazing their flocks of sheep and goats, these people engage themselves in cutting wood, pounding rice working as agricultural and rural labourers, domestic service, etc. Thus, their meagre income from land, sheep and goats and cottage industries at home is augmented to some extent. The constant touch with the outside world, during migration year after year, also results in their adopting better ways of life obtaining in the places of their migration. This migration, however, interferes with the education of their children as also many stresses and strains are faced by their expectant women and nursing mothers. Gujjars of Pangri also migrate to other areas like to Gaddis with their herd of cattle.

### Working Population

The number of workers in any area is yet another indicator of development. The proportion of workers in tribal areas is as high as 57.19 per cent whereas

the same for the State is only 41.4 per cent. Agricultural workers from 64.60 per cent of the main workers as against 72.36 per cent in the Pradesh, as a whole. The spread of workers among males and females is in the ratio of 59.41 as against 73.27 for the State, as a whole.

### Literacy

Education is of basic importance for rousing enthusiasm among the people for bettering their economic conditions and providing healthy and clean environments for a fuller life through a change in social and cultural life of the people. In a democratic set up like ours, its role becomes more crucial, since democracy can function effectively only if there is an intelligent, active and wide spread participation of the masses in all public affairs. But during the pre-independence period, adequate educational facilities were not available in the tribal areas and were almost non-existent for the education of women. A fillip to education facilities was, however, given through the plans. As a result the percentage of literacy which was just 12.85 in 1961 in these areas rose to 30.89 as compared to 42.48 for the Pradesh as a whole; national average being 36.23 in 1981. The table below shows the faster rate of growth of literacy in the tribal areas during the past two decades:—

*Literacy Percentage*

Period	H.P.	Kinnaur	Lahaul-Spiti	Pangri	Bharmour	Total Tribal areas.
1	2	3	4	5	6	7
1961 Census	21.27	15.35	17.500	7.15	7.38	12.85
1971 Census	31.96	27.70	27.155	10.13	10.53	21.99
1981 Census	42.48	36.84	31.355	19.32 (P)	22.65	30.89 (P)
Growth rate (1961-71)	50.26	80.45	64.755	41.68	42.68	71.12
(1971-81)	32.92	33.00	15.477	90.72	115.10	40.47

It may be seen from the above table that Pangri and Bharmour deserve special consideration in any literacy drive.

### Means of Communication

The means of communication are sine qua non for the development of any region, area or place. It is the roads that determine the location of cities, commercial centres and activity spread. The roads, particularly in the land locked tribal belt of the Pradesh, are, in fact, the life lines of the areas as no other means of communication can, in the near future, provide substitute to these. The absence in the past has been the main bottle neck in the development of the tribal belt. Himachal Pradesh Government being conscious, right from the day the planning process started, has given first priority to the development of roads. Its efforts have been supplemented by the Director General of Border Roads as they are also constructing roads in these areas, Kinnaur district in

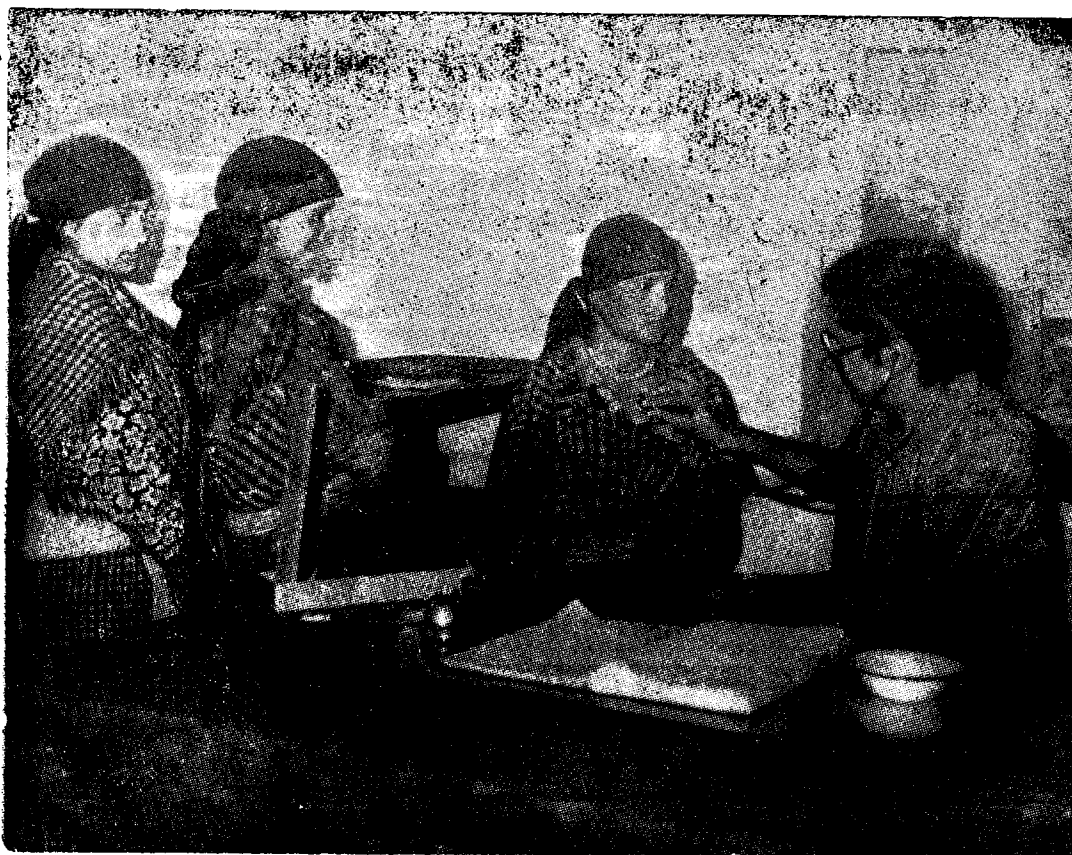
the tribal belt has been most fortunate in this behalf. National Highway No. 22 passes through the middle of this district along the Sutlej river. Lahaul has similarly been blessed. The tribal areas of Kinnaur and Lahaul-Spiti have common international border with Tibet. Hence, both from economic and strategic point of view, road net work has to be developed in these areas to speed up economic development and to safeguard the frontiers. Also, these areas have a substantial potential for horticulture, hydel power generation and tourism and unless roads are constructed we will not be in a position to exploit this potential to our advantage. The road density per 100 Sq. km. of area in the tribal areas is 8.16 km. as against 33.7 Km. for the state as a whole.

### Health Facilities

In a Welfare State, for attaining the objectives of socio-economic betterment of its people, improvement in public health is a must. At the time of formation of Himachal Pradesh the medical and public health

facilities available in these areas were negligible. Adequate attention was paid in the plan programmes for providing better health facilities. There are at present 3 Civil Hospitals, 7 primary Health Centres, of these 4 are 20 bedded rural hospitals, and 14 Civil

dispensaries with 172 beds in the tribal areas of the State, besides one Ayurvedic hospital and 49 Ayurvedic dispensaries. The medical institutions per lakh of population at the end of 1981-82 were 55 in the tribal areas as against 17 in the State as whole.



Spread of Health Services

### Agriculture

The economy of our tribal areas is highly agropastoral. 64.60 per cent of the main workers are engaged in agricultural work according to 1981 census. Culturable area forms 4.22 per cent of the geographical area; cultivated area being only 3.55 per cent. Intensity of cropping varies from 1 to 1.37, average being 1.32. Cultivated area per agricultural worker works out to 0.46 hectare only. All this calls for intensive agriculture and increasing the yield per unit of area/investment. Special efforts have, therefore, been made to increase the agricultural production in these areas through the distribution of high yielding varieties of cereals, introduction of cash crops and subsidised distribution of fertilizers and pesticides etc.

### Irrigation

In a predominantly agrarian economy, irrigation plays an important role for increasing agricultural production; no wonder that irrigation has been accorded the pride of place in the New 20-Point Programme, being point No. 1. The rugged terrain, absence of rain and then cap soil have restricted the

scope of major and medium irrigation schemes in these areas. Minor irrigation, both lift and flow, is the only hope left. Compared to 16 per cent net area sown being irrigated in the State, as a whole the percentage in the tribal belt is 54 for Kinnaur, 100 each for Lahaul and Spiti, 32 for Pangl and almost negligible for Bharmour. Any increase in crop intensity or net area sown is also hinged to extension of irrigation.

### Indebtedness

Quantum of indebtedness is an essential aspect to gauge the economic conditions of the people. The problem of indebtedness among the tribals is there, though not in an acute form. A survey conducted by the Directorate of Economics and Statistics, Himachal Pradesh during 1976 revealed that as many as 25.5 per cent of the total households in the tribal belt were under debt as on 30th June, 1976. In Lahaul-Spiti 9.8 per cent of the households were under debt. This percentage in Kinnaur and Pangl/Bharmour was 29.2 and 28.9 respectively. This shows that the incidence of indebtedness is the highest in Kinnaur district among all the tribal areas followed by Pangl/Bharmour. The Bench-mark surveys carried out during 1978-79 have



also thrown up some data on the incidence of indebtedness. According to these survey results about 20.8% of the total households in Kinnaur district were under the debt, of which 14.1% were indebted to moneylender and 6.7% to banks and Cooperative Societies. This percentage in Pangi and Bharmour was only of the order of 5.4 and 2.4 respectively. The local money lender was the main source of supply of the loan.

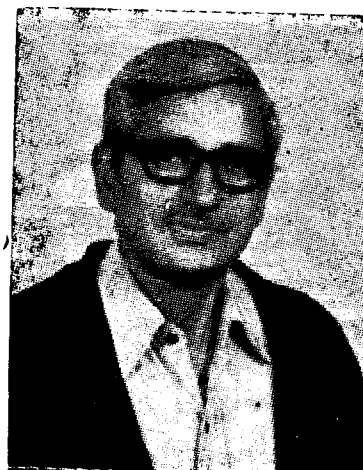
Sub-plan concept, a plan within the plan, was innovated at the national level for accelerated socio-

economic development of the tribals, consistent with equity, at the beginning of the 5th Plan i.e. 1974-75 and efforts put in this State have been laudable. Against only 3.11% of the population concentration in tribal areas, State Plan investment has reached the level of 9% by the end of 6th Plan starting with 3.65% in 1974-75. Special Central assistance supplementation has been Rs. 6.49 crores for the 6th Plan as compared to Rs. 3.19 crores in the 5th Plan. All in all, the tribal areas are poised to make a great leap forward in the coming years, a firm base having already been laid during 1974—84.

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## SCHEDULED CASTE COMPONENT PLAN SCHEMES AND THEIR IMPACT

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### Introduction

It was on the eve of the drafting of the Fourth Five Year Plan of India that the problem of poverty in India came to occupy a focal position in not only political discussions and programmes but also in discussion and programmes related to Indian economic planning. "Garibi Hatao" was a slogan and programme that came into prominence at this time. The reason for it was not political expediency as such; on the other hand, there was a more fundamental cause of it. A few independent research investigations into the impact of planned economic development in India on the general masses of the people had revealed the disconcerting fact that it had failed to improve the living standards of the common people and alleviate poverty in India. The pioneering study by Dandekar and Rath of Gokhale Institute of Economics and Politics of Pune had revealed that in year 1967-68 the total number of people in India living below the poverty line was 215.5 million of which 166.4 million were rural people who made up about 40 per cent of the total rural population of India. Some other studies show the estimates of poverty by Dandekar and Rath to be rather on the low side. B. S. Minhas's estimates for the same year show that about 50.6 per cent of the rural population of India was below the poverty line in the year 1967-68.

An important conclusion which one could draw from the results of these investigations on Indian poverty was that the fruits of whatever growth took place under the planned economic development of the country were not evenly distributed between the various classes. The percolation hypothesis which suggests that the benefits of economic growth tend to percolate to the poor sections of society without any active intervention by the state was not vindicated by the Indian experience. Although, after the Second Five Year Plan, "growth with social justice" was made an avowed objective of economic planning in India, yet the facts revealed that social justice, insofar as it implies an improvement in the economic conditions of the socially and economically backward classes of the society of whom the scheduled caste and scheduled tribe people make up a vast majority, remained no more than a mere hope. No doubt, there have been all this time some measures by the state such as reservations of jobs and subsidised education

for the scheduled castes and scheduled tribes, but precious little was done to plan and implement developmental schemes which could bring the benefits of economic planning directly to the poor and backward classes of society. The implicit assumption underlying India's economic planning which appears to have been taken from the percolation hypothesis was that the process of economic development generates increasing opportunities of employment which can be availed of by the under privileged classes. But, as we have already observed, the empirical investigations on poverty in India demonstrated that the Indian experience had refuted this assumption.

On the contrary, it is a well known empirical fact (Which has been borne out by the Indian experience) that economic development in an inegalitarian society, when it takes place within a laissez faire framework, tends to bypass the backward and downtrodden sections of the society. The most backward and downtrodden sections of our society reveal two important features: first, most of them live in the rural areas; secondly, they are usually segregated either socially (as in the case of scheduled caste people) or geographically and culturally (as in the case of scheduled tribes) from the mainstream of the society. Among the backward classes of India, the scheduled castes are the most backward. The great bulk of the Indian people living below the poverty line is made up of the scheduled caste people. The "Garibi Hatao" and "Twenty Point" programmes, which were launched in the wake of the realisation that despite the planning, poverty in India was increasing rather than decreasing, were founded on the realisation that any programme of eradicating poverty must begin with schemes which directly aim at ameliorating the living conditions of the scheduled castes and the scheduled tribes.

The Special Component Plan for the scheduled castes within the overall Sixth Five Year Plan is but the extension and concretisation of the "garibi hatao" and "twenty point" programmes and a step forward towards realising one of the important directive principles of State Policy in our constitution which enjoins

that the "State will promote with special care the educational and economic interest of weaker sections of people, and in particular, of the scheduled castes and scheduled tribes and shall protect them from social injustice and all forms of exploitation." The Special Component Plan for Scheduled Castes in the Sixth Five Year Plan stresses that "The core programme for economic development would lay emphasis on land development and agricultural production, animal husbandry including dairy, sheep, goat, poultry, piggery development, leather work, weaving, other cottage and village industries, fisheries and small scale and tiny industries". Consequently, special component plans for scheduled castes were incorporated in the Sixth Five Year Plans of the States also. The government of Himachal Pradesh too incorporated into its Sixth Five Year Plan a special component plan for the scheduled castes.

### The Schemes

The Schemes evolved and being executed under the Special Component Plan for the scheduled castes in Himachal Pradesh may broadly be classified into two categories, namely, (i) the schemes which aim at developing the infrastructural facilities in areas where there is heavy concentration of scheduled caste population, and (ii) the schemes which have the objective of supplying some income, earning asset or assets to the scheduled caste households. The first category of schemes are expected either to increase the employment and income earning opportunities in the rural areas where the scheduled caste population is concentrated or to provide to the scheduled caste households some "social welfare" service/good which may help in raising the quality of their living. The second category of schemes aim at either providing a facility which directly improves the economic welfare of the beneficiaries or helps them in supplementing their income which, in turn, may also help in raising their living standards. The first category comprises schemes of rural electrification, in particular, the electrification of the scheduled caste households, irrigation and drinking water supply. The other category is comprised of schemes of animal husbandry including dairy, piggery, fishery and housing for the scheduled caste households.

The electrification scheme in the Special Component Plan of Himachal Pradesh aims at carrying this modern amenity into the households of the scheduled castes. It provides for a "Massive subsidisation of the programme of rural electrification of the left out scheduled caste households and predominantly scheduled caste bustees". Under this scheme the entire cost of internal wiring, main switch and the metre is to be borne by the government. Electrification not only improves the quality of life directly but can also open up new economic opportunities. Irrigation is also a very important infrastructure which can have a very significant economic impact, for it facilitates the adoption of new and more productive techniques of cultivation. The drinking water supply schemes may not have a direct economic impact on the lives of the scheduled castes but insofar as they succeed in supplying clean drinking water near the scheduled caste

households, they may generate a favourable health effect as well as result in the conservation of time and energy which can be put to more productive use by the scheduled caste people.

The second category consists of beneficiary oriented schemes. As already pointed out, these schemes are designed to subsidise the scheduled caste households for adopting and carrying on activities related to animal husbandry including dairy, piggery, fishery and building dwelling houses. While the housing scheme seeks to provide an essential necessary of daily life, the other schemes in this category aim at helping the scheduled caste families in increasing their regular income.

### The Impact

It has been nearly two years only since the schemes under the Special Component Plan were put into force in Himachal Pradesh. Therefore it is too early to see the impact of these schemes, for, by all reasons, they cannot be expected to have a visibly significant effect on the economic life of the people for whom they are meant in such a short period. However, it may be possible to assess the broad direction of their impact, spot out some drawbacks in their implementation and suggest some general measures for their more efficient implementation.

The present analysis of the impact of these schemes is based on the empirical studies conducted by the Economics Department of the Himachal Pradesh University on behalf of the government of Himachal Pradesh. Similar studies have been conducted in other areas by the Pailampur University also. We presume that their findings are not significantly dissimilar to ours.

We have already, in the preceding section, classified the special component plan schemes into two broad categories, namely, the infrastructural schemes and the beneficiary oriented schemes. We can consider the impact of each one of these separately.

The infrastructural schemes do not seem to have brought in any immediate economic benefits to the scheduled caste people except in the case of the irrigational schemes which might have made some marginal impact. In theory the provision of an important infrastructure like electrification is supposed to facilitate the setting up of new commercial/industrial enterprises which, in turn, create new employment opportunities. It may also help the artisans in working longer hours and thus increasing their self-employment and income. But the evaluation of the electrification scheme in the district of Bilaspur by the Economics Department of the Himachal Pradesh University reveals that it did not make any significant impact in this direction. The few commercial connections observed in the area were owned by non-scheduled caste people. The study rightly observes that infrastructural schemes like electrification by themselves cannot have the type of economic impact expected from them unless some additional conditions like adequate market are also satisfied. The scheduled

caste people are unable to take advantage of such an infrastructure to start their own enterprises, however small, because they lack even the minimum financial resources necessary for it.

However, if impact of electrification scheme is to be measured in more modest terms such as the proportion of the scheduled caste households receiving electric light as the result of the scheme, then it will be found to have a very visible and significant effect. For example, in the three blocks surveyed in the Bilaspur district, about 83 per cent of the scheduled caste households had been electrified by 31st March, 1983. It has not only made life a little more cheerful in the scheduled caste households but has also enabled their children to study for longer hours which may leave a favourable social impact in the long run. Moreover, although the electrification schemes have not brought any immediate economic benefit to the scheduled caste people, yet some indirect economic benefits may show up in the long run.

Infrastructural schemes related to water supply also fall in the same category in that they too have hardly any economic impact on the living conditions of the scheduled castes in the form of increased employment and income. The evaluation study of the water supply scheme in Shimla district has confirmed this conclusion. However, the availability of clean drinking water within the village does have a favourable welfare impact in the form of better health and more leisure resulting from saving in time and trouble. But there are certain lacunae in the implementation of these schemes on account of which their impact in even the limited sense has been less than what is possible. For example, out of the 54 households surveyed in the district of Shimla, only 20 were actually receiving water from this scheme.

Irrigation schemes, on the other hand, are of different nature in that they do have an immediate economic impact as contrasted with the electrification and water supply schemes. The evaluation study of the irrigation scheme in the Sirmaur district has revealed this impact unmistakably. It has resulted in a significant reduction in the area of fallow land, specially in the rabi season. It has come down from 0.5 acres on an average farm of 3.17 acres to only 0.17 acres. Another impact has been that the area under the high yielding varieties of maize, paddy and wheat has increased substantially and consequently the yields per acre of these crops have also increased. The per acre yields of even the traditional local varieties of crops have also increased as the result of the irrigation scheme in Sirmaur district. Per acre yield of maize (Local) has increased from 6.55 quintals to 8.65 quintals. Per acre average yields of paddy and wheat of local varieties have increased from 4.66 quintals and 6.40 quintals to 10.65 and 11.55 quintals respectively. The total value of the increased production of maize, paddy, wheat and sugarcane due to the irrigation scheme is estimated to be Rs. 1,899 per farm of the average size of 3.17 acres. This implies an increase of about Rs. 600 in income per acre of the scheduled caste households surveyed in the Sirmaur district.

The beneficiaries oriented schemes are expected to have an immediate economic impact, though this impact too is likely to be much stronger over a longer period. These schemes provide for subsidies and cheap loans to the target scheduled caste families in order to enable them to acquire productive assets with the help of which they can increase their self-employment and income. Wherever such schemes have come into force, this impact has shown up in unmistakable terms. For example, as the result of the beneficiaries oriented fishery scheme in the Bilaspur district, the beneficiary scheduled caste fishermen began to have an average daily catch of about 9 Kg fish in place of the former average of only 6 Kg. This resulted in an increase of about Rs. 18 per working day for the beneficiaries. The impact of the livestock and piggery schemes in Solan and Shimla districts has also been unmistakable. These schemes have resulted in significant increase in the assets of the beneficiary scheduled caste families and consequently their income have also risen. For example, the survey conducted by the Economics Department of HP University discovered that as a result of these schemes the beneficiary households in the Solan district had roughly three times more assets than the non-beneficiary households. The beneficiaries are also getting more institutional finance for their productive activities. It is estimated that in the area surveyed in the Solan district the beneficiaries have added on the average Rs. 2688 worth to their assets which has increased their earning capacity. These schemes have also led to some diversification of economic activities followed by the scheduled caste families resulting in greater employment and income. A more significant impact which may prove to be very beneficial and durable in the long run is that as a result of these schemes the beneficiaries and their productive activities are becoming more and more linked with the market mechanism on account of which their subsistence occupation is slowly but surely being transformed into a commercial occupation.

The housing schemes which are also beneficiaries oriented do not have the same type of impact as those mentioned above. They do not add to the income-earning assets of the beneficiaries or increase their employment even though they may add to their general wealth. Moreover, if the survey conducted by the HPU Economics Department on the working of the housing scheme in Sirmaur district is to serve as a guide, these schemes have the said impact on a very small number of scheduled caste families which are able to avail themselves of these schemes. In the Sirmaur district, only five persons had benefited from the scheme.

### Conclusion

As already observed, it is too early to assess the impact of the special component plan schemes for the scheduled castes and to reach firm conclusions. But, on the basis of the impact that they have made during the very short period for which they have been in operation, one can make the following observations. The schemes taken together are helping the scheduled caste families to improve their income and economic conditions as well as to get some essential public goods like drinking water and electricity which have to some

extent improved their quality of life. However, the analysis of the relative impact of the different types of schemes suggests that the beneficiaries oriented schemes which help the beneficiary scheduled caste families to acquire and add to their income earning assets will be more helpful in helping the scheduled castes in pulling themselves above the poverty line. This should not be interpreted to suggest that the other schemes be replaced by this kind of schemes. The other schemes, infrastructural or beneficiaries oriented, which supply some essential public good/service also help in improving the quality of life of the scheduled caste people. However, there should be greater emphasis on the former type of schemes while the latter should play a supplementary role.

Furthermore, if the former type are to be made to have a still greater and sustained impact, it should be seen that the increased income that results from these schemes should not be dissipated by the beneficiaries on unproductive social customs and ceremonies or on harmful evil habits like drinking. This emphasises the need for integrating the schemes of economic upliftment of the scheduled castes with social education schemes, if the impact of the former is to be made more effective and enduring.

The impact of the schemes is also lowered due to the ever present inflation in our economy. While the schemes refer to attaining certain physical targets, the planned financial allocation for the achievement of these targets does not seem to take account of the inflation, with the result that the physical targets are impossible to achieve. Therefore, if due consideration is given to the factor of inflation while making financial

provision, the schemes can have a greater impact. It has also been noticed that the particular beneficiary oriented schemes are not adequately publicised on account of which quite a number of would be beneficiaries are left out. It is generally the poorer among the scheduled castes who are ignorant of such schemes. Thus those who fail to benefit from these schemes generally belong to the lowest stratum of the scheduled castes who should rather deserve our first attention. The scheduled caste people in general and the lower stratum of them in particular have failed to benefit from the housing schemes so far, in as much as they provide for only cheap and easy loans but not subsidies. In the case of infrastructural schemes like the drinking water supply and irrigation also the benefits tend to be hogged up by the economically and socially more powerful as they are able to influence the alignment of channels and even the employment of local labour in the construction work involved in the schemes.

In conclusion it can be said that the special component plan schemes are having some discernible impact on the economic conditions of the beneficiaries, though it is too early to predict that they will succeed in lifting the beneficiaries above the poverty line in a short-period. A greater emphasis on schemes which help the beneficiaries to acquire income-earning assets will make the programme more effective. But whether these gains become permanent or not will depend, on the one hand, on how the beneficiaries employ their increments in income and, on the other, how the village economy, where most of the scheduled caste families are out their living, develops.

## ESTIMATES OF POVERTY IN HIMACHAL PRADESH

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### Summary

While analysing the problem of poverty a distinction is made between relative and absolute poverty, the former referring to the position of a country, region or class of people in terms of per capita income relatively to other regions or classes, and the latter focussing on the absolute levels of living of the poorest sections of society.

Himachal Pradesh has a creditable record of reducing relative poverty through more rapid increases in per capita income relatively to most other states of the country.

Among the factors explaining the better growth performance of the state may be its low level of absolute poverty. Available estimates of absolute poverty put nearly a third of the population of the state below the poverty line. The position in Himachal Pradesh, in this respect, is much better than in most of other states of the country.

It would be advisable that in the future plans of the state efforts are made to still further improve the income generating capacity of the poor.

In recent years, planners, economists, and administrators have increasingly focussed on the problem of poverty. This increasing concern over the problem has been the result of a paradoxical situation observed in the less developed countries over the past three decades, viz., rising average levels of living accompanied by stagnant or falling standards of living of the poorest sections of the population. In other words, while per capita incomes have risen, there has hardly been any perceptible improvement in the levels of living of the poor.

From the analytical point of view, it has been found useful to distinguish between relative and absolute poverty. When we compare the per capita income of a poor country with that of a rich (or the per capita income of the poorer sections with those of the richer classes within the same country). We are, in fact, concerned with the problem of *relative poverty*. Analogously, we may compare the per capita income



of a particular state or province with that of the country as a whole and thus form some idea of the *relative poverty* of the former. *Absolute Poverty* on the other hand, focuses on the level of living of the poorest sections of society in a given region. Here, one is concerned with the absolute position of the poverty groups *per se* rather than in comparison to some other group or region.

### Relative Poverty in Himachal Pradesh

It would be interesting to reflect over the record of Himachal Pradesh with regard to relative poverty (i.e. per capita income in the state relatively to that in the country as a whole). At the beginning of the planning era, Himachal Pradesh was among the poorest states in India because the per capita income of this state (in 1955-56) was higher than that of only three other states, viz., Bihar, Orissa, and Manipur. Even in the 'Newly merging' areas, the position seems to have been no better at that time. According to one estimate, Kangra, Lahaul and Spiti and Shimla were among the poorest areas, in terms of per capita income within the composite Punjab in 1955-56.<sup>2</sup>

From that position of a poor ranking in terms of per capita income index or high relative poverty, Himachal Pradesh soon emerged as a rapidly growing state. Even between 1955-56 and 1960-61, the growth rate of per capita income in Himachal Pradesh was exceeded only by one other state, namely composite Punjab.<sup>3</sup> In the latter year, the rank of Himachal Pradesh, in terms of that index, had improved to 10th in the country.<sup>4</sup> Since then the position seems to have continued improving, and by 1975, this state had come to be ranked sixth in terms of per capita income, a position which continued to be maintained even in 1977.<sup>5</sup>

<sup>1</sup>S.K. Bose, *Some Aspects of Indian Economic Development*, Vol. I, Ranjit Printers and Publishers, Delhi-1962, pp. 122-23.

<sup>2</sup>See National Council of Applied Economic Research (NCAER), *Inter-District and Inter-State Income Differentials*, Occasional Paper No. 6, Table 20, p. 27.

<sup>3</sup>S.K. Bose, *op. cit.*, pp. 122-23.

<sup>4</sup>NCAER, *Distribution of National Income by States 1960-61*, Table 3, p. 9.

<sup>5</sup>Directorate of Economics and Statistics, Himachal Pradesh, *Economic Review of Himachal Pradesh*, 1975, p. 2 and 1977, p. 3.

It is natural to ask, what might have accounted for a relatively better growth performance of this state during the planning period? In order to answer this question, one might advance two hypotheses as probable explanations, among others. In the first place, the growth of agricultural productivity in Himachal Pradesh, though not spectacular, has been fairly high during the planning era. The state had a very low net or gross agricultural output per acre in 1960-61, the state occupying a near-bottom position in this respect in that year.<sup>6</sup> During the 1962-65 to 1970-73 period, however, the annual compound growth rate of agricultural yield was 2.87 per cent, which was higher than that of at least eight other states of the country.<sup>7</sup> The improvement in agricultural productivity, in a highly rural economy must have contributed a great deal to improving the ranking of the state in terms of per capita income index.

Secondly, it can be reasonably assumed that a relatively more egalitarian socio-economic structure of the state must have contributed good deal to the better growth performance of the economy. Among other indicators of a relatively more egalitarian socio-economic structure, the one most conspicuous appears to be the low incidence of absolute poverty in the state. In order to notice a possible link between growth performance of the economy and the state of its poor (i.e. those suffering from absolute poverty). We may first of all look at the evidence available on the incidence of such poverty in Himachal Pradesh.

### Absolute Poverty in Himachal Pradesh

*Absolute poverty*, as distinct from *relative poverty*, focuses on the absolute standards of living in terms of nutrition, clothing, housing, health, sanitation, education, etc. of the poorest sections of society. Some minimum socially acceptable level of living may be laid down as the poverty line and that proportion of population whose income, consumption or assets fall below that minimum level may be taken as suffering from absolute poverty.

Since the early 1970s, a great deal of interest has come to be evinced in the estimation of the proportion of population below the poverty line or the poverty ratio in India and its constituent states. Unfortunately many of the influential studies in this area of research have left Himachal Pradesh out of account perhaps because of the very tiny proportion of the country's population which lives in this state. Still, a few estimates of the extent of absolute poverty in Himachal Pradesh are available to enable one to make a tentative generalisation.

While analysing the incidence of absolute poverty, two criteria are commonly used, viz., (i) the consumption criterion, and (ii) the assets criterion. Estimates

of population below the poverty line in Himachal Pradesh on the basis of these criteria may be presented below:

#### (i) The Consumption Criterion:

Under this criterion, a certain minimum daily calorie-intake may be taken as the dividing line between the poor (i.e. those suffering from absolute poverty) and the non-poor. Corresponding to that minimum daily calorie-intake the monthly per capita consumption expenditure is estimated. The point may be explained with reference to the norms laid down in this respect by the Planning Commission in its Sixth Plan.<sup>8</sup> The Commission maintains that in India a minimum calorie-intake of 2,400 per person in rural areas and 2,100 in urban areas should be taken as the dividing line between the poor and the non-poor. The Commission then estimates the per capita monthly consumption expenditure which would be needed to get the requisite calories per day. The size distribution of consumer expenditure are studied to determine the percentage of population which cannot afford to make the requisite per capita monthly expenditure and thus fails to enjoy even the minimum calorie-intake per day. This yields an estimate of the proportion of population below the poverty line.

A few estimates of the incidence of absolute poverty in Himachal Pradesh, using the above-mentioned methodology or applying similar norms, are available. These are shown in the table below:

*Estimates of Population below the Poverty Line (Or Poverty Ratios) in Himachal Pradesh and All-India*

Sr. No.	Year	Population below the poverty line (% to total)	
		All India	H.P.
1	1970-71	—	33.95 (R)
	"	—	22.66 (U)
	"	—	32.95 (C)
2	1971-72	49 (R)	33 (R)
	"	56 (U)	38(U)
3	1972-73	—	31.53 (R)
4	"	—	10.66 (R)
5	1977-78	50.82 (R)	28.12 (R)
	"	38.19 (U)	16.56 (U)
	"	48.13 (C)	27.23 (C)

R—Rural U—Urban C—Combined

SOURCE —S. No. 1 —Govt. of India, *Report of the Finance Commission 1978* pp. 147 and 213.

S. No. 2—*Economic and Political Weekly*, Jan. 13 1979

S. No. 3—L. R. Sharma *Economic Affairs*, July-Sept. 1982 p. 503.

S. No. 4—Pranab Bardhan *Economic and Political Weekly* July 23 1983 p. 1330.

S. No. 5—*Planning Commission*, Govt. of India op. cit. p. 16.

<sup>6</sup>NCAER, *Agricultural Income by States 1960-61*, pp. 30-31.

<sup>7</sup>See Krishna Bhardwaj, "Regional Differentiation in India, A Note," *Economic and Political Weekly*, Annual Number, April, 1982, p. 612.

<sup>8</sup>Planning Commission, Govt. of India, *Sixth Five Year Plan, 1980-85*, p. 16.

It may be noted in the above table that during the years for which comparable data have been given incidence of poverty in Himachal Pradesh was much less than in the country as a whole. In fact, according to the estimates of the Planning Commission for the year 1977-78, Himachal Pradesh had the 4th lowest poverty ratio in the country. Similarly, according to the estimates of Pranab Bardhan, who divides the entire country into 61 well-defined regions, the percentage of rural population below the poverty line in Himachal Pradesh was the 2nd lowest among these regions of the country in 1972-73.

The poverty ratios in the above table have been shown to vary somewhat from year to year. This, apart from differences in methodology or norms used, may also be caused by economic factor such as year to year fluctuations in the availability of foodgrains. During years of good harvest, for example, the number of people below the poverty line falls and vice versa. But all estimates, except one, in the above table are consistent, in the sense that the percentage of population below the poverty line in each category (i.e. rural, urban etc.) has varied within a narrow margin. In the case of Bardhan's estimate for 1972-73 which is a very low ratio, the cut-off point in consumer expenditure taken as the norm of poverty has indeed been on the low side.

A study of population below the poverty line in Himachal Pradesh, based on data collected by Govt. agencies, has also been made by M. S. Mukherjee and N. Kishore.<sup>9</sup> A merit of this study is its emphasis on the need to evolve different norms of absolute poverty for this state because of its peculiar geography and the consequently different consumption requirements of its poor. However, the study yields somewhat inconsistent results for the year 1981, a very low poverty ratio (5% of households) for the urban sector, and a relatively high poverty ratio (42.18% of households) for the rural sector, even when the same level of consumer expenditure is taken as the cut-off point for the two sectors.<sup>10</sup>

Another measure of absolute poverty based on the consumption criterion has been suggested by V.M. Rao and M. Vivekananda, according to whom the poor are viewed "as a stratum having incomes inadequate for current needs and, hence lacking resources to allot for future needs and growth. Absence of a surplus above expenditure on current needs is the criterion of poverty suggested by this view."<sup>11</sup> Applying this criterion to the N.S.S. 28th round data for Himachal Pradesh, the present author has estimated the poverty

ratio for the rural sector of the state to be 21.5 per cent,<sup>12</sup> which again places this state immediately below Punjab, Haryana, and Kerala, where the poverty ratios on this criterion are very low.

#### (ii) The Assets Criterion :

The poor-non-poor dichotomy can also be analysed on the basis of productive assets owned by different households. A certain value of assets can be taken as the cut-off point between the poor and the non-poor. The Reserve Bank of India in its All-India Debt and Investment Survey, 1971-72, took the value of assets worth Rs. 2,500 per rural household as the dividing line. According to this criterion too, Himachal Pradesh in its rural sector had only 5.2 per cent households owning assets worth less than Rs. 2,500 each. This percentage of households was the lowest for any state in the country.<sup>13</sup>

The foregoing analysis shows almost unequivocally that the incidence of absolute poverty in Himachal Pradesh is relatively lower as compared to most other states of the country. It, therefore, provides ample support to our earlier contention that this state has a relatively egalitarian socio-economic structure.

This favourable feature too might have contributed to the relatively higher growth rate in per capita income recorded by the economy of Himachal Pradesh during the planning period. The logical link between low incidence of absolute poverty and a relatively higher growth rate of net state domestic product or per capita income may be that households below the poverty line have resources (like physical assets, skills, and savings etc.) too meagre to participate in the development process. The less, therefore, the number of households below the poverty line the more of them are in a position to participate in that process. This is only a hunch which needs further verification.

#### Policy Implications of Low Poverty Ratio for Future Planning

If the incidence of absolute poverty in Himachal Pradesh has been really low, then it is both an opportunity as well as a challenge for the planners of the state. It is an opportunity in the sense that in the formulation of future plans, resources which otherwise would have to be allocated for putting a high proportion of the population above the poverty line (providing food and nutrition, clothing, shelter, medicines, and clearing of slums, etc.), can be used for building further production capacities in the economy.

<sup>9</sup>M. S. Mukherjee and N. Kishore, "poverty in Himachal Pradesh, *Seminar on Economic Development in the Western Himalaya*, H.P. University, Shimla, pp. 99-111.

<sup>10</sup>Ibid, Table 4 and 7.

<sup>11</sup>V.M. Rao and M. Vivekananda, "The poor as Social Stratum, Some Economic Criteria for Studying Poverty, *Economic and Political Weekly*, July 3, 1982, p. 1107.

<sup>12</sup>See L.R. Sharma, "Distributional Aspects of the Socio Economic Structure of Himachal Pradesh, *Seminar on Economic Development in the Western Himalayas*, Deptt. of Econ., H.P.U. Shimla, p. 83.

<sup>13</sup>Reserve Bank of India, *All India Debt and Investment Survey (1971-72)*, Assets of Rural Households as on June, 30, 1971, p. 31.



At the same time, it is also a challenge in that *low incidence of absolute poverty does not mean existence of bulging affluence in the state*. It merely means absence of dire, abject or appalling poverty. People in fact may be living just above the poverty line, who may slip below the dividing line anytime if the planners become even slightly complacent. Therefore, when the seventh and the subsequent plans are formulated there would be need to strengthen the structure of the economy at its base. This requires constant endeavour to raise the income-generating capacity of the poorer classes. Emphasis needs to be given particularly to the provision of more educational facilities and

transfer of more assets of such households, creation of more skills among their members and the strengthening of the public distribution system. The foregoing analysis also indicates the need, on the one hand for avoidance of too much emphasis on conspicuous urban industrialisation and on the other for the maintenance of focus on rural development. Besides, there is need to link the poorer producers with the market and to provide them with subsidised inputs. The watchword in policy should be the creation of differential advantage in favour of the poorer sections. This would help in both keeping the level of relative as well as absolute poverty low.

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## FOOD GRAIN PRODUCTION IN HIMACHAL PRADESH



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### Introduction

There is an urgent need to increase food grain production in Himachal Pradesh as the same has been more or less stagnant in spite of the green revolution in the country. The emphasis on development of horticulture and vegetable production as important subsidiary sources of farm income is understandable. However, these enterprises are confined to only about less than 2 per cent of the total geographical area (Table 1). Most of the cultivated area is devoted to field crops, mainly food grains by all the farmers in general and small marginal farmers in particular. It is a common knowledge that the most important crops grown in Himachal Pradesh are maize and paddy in kharif season and wheat and barley in rabi season (Table 2). Orchards are mostly planted in the areas not suitable for cultivation of crops. When they are laid out in the fields fit for cultivation, mixed cropping with food grain crops is quite common.

A number of states in India have done reasonably well in the recent past so far as food grain production is concerned. This has been responsible for near self sufficiency in food grain production in the country. In fact, the most advanced states in the country are also those who have raised their food grain output significantly like Punjab and Haryana. The cost of capital for creating employment opportunities and generating income in manufacturing industry is very high. Therefore, agricultural output and income needs to be raised

rapidly to improve the economic conditions of our rural people. Increased food grain production plays a very important role in this regard as every farmer is involved in this and there is a readily available market for the same.

More than 95 per cent of the total population of Himachal Pradesh comprises of farm families who put most of their farm area under food grain production. A rapid rise in food grain production for a State like Himachal Pradesh is, therefore, quite essential. However, as will be noted from the analysis in the foregoing sections. We do not have well-thought-out approach to food grain production—both in terms of planning and implementation in Himachal Pradesh.

### Objectives

The specific objectives of this paper are the following:

- (i) To examine the past trends in food grain production in Himachal Pradesh vis-a-vis, India and some selected states.
- (ii) To analyse the reasons for stagnant food grain production in Himachal Pradesh as well as to point out the scope and potential for increasing food grain production including the major issues involved therein.



Granary of H. P. (Una Valley)

### Data

The Secondary data used for analysis have been taken mainly from Fertiliser Statistics<sup>1</sup> and Statistical Outline of Himachal Pradesh<sup>2</sup> for different years. The data regarding production potential have been taken from various research experiments at different research centres and demonstrations laid out on the farmers' fields. The primary data were collected from farmers in Kasumpti block of Shimla and Paraur area of Kangra districts in Himachal Pradesh. Both these districts are among the most progressive districts of the State.

### Past trends in production

It can be seen from table 1 that most of the area in Himachal Pradesh is not available for cultivation due to the hilly terrain (Fig. 1). Most of the area is under forests, pastures and grazing land. Only about 11 per cent of the total geographical area is available for cultivation. However, this can be put under double cropping. Third crop, especially of vegetables including potato can be grown between the two season in some of the irrigated areas.

TABLE 1 : Land Utilization Statistics of Himachal Pradesh, 1981-82

Particulars	Area in (Hect.)	Percent to total geographical area
Geographical Area . . . . .	55,53,800	100.00
Cultivated Area (devoted to field crops)	6,13,200	11.04*
Area Under Fruits . . . . .	92,467	1.66
Forests . . . . .	21,14,200	38.07
Fallow Land . . . . .	53,600	0.96
Net available for Cultivation : Barran land and land put to non-agricultural use . . . . .	3,54,200	6.38
Cultivable waste . . . . .	1,36,000	2.45
Area under pastures grazing land and under micellaneous trees . . . . .	21,90,133	39.44

NOTE : Most of the area is put under food grain crops in Kharif as well as Rabi seasons giving a cropping intensity of about 166% which is quite high as compared to Punjab and other plain areas.

<sup>1</sup>Published by Fertiliser Association of India.

<sup>2</sup>Published by Directorate, Economics & Statistics, Government of Himachal Pradesh, Shimla.

Food grain crops namely wheat, maize and paddy predominate the cropping pattern as will be seen from Table 2 which gives the cropping pattern followed by

the farmers in Himachal Pradesh. As there is no significant changes in the cropping pattern over the years especially after 1970-71, the same is shown only upto 1974-75.

TABLE 2 : Cropping Pattern in Himachal Pradesh

Particulars	Percent of Gross Cropped Area					
	1966-67	1970-71	1971-72	1972-73	1973-74	1974-75
Wheat . . . . .	32.1	34.8	35.7	34.3	34.1	34.8
Maize . . . . .	28.2	28.2	28.1	28.2	28.6	28.8
Paddy . . . . .	11.5	11.4	10.8	10.5	10.7	10.0
Other food crops . . . . .	19.7	17.3	17.1	18.2	18.2	17.6
Potato . . . . .	2.1	1.8	1.6	1.6	1.6	1.6
Apple . . . . .	0.7	1.0	1.2	1.3	1.3	1.3
Oil seeds . . . . .	2.6	2.2	2.2	2.2	2.2	2.2
Other non-food crops . . . . .	3.1	3.3	3.3	3.6	3.3	3.7
Cropping Intensity (%) . . . . .	158	166	164	166	164	166

Table No. 2 gives the importance of different crops in the cropping pattern of Himachal Pradesh. It is clear that the cropping pattern is more or less stable and dominated by food grain crops. Nearly three-fourth's of the cultivated area is under foodgrain crops. Other crops have only marginal significance as very little percentage of area is devoted to them.

The trend in foodgrain production has been analysed and compared vis-a-vis India, Punjab and Gujarat. The neighbouring state of Punjab has been selected as it is the most progressive agricultural state. Gujarat has been selected as this state is known for unfavourable agriculture situations such as scarcity conditions, draughts, non-availability of irrigation water and infertile land. As compared to this, soil in Himachal Pradesh is quite fertile with organic matter much more even as compared to soils in Punjab. The natural fertility level of soils in Himachal Pradesh is thus higher than that of Punjab and much higher than that of Gujarat soils.

Even in terms of the important economic indicators which have a bearing on agricultural production, Himachal Pradesh has an edge over Gujarat. This can be seen from Table 3.

TABLE 3 : Selected Economic Indicators

Particulars	Percentage of literacy (1981)	Percentage of net irrigated area to net cultivated area 1976-77	Percentage of electrified villages 1976-77
Punjab . . . . .	40.7	75.1	29.5
Himachal Pradesh . . . . .	41.9	16.1	42.8
Gujarat . . . . .	43.7	14.6	38.9
India . . . . .	34.8	24.2	35.2

Table 4 gives the actual food grain production over the years in Himachal Pradesh, Gujarat, Punjab and All India during and after the green revolution period. There are two distinct periods of 1964-65 to 1972-73 and 1973-74 to 1981-82 which can be termed as the green revolution and post-green revolution periods.

During the first period there has been a steady increase in food grain production due to the introduction of the new strategy for agricultural development which consisted of the cultivation of high yielding varieties of seeds and timely provision of other inputs. Accordingly, the annual production of food grain in Himachal Pradesh increased from 8 lakhs tonnes to about 10 lakh tonnes. The increase in case of Gujarat was most significant covering from about 28 lakhs tonnes to about 42 lakh tonnes. In case of Punjab where production was already at a relatively high level of around 71 lakh tonnes, it increased to about 80 lakh tonnes in 1971-72. In case of all India, the food grain production during this period increased from about 89 million tonnes to 105 million tonnes. The production of food grains during 1964-65, 1974-75 and 1981-82 for selected states and India are shown in Fig. II and Fig. III, respectively.

During the second period of 1973-74 to 1981-82, there has been significant increase in food grain production in Punjab followed by all India and Gujarat with Himachal Pradesh showing almost stagnant production. In Punjab the total production of food grain which was 76 lakh tonnes in 1972-73 increased almost constantly to 125 lakh tones in 1981-82. During the same period food grain production in India increased from 97 million tonnes to a record production of 133 million tonnes. In case of Gujarat, the production increased from 42 lakh tonnes to 48 lakh tonnes. In Himachal Pradesh it ranged between 10 to 11 lakh tonnes only.

TABLE 4 : Food grains Production, 1964-65 through 1981-82

Year	Himachal Pradesh (Lakh tonnes)	Gujarat (Lakh tonnes)	Punjab (Lakh tonnes)	India (Lakh tonnes)
1	2	3	4	5
1964-65	8.00	28.80	71.03	89.35
1965-66	7.07	24.16	55.53	72.34
1966-67	6.17	24.13	42.17	74.23
1967-68	7.04	35.61	54.45	95.05
1968-69	8.70	22.54	45.20	94.01
1969-70	9.20	30.90	69.37	99.50
1970-71	9.23	44.10	70.24	108.42
1971-72	9.55	42.22	79.28	105.17
1972-73	9.39	42.10	76.77	97.02
1973-74	9.46	36.30	85.60	104.66
1974-75	10.68	44.80	81.98	99.82
1975-76	10.73	45.20	87.52	121.03
1976-77	11.15	40.28	91.99	111.16
1977-78	9.29	38.73	106.63	126.40
1978-79	10.31	44.85	116.23	131.90
1979-80	8.60	40.88	118.90	109.70
1980-81	11.35	45.78	118.76	129.90
1981-82	11.06	48.12	125.12	133.10

### Compound Growth Rates

The compound growth rates of food grain production to determine the actual trend during the different periods over the year have been worked out and are given in table 5.

TABLE 5 : Annual Compound growth rates of food grain Production, 1964-65 through 1981-82

Period	Himachal Pradesh	Gujarat	Punjab	India
1964-65 to 1972-73	4.39	7.39	4.55	3.91
1973-74 to 1981-82	1.11	1.66	6.12	2.84
1964-65 to 1981-82	2.69	3.62	5.72	3.02

It will be noted from table 5 that there has been a fall in growth rates over the years except in case of Punjab. During the period 1964-65 to 1972-73 as a result of introduction of new technology, there has been a spectacular increase in food grain production

over the base year. Gujarat, seems to have taken maximum advantage of the new technology and showed the maximum growth rate of around 7 per cent. Punjab, where the food grain production was already at a higher level, registered a growth rate of 4.5 per cent during this period. The performance of Himachal Pradesh has been also good during this period—registering a growth rate of about 4.4 per cent as compared to 3.9 per cent of all India.

During the period from 1973-74 to 1981-82, Punjab continued to have a phenomenal increase in food grain production with an impressive compound growth rate of about 6 per cent followed by the all India figure of 2.8 per cent. In case of Gujarat, the growth rate comes to nearly 2 per cent because the production had already reached to a fairly high potential during the previous period. The performance of Himachal Pradesh on the food grain production front over the years and especially during the period 1973-74 to 1981-82 has been quite disappointing with a growth rate of only 1 per cent as compared to 6 per cent of Punjab. This should be a matter for concern particularly when it can be seen that the performance of Himachal Pradesh and Punjab in terms of growth rate during the first period was almost similar.

Thus, there has not been any significant improvement in food grain production in Himachal Pradesh if the growth rates of production are taken as any indication. For the entire period of 1964-65 to 1981-82, Punjab has registered a growth rate of 5.7 per cent followed by Gujarat with 3.6 per cent. Himachal Pradesh has the lowest growth rate of about 2.7 per cent which is lower than that for India (3 per cent). Therefore, the growth rates of food grain production as compared to the All India and other states in table 5 clearly indicates that the green revolution in Himachal Pradesh is yet to gather momentum and the new technology is yet to be taken to the farmers in this state. Accordingly, the food grain production in the state has remained stagnant over the years without any major break-through.

### Yield per Hectare

The similar results can be drawn from table 6 which gives the data on the yield of principal food grain crops for Himachal Pradesh and India over the years.

TABLE 6 : Yield per hectare of wheat, Maize and Paddy, 1966-67 through 1980-81

Year	Wheat		Maize		Paddy	
	Himachal Pradesh	India	Himachal Pradesh	India	Himachal Pradesh	India
1	2	3	4	5	6	7
1966-67	9.3	9.8	15.2	9.6	8.5	8.6
1967-68	9.6	11.1	17.0	11.2	11.3	10.3
1968-69	8.2	11.7	19.8	9.9	10.2	10.7
1969-70	9.0	12.0	17.3	9.6	11.7	10.7
1970-71	9.2	12.0	18.5	12.7	11.7	11.3
1971-72	9.1	13.8	13.4	8.9	10.6	11.4
1972-73	11.6	12.5	15.6	10.8	9.9	10.7
1973-74	9.5	9.3	17.5	11.5	12.1	11.5
1974-75	11.1	13.3	18.7	9.6	10.5	10.6
1975-76	11.2	13.4	18.4	11.7	13.0	12.4
1976-77	13.8	13.9	17.8	10.3	11.2	11.1
1977-78	8.2	14.7	16.7	10.4	12.9	13.2
1978-79	11.3	15.7	15.8	10.7	12.5	13.4
1979-80	6.8	14.3	15.8	9.7	8.9	10.8
1980-81	8.6	16.5	14.9	11.3	8.8	13.4

The yield of major food grain crops namely wheat, maize and paddy continues to be quite low in Himachal Pradesh and had even decreased now as compared to a few years back. This can be seen from table 6. The yield of wheat has been all times low during 1979-80 and 1980-81. It was only 8.69 quintals per hectare during 1980-81 as compared to the national average of 16.5 quintals during the year. The average yield of wheat during 1978-79 was 11.3 quintals as against the national average of 15.7 quintals. The yield of wheat recorded for the same year in Punjab was 27.1 quintals and for Haryana the same was 23 quintals. The average yields of wheat, maize and paddy during 1966-67, 1974-75 and 1980-81 are shown in Fig IV.

Only in case of maize, yield has been comparatively higher than the national average. However, the yield maize too has been constantly going down in Himachal Pradesh after it reached a maximum of 18.7 quintals in 1973-74. During 1978-79, for

example, the yield of maize has been 15.8 quintals as compared to that of 16.1 quintals in Punjab and 29.4 quintals in Karnataka which state recorded maximum yield per hect. Thereafter, the yield has gone down further.

Similarly, in case of paddy, the average yield per hectare in 1978-79 was 12.5 quintals as against the national average of 13.4 quintals and 29.1 quintals in Punjab and 26.8 quintals in Haryana. Table 6 shows that the yield of paddy thereafter has further gone down in the state.

#### Scope and Potential

It is observed that the yields of food grains crops in the state are too much below the potential yields under the new technology of crops production. The production per unit of land can be remarkably increased with the existing improved varieties and technology. This can be seen from Table 7 which indicates the gap between potential of different crops and actual average yields per hectare (Table 6).

TABLE 7 : Production potential in terms of yields of Major Food grain crops

Particulars	Himachal Pradesh			National Demonstration
	Various Research Experiments (Average)	Soil and Water Management Experiment HPKVV	Highest under Lab to Land Programme Paraur Area (Kangra Distt.)	
Wheat : Irrigated	35.7	46.0	41.8	57
Rainfed	20.8	22.1	21.0	—
Maize : Rainfed	50.0	67.7	36.0*	82**
Paddy : Irrigated	34.3	52.0	51.3	59

\*It was comparatively low as best lands are put under paddy cultivation in this area during the kharif season.

\*\*Under irrigated conditions.

The data presented in table 7 shows that the present yield of food grain crops can be increased 3 to 5 times by the adoption of crop planning with improved technology. This is shown by the results of research experiments as given in table 7. When the same technology was followed on the farmers' fields under the Lab to Land Programme, the similar results were obtained except in case of Maize—as maize is grown by the farmers in the study area in inferior land where paddy cannot be grown. Looking to the potential, it seems, the food grain production in the state can be doubled as has been already done in many states after the green revolution. This would however, require strenuous extension efforts.

### Major Issues

The foregoing analysis shown that the food grain production in Himachal Pradesh has been stagnant. However, a big rise in the output of major food grain crops namely wheat, maize and paddy is possible as the technology is available for boosting the yield of these crops. There is need to get technology out of the farmers' fields. This can be done only if all of us are impatient about it and actually go to the farmers' fields for this purpose.

Although provision of irrigation facilities is the most important factor to increase production, crop yields in Himachal Pradesh even under rainfed conditions are also fairly high under optimum management (Table 7). At the same time the rains are fairly well spread expect only for exceptional years once in a while. This can be seen from the data of food grain production in Table 4 and crop yields in Table 6 which do not show wide fluctuations from year to year as in case of Gujarat and All India production figures.

Therefore, in order to sort out the major issues responsible for the stagnant food grain production, we have analysed the data on the input use and the efforts being put to modernise the food grain production in Himachal Pradesh. The same are given in Tables 8 to 10. Table 8 and 9 gives the data from the secondary sources and the remaining table is made from primary data obtained from the farmers in Kasumpti block of Shimla District.

TABLE 8 : Consumption of Fertiliser, 1974-75 through 1980-81 (Kg/Hec.)

Year	Himachal Pradesh	Punjab	Gujarat	India
1974-75	9.9	42.9	15.4	15.9
1975-76	9.9	49.9	15.6	17.1
1976-77	9.9	61.6	20.0	20.1
1977-78	10.7	72.1	28.5	25.6
1978-79	12.8	94.5	31.4	30.6
1979-80	15.0	106.8	36.6	30.5
1980-81	17.4	117.9	34.9	31.9

Fertiliser is the most important input to increase output of crops next to irrigation. There has been a

phenominal increase in application of fertiliser after 1974-75 in Punjab which shows the higher increase in food grain production. The fertiliser consumption in Gujarat as well as at the national level has also increased significantly when compared with Himachal Pradesh. The fertiliser consumption per hect. in Himachal Pradesh is the lowest and only about half of that in Gujarat and All India level. The fertiliser consumption per hect. during 1974-75 and 1980-81 has been shown in figure V.

The use of fertiliser, being one of most important inputs to increase agricultural production shown the extent of modernisation of agriculture. The data regarding fertiliser use in Himachal Pradesh is not at all impressive when the same is compared for instance even with Gujarat where rainfall is lowest than that of Himachal Pradesh. The percentage of irrigated area also is lower for Gujarat. The high yielding varieties require very heavy dose of fertiliser application. The rates of use of fertiliser are as follows: Punjab (nearly 120), China (130), USA (110), USSR (80), Korea (2.58), Japan (87) and Netherlands (717).

At present the use of other modern agricultural inputs is also quite low. This can be seen from Table 9 and 10 given below.

TABLE 9 : Area under high yielding varieties in Himachal Pradesh 1970-80

Year	Percent of gross cropped area
1970-71	16.55
1971-72	22.30
1972-73	24.86
1973-74	34.74
1974-75	29.37
1975-76	35.94
1976-77	38.50
1977-78	42.96
1978-79	40.85
1979-80	42.98

TABLE 10 : Percentage of farmers using modern inputs 1981-82

Category of farmers	HYV Seeds	Fertilisers	Insecticides/pesticides	Improved tools & implements
Marginal (Upto 1 ha)	58.49	37.66	5.00	5.42
Small (1 to 2 ha)	60.90	35.64	6.25	8.25
Medium (2 to 3 ha)	49.50	47.00	22.07	12.50
Large (above 3 ha)	45.60	48.19	33.33	17.62
Overall	56.19	39.80	16.66	8.71

Table 9 shows that the area under improved seeds which form the cheapest and the basic input to increase agricultural production is only about 43 per cent. Even here, it is found that the seeds are not available to the farmers every year or on regular basis. They have obtained it once in a while—that too from the fellow farmers rather than from a reliable source.

Table 10 gives the percentage of farmers using modern agricultural inputs. It will be noted that on the whole only about 56 per cent of the farmers were using high yielding varieties. Only about 40 per cent of the farmers use fertilisers. The application of plant protection measures was almost a neglected field. The seed treatment is not done by the farmers at all and food grain crops are not given any attention in this regard. The use of improved tools and implements is also not in vogue.

Some of the other issues which came to light during our discussions with the farmers and agriculture officials are as under :

1. Lack of proper motivation and lack of development of managerial skills of the staff of the Agricultural Department to achieve the target of food grain production.
2. Dependence on routine promotions based on the confidential reports of the departmental heads *rather than* the modern methods of interviews, work achievements, publications and overall suitability to achieve the results. This has led to frustration of good workers and a stage has come where the personnel of the Agricultural Department at the field level are not much concerned with the farmers and the farmers in general, have nothing to do with the department as their interest in modernisation of agriculture has not been raised. Transfer of technology and management aspects of farming particularly in remote areas are practically absent.
3. Suitable seeds of high yielding varieties, fertilisers, insecticides etc. are not timely available in the villages nor are the agriculture officers going to the villages particularly far-flung villages for spreading the message of modernisation of agriculture and for providing timely technical advice and help to provide modern inputs including crop load facility at the farmers' door step for raising the output of food grains, as in other progressive states.
4. The Agriculture Extension Officers who are supposed to go to the farmers in the villages to guide and help them, are generally made incharge of the fertiliser or seed stores to look after the same instead of the technical work and going to the farmers, fields to raise agricultural output.
5. The seed production programme is the weakest. There are no systematic arrangements for production and timely distribution of improved seeds in Himachal Pradesh.

Mostly, the seeds are purchased from Punjab or U.P., for distribution to the farmers without trying them on the state government or University farms. The Department of Agriculture is not adopting and multiplying the seeds most suitable for the farmers in this state. Generally, the actual food grain production falls short of the annual targets fixed by the Government. The issues raised above need to be sorted out so that the target of increased food grain production can be achieved.

### Concluding Remarks

The unsatisfactory performance on the farm front in Himachal Pradesh focusses naturally the attention on the primitive practices still followed by the farmers and the need for transfer of modern technology. There is a need for major shake-up and toning up of the Agriculture Administration to achieve self sufficiency in food grain production in the state which is not out of reach as shown in this paper. It is time for stock taking and correcting out shortcoming in this regard. We will have to adopt a result oriented managerial approach to achieve the food grain production targets fixed every year.

Food grain production can be increased 3 to 5 times by adopting modern technology. A manual for doubling food grain production in Himachal Pradesh should be developed on the basis of the recommended practices. The agriculture staff in each district should be made responsible and accountable to achieve the food grain production target. They should move to the farmers, and provide all the necessary technical inputs including crop loans, fertilisers, pesticides and technical guidance to secure rapid increase in good grain production.

It was only during the agriculture administration of Dr. L. S. Negi, formerly, Director of Agriculture, that food grain production had got a boost and high growth rate and comparatively high yields were obtained. Thereafter, the food grain production has been stagnating. It is found that the farmers, in general, follow traditional methods of farming and they are yet to be exposed to the modern technology package. Majority of the farmers do not use fertilisers and pesticides, and they are not aware of their different advantages and the methods of application for best results. Similarly, improved agronomic practices like line sowing of wheat and maize and transplanting of paddy and timely schedule of operations are not followed.

The seed production programme within the state will bring an immediate results. Arrangements for this should be made on the government, University and progressive farmers' so that certified seeds of HYV should be given to the farmers every year. In order to produce, procure and distribute the right type of high yielding varieties of seeds, seed Corporation may be established as in other states.

There is a need to plan in the right way for raising the food grain output. High yielding varieties need delicate handling for achieving their potential. The officials have to see that the farmers get the right variety, sow the same at the right time in the right way



and administer the right kind of pesticides and fertilizers in right doses at right time. This may have also to be supplemented with the application of management input and the higher scientific advances such as micronutrients especially zinc sulphate, bio-fertilisers like Rhizobium, Azotobacter, Azospirillum, Blue-green algae etc. In order to avoid loss of fertilisers, encapsulated and slow release fertilisers offer a promising solution.

Reaching all the potential farmers in the inaccessible hill areas and better management of farm inputs such as ensuring timely availability of seeds, fertilisers, pesticides and improved implements not at the block headquarter but in each village becomes a prerequisite for raising the food grain output. The rural godown scheme designed for producer oriented marketing to prevent distress sale, can be used for this purpose as well.

The farmers in each village will have to be visited and guided by the agricultural extension officers and the VLW every fortnight in order to supply them the latest technology and management aspects of farming for adoption in the next fortnight. Training camps will have to be organised every fortnight for a day or two where VLWs will be given required training in the package of recommended practices to be taught to farmers which will be followed by them in their fields in the coming fortnight. In addition to the regular fortnightly training, pre-seasonal training camps of 2-3 days duration should be held every year in the beginning of the kharif and rabi seasons for the VLWs and AEOs where the subject matter specialists of the Department and Agriculture University will participate and impart intensive training. The focus in the training will be mainly on those practices which bring the highest economic results and increased production to the farmers by making the optimum use of the available resources. At the same time, the VLWs and AEOs will take the opportunity of their training to bring the farmer's specific problems for solution by the specialists at these training camps.

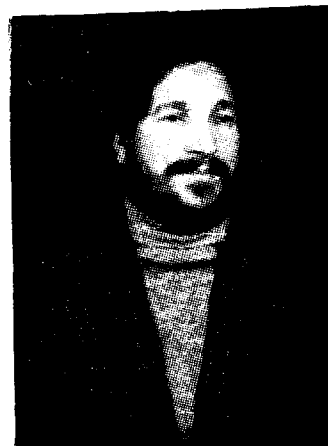
The kharif and rabi campaigns will have to be organised every year by the Department and Agriculture University. The agricultural extension wing of the H.P. Krishi Vishva Vidyalaya should be further strengthened by increasing its responsibility at least in selected districts of the state. Sufficient funds should be earmarked for the extension activities atleast in 3-4 selected districts of the state to start with. The staffing pattern of the extension wing of the districts under the University should be similar to the neighbouring state agricultural Universities of Punjab and Haryana. The entire extension work of the selected districts should be entrusted to the University where research wing will further supplement the needs of the extension work.

However, the extension specialists will have to move out to farmer's fields to modernist agriculture production techniques and increase agricultural production instead of sitting in the offices. It is pity that even in district Kangra where Agricultural University and Indo-German Agricultural Project are located farmers even under irrigated conditions follow broadcast method for sowing of important crops like paddy and wheat instead of the well known Japanese method for paddy and line sowing for wheat. The proper use of fertilisers and other modern inputs is also lacking.

It is also necessary to conduct an indepth research study to examine the present resource use pattern, status of transfer of technology and the actual constraints and problems faced by the farmers in production and marketing which are responsible for low food grain production in the state. The Department of Agriculture should provide funds to the Department of Agricultural Economics of the Himachal Pradesh Krishi Vishva Vidyalaya for this research project immediately as no systematic study has been conducted on food grain production and marketing in Himachal Pradesh so far. This study will be very useful to provide guidelines for chalking out a strategy to raise food grain production significantly.

## URBAN DEVELOPMENT IN HIMACHAL PRADESH

—Shri B. K. Chauhan,  
Former Commissioner,  
Municipal Corporation, Shimla.



### Growing Urbanisation

The growing urbanisation of area has obvious impact of the modern development 5 years Plans. According to available figures, the growth rate of urban population during 1951—61 decade was 26.41 per cent which has gone upto 38.22% during 1961—71 decade. Previously the general impression was that 80 to 90% population lived in rural area and that the rural area alone attracted the utmost attention of our planners and administrators. The latest trend of village people coming over to cities is not only for seeking better education and employment but also the modern facilities available in cities attract the village folk towards Urban areas which has lead to haphazard growth of cities. The increasing urbanisation has therefore drawn the attention of our planners and administrators to improve the civic amenities. The citizens face the increasing problems of water supply, light, transport and shelter. The better educated people of cities have a better sense of well being and they would like to be assured of basic necessities of life. The prospective in these circumstances calls for a clear projection with regard to possible population in next two decades and sound plans for meeting the needs of the increasing population. Apart from the basic services, a stress on some of the Welfare and Social services that are to be provided by Municipal Administration is immense. The better educated city people not only want a quantity of services but also the quality had to be assured. The administrative structure of Local Bodies has to be brought on efficient lines as the increasing influx of population has made its performance erratic and does not inspire confidence in undertaking dynamic programmes. To meet the types of challenges that will arise in the process of rapid urbanisation, the administration must be flexible and forward looking.

### Local Bodies in Himachal Pradesh

Before 1948, there were hardly half a dozen Local Bodies but this number has gone over to one M.C. (at Shimla) 19 Municipal Committees, 21 Notified Area Committees. Local Bodies in H.P. are constituted realising the importance of settlement and to provide better civic amenities for a population sometimes less than 1000, such as Sarahan and Nainadevi.

These Local Bodies are generally not in a position to provide basic amenities and facilities due to topographical, climatic and financial constraints and sometimes due to shortage of staff. Unlike civic Bodies in plains the investments in Hilly areas yield a poor return and conventional norms loose their meaning. The urban population has been increasing at the rate of about 3% per year and total urban population in H.P. is about 3.5 lakhs. During the last financial year, the grant-in-aid to the extent of 54 lakhs was given to local bodies not only for execution of some works for providing basic amenities and facilities but also to maintain the existing ones. This amount is too small for any development worth the name in urban area, especially due to increasing prices of material & Labour cost. Due to abolition of Octroi duty from 1982-83, there are major financial constraints to Local Bodies in H.P. even when some grant in lieu thereof is being given by the Govt. Sufficient basic amenities having not been provided is polluting the environment in one way or the other.

### Position of Shimla Municipal Corporation

The Shimla Town was built up to cater to needs of population of about 29,000 where as it has increased its population by four times. The population including the migratory population goes up by more than ten times during the peak summer season. Shimla has its importance not only of its being a hills resort but also as a state capital. All types of persons from different parts of the state come to Shimla for one or other reasons. The present facilities provided are not sufficient enough to meet with the requirements of the growing population. In the year 1948 the water supply provided in the town was only 9,72,000 gallons against the present supply of 42,00,000 gallon per day. In 1948 there used to be about 1957 nos water connections whereas at present water connections have gone upto 7,000,

Most of the town was on dry system in the year 1948 and hardly 20 K.M. of sewerage lines were there. At present 80 K.M. of sewerage line is in existence and about 60% of the population is on Water Borne System. The Municipal Corporation has a proposal to convert all the dry latrines into hand flush water borne system by the end of 1985. The Municipal Corporation had only 38 W.C. seats and 22 Urinals for the general public use in the town where as W.C. seats for gents 267 nos and ladies 103 urinals, 113 nos and 8 bath rooms are existing at present.

Although all efforts have been made by the Municipal Corporation to provide important amenities of life to the general public but due to shortage of funds were not able to provide all the modern facilities for the general public conveniences. In the modern times, it is a blot on the face of any Local Body to have the dry system (carrying of night soil on head load). We have now a plan to lay down sewerage line throughout the town and having a proper disposal of the sewage and sullage water. To have the proper disposal and augment the present disposal a sum of Rs. 50 lacs is required where as a sum of Rs. 30 lacs is required to improve the existing water system. For other necessities such as bath rooms, W.C. Seats, Urinals, smalls parks for ladies and Children in the different localities of the town we need about 30 lacs rupees.

The roads are the most important factor for movability in the town and for its proper and efficient development, Shimla is a town of ups and downs. The cost of the construction and maintenance is quite higher as compared to the plains. At present Municipal Corporation is having 129 K.M. roads to maintain. In 1948 we were having only 24 K.M. roads metalled (tar) where as 105 K.M. were unmetalled. At present, the metalled roads are 112 K.M. and Unmetalled 17 K.M. All efforts were made to maintaining the roads and to keep them fit for use but the funds were not available adequately to meet the actual requirements. There were hardly 2000 buildings in the year 1948 against 6000 building at present. To meet the requirements of roads, drains and such like facilities of newly constructed colonies, as a sum of Rs. 30 lacs is required and to tar the remaining portion of the roads we need about 60 lacs rupees. The maintenance of the wooden railing is very costly as such, M.S. pipe railing would be replaced in place of wooden railing. This will beautify this important station.

Disposal of the surface water becomes important and relevant in the town as there are lot of rains and snow falls. The existing channels are required to be repaired and augmented. There used to be hardly a kilometer of nallah lined in 1948 where as at present, we have about 15 K.M. on lined nallah. A sum of

Rs. 30 lacs is required to lined new nallah in the Town in the thickly populated segment of the town and newly constructed colonies for effective disposal.

There was hardly one kilometer of street light in the town in the year 1948 where as at present we have 60 kilometer of street light in the town, Present days this is a necessity and we need a sum of Rs. 20 lacs to provide street lights in the town and a sum of Rs. 10 lacs required to improve the present system of the street light per year. As there is migratory population in the Shimla Town, we have to construct some sarais, night shelter. For hostels for labours and rain shelters, a sum of Rs. 50 lacs is required for this purpose. The Municipal Corporation has a proposal to extend its limits upto Tara Devi, Jutogh, Kasumpati, Dhalli etc. According to the proposal a sum of Rs. 1,00,00,000 is required to provide civil amenities such as roads sewerage, water supply, street lights etc. in this newly proposed areas.

### Services

The increased urban areas required the service of additional safai and other staff. Due to grant of 5-6 instalments of A.D.A. every year and revision of scales etc., the expenditure of staff component has gone up considerably. Civic employees are given all facilities as are provided by the State Government to its employees. The Local Bodies are unable to meet this ever increasing expenditure on staff component. The entire income of the Shimla M.C. is spent on Estt. Charges alone and Corporation has no funds of its own to improve the existing civic amenities. The position of small committees can easily be judged.

### Mobilization of Financial Resources

The expenditure of Local Bodies have grown enormously after 1947. The Local Bodies have become dependent on sources other than its own. The Government grants are becoming increasingly important as compared to Local Taxation. Local Taxation being property tax, it is becoming difficult to secure the desired elasticity in its yield. Already its present rate is about 18% in Shimla. Other Local Taxes are naturally of minor importance. There can be "shared Taxes" collected by State Government the receipt of which can be transferred wholly or partly to the Local Bodies such as Motor Vehicles Tax, Entertainment Tax, Excise Duty and Sales Tax, etc. With the abolition of Octroi Duty, there is no chance of its being raised as an effort for "Resource Mobilization." Even for imposing Local Taxes or enhancing the existing rates of Taxation etc., prior approval of State Government is required which is in fact never given. Thus no substantial change is possible for Local Bodies to increase their own income and they have only to depend upon the grant from the State Government.

## LABOUR WELFARE

—Shri P.L. Sehgal,  
Joint Labour Commissioner.

Labour policy derives its philosophy and content from the Directive Principles of the State Policy as laid down in the Constitution of India and has been evolving in response to the specific needs of the situation and to suit the requirement of planned economic development and social justice. It is the product of the tripartite consultations in which representatives of the working class, the employers and the Governments have been participating at various levels. Participation of the parties so vitally concerned lends the product and strength and character of a national policy. The aim is to promote co-operation between workers and employers in order to improve production and working conditions and to promote the interests of the community at large.

While in the years of early industrialization labour policy was pre-occupied mainly with the organised sections of the labour force growing attention is now being paid to the interests of the workers in the unorganised sector without detracting from the concern of Government for the improvement of the real earnings and working conditions of those in the organised sector.

The legislative measures adopted by Central Govt. during the last decade are evidence of diversification of labour policy to progressively fulfil the Directive principles of the Constitution. The more important of the measures taken since 1970 are the contract Labour (Regulation and Abolition) Act to regulate the employment of contract labour and to provide for its abolition in certain circumstances; the Bonded Labour System (Abolition) Act for the abolition of the Bonded Labour system and to free labourers who have incurred a bonded debt, the Sales Promotion Employees (Condition of Service Act), to regulate conditions of service of sales promotion employees; the Equal Remuneration Act for the payment of equal remunerations to men and women workers and for prevention of discrimination against women in the matter of employment and the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act. In accordance with the Directive Principles of the State Policy stress to secure the participation of the workers in management in order to create better mutual understanding between labour and management and facilitate the adoption, on both sides of an objective approach towards the problems of industry and the workers is being laid.



In Himachal Pradesh, the Labour Department is functioning under the overall control of the Labour Commissioner cum-Director of Employment who is assisted by a Joint Labour Commissioner and a Deputy Labour Commissioner and a Factory Inspector at the Headquarters with two Zonal Labour Officers one each posted at Solan and Mandi. In the fields, there are 11 Labour Inspectors who form the part of agency for the implementation of Labour Laws. The department is responsible for implementing the following labour laws :

### *Central Acts*

1. The Industrial Disputes Acts, 1947.
2. The Payment of Wages Act, 1936.
3. The Minimum Wages Act, 1948.
4. The Factories Act, 1940.
5. The Industrial Employment (Standing Order) Act, 1946.
6. The Workmen's Compensation Act, 1923.
7. The working Journalists (Conditions of Service and Misc. Provisions) Act, 1955.
8. The Motor Transport Workers Act, 1961.
9. The Maternity Benefit Act, 1961.
10. The Employees State Insurance Act, 1948.
11. The Employees Provident Fund Act, 1952.
12. The Trade Unions Act, 1926.
13. The Payment of Bonus Act, 1965.
14. The Payment of Gratuity Act, 1972.
15. The Plantations Labour Act, 1951.
16. The Contract Labour (Regulation & Abolition) Act, 1970.
17. The Equal Remuneration Act, 1976.

18. The Bonded Labour System (Abolition) Act, 1976.
19. The Sales Promotion Employees (Conditions of Service) Act, 1976.
20. The Indian Beiler's Act, 1923.
21. The Employment of Children Act, 1938.
22. The Inter-state Migrant Labour Act, 1979.
23. The Personal Injuries (Compensation Insurance), Act, 1953.

#### *State Acts and Rules*

1. The Himachal Pradesh Shops and Commercial Establishments Act, 1969.
2. The Himachal Pradesh Industrial Establishment (National and Festival Holidays and Casual Leave and Sick Leave) Act, 1969.
3. The H.P.P.W.D. Contractor's Labour Regulations.

The various Welfare activities undertaken by this department are in the form of implementation of the above mentioned Acts and the Rules formed thereunder. The activities undertaken under these Acts and the objects and scope and main provisions of the Acts are discussed as below :

#### **Factories Act, 1949**

The main object of the Act is to ensure adequate safety measures and to promote the safety and health of the workers employed in factories. It seeks to prevent hapazard growth of factories through the provision therein relating to approval of plans by the Chief Inspector of Factories. The main provisions of the Act, inter-alia, relate to (i) Health, safety and Welfare, (ii) hours of work, (iii) employment of young persons and women, (iv) annual leave with wages, (v) Occupational diseases, (vi) administration, (vii) enforcement and panalties for offences etc. In Himachal Pradesh, the Labour Commissioner functions as Chief Inspector of Factories, the Joint Labour Commissioner as Additional Chief Inspector of Factories, and all the Principals of the Industrial Training Institutes as Factories Inspectors and the Labour Inspectors as Additional Inspectors. Besides, one Factories Inspector has been appointed at the headquarters. The Act has been extended to Saw Mills under Section 85 of Act.

#### **The Plantations Labour Act, 1961**

The object of the Act is to provide for the welfare of labour to regulate the conditions of work in plantations. It covers tea plantations in Kangra District of Himachal Pradesh in so far as Himachal Pradesh is concerned. The main provisions of the Act deals with (i) health and welfare, (ii) hours of work, rest intervals etc. (iii) employment of Children and young persons; and (iv) leave with wages etc.

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#### **The Motor Transport Worker's Act, 1961**

The object of the Act is to provide for the welfare of the Motor Transport Worker's and regulate the conditions of their work. It applies to every Motor Transport Undertaking employing 5 or more Transport workers. The main provisions of the Act, Inter-alia relate to (i) Welfare and health, (ii) hours of work, (iii) employment of young persons; (iv) wages, overtime and payment of leave wages etc.

#### **Shops and Commercial Establishment Act, 1969**

The working conditions of the employees in Shops and Commercial Establishments are governed largely by this Act. The Act inter-alia, regulates the daily and weekly hours work, rest intervals opening and closing hours of establishments; payment of wages, overtime pay holidays with annual leave, employment of Children and young persons etc.

#### **The Payment of Wages Act, 1936**

The main purpose of the Act is to ensure regular and prompt payment of wages and to prevent the exploitation of wage earner by prohibiting arbitrary fines and deductions from the wages of the workers. The main provisions of the Act relate to (i) powers of the State Governments to extend the application of the Act, (ii) fixation of wage periods and time for payment of wages, (iii) deduction for wages, and levy of fines etc.

#### **The Minimum Wages Act, 1948**

The Minimum Wages Act, 1948 requires the appropriate Government, Central or State as the case may be, to fix minimum rates of wages payable to employee both, skilled and unskilled, manual or clerical, in an employment specified in Part-I or Part-II of the Scheduled appended to Act and any employment added to either part of the schedule subsequently. Under Section 27 of the Act, the appropriate Government is empowered to extend application of the Act to any other employment in respect of which it is of the opinion that the minimum rates of wages should be fixed under the Act. The Act provides for the fixation of (a) minimum time rate of wages (b) minimum price rate wages, and (c) overtime rate of wages, for different occupations, localities or classes of work and for adults, adolescents, Children and apprentices. The minimum rates of wages may consist of (a) basic rate of wage and cost of living allowance or (b) basic rate of wages with or without cost of living allowance and the cash value of concessions in respect of essential commodities supplied at concessional rates (c) all inclusive rate. In Himachal Pradesh, minimum rates of wages have been fixed in the following 11 Scheduled Employments and are also proposed in other 6 employments as per list given below :

1. Employment in Agriculture.
2. Employment in stone breaking and Stone crushing.
3. Employment in the construction or maintenance of roads and building operations.

4. Employment in Forestry and Timbering operations.
5. Employment in Public Motor Transport.
6. Employment in Shops and Commercial Establishments.
7. Employment in Tea Plantations.
8. Employment in Engineering Industries.
9. Employment in Chemical and Chemical Products.
10. Employment in Food and Drinks.
11. Employment in Shawl weaving and Carpet Making.

*Employments in which Minimum Rates of Wages are proposed to be fixed*

1. Employment in Textile Industry.
2. Employment in Hosiery Industry.
3. Employment in Breweries, distilleries and other incidental operations like bottling.
4. Employment in Cement manufacturing and other cement products.
5. Employment in Saw Mills and other wood based industries.
6. Employment in the manufacture of paper and paper products.

#### **The Payment of Bonus Act 1965**

The main object of the Act which came into force with effect from 29th May, 1965 is to provide for the payment of bonus to persons employed in certain establishments and for matters connected therewith. The Act applies to all factories as defined in section 2 (m) of the Factories Act, 1948 and to all other establishments in which 20 or more persons are employed on any day during the accounting year. The main provisions of the Act inter-alia relate to (i) eligibility for bonus, (ii) payment of minimum and maximum bonus, (iii) time limit for payment of bonus, (iv) deductions from bonus, computations of gross profits and available surplus allocable for bonus etc.

#### **The Worker's Compensations Act, 1923**

The object of the Act is to impose an obligation upon employers to pay compensation to workers for accidents arising out of and in the course of employment, resulting in death or total or partial disablement for a period exceeding 3 days. Compensation is payable by the employer in the case of injury caused by accident arising out and in the course of employment. The Act is administered by the State Governments through the appointment of Commissioners for workmen's compensation. In Himachal Pradesh, all the Sub-Divisional Magistrates and Land Acquisition Officers have been appointed, as such, within their respective areas and jurisdiction.

#### **The employee's State Insurance Act, 1948**

The Employee's State Insurance Act, 1948 is a pioneering measure in the field of social insurance in the country. It has been enacted to provide for certain benefits to employees in the case of sickness, maternity and employment injury and to make provisions for certain other related matters. The Act has been extended to Solan, Parwanoo and Nalagarh.

#### **The Payment of Gratuity Act, 1972**

Under the Act, gratuity is payable to an employee on the termination of his employment after rendering continuous service for not less than 5 years, on superannuation or retirement or resignation or death or disablement. For every completed year of service or part thereof in excess of six months, the employer shall pay gratuity to an employee at the rate of 15 days of wages based on the rate of wages last drawn by the concerned employee subject to a maximum of 20 months wages. It applies to every factory, mine, oil field, plantation, every shop or establishment within the meaning of any law for the time being in force, in relation to shops and establishments in State in which ten or more persons are employed or were employed on any one day of the proceeding 12 months.

#### **The Trade union Act, 1926**

The main object of the Act is to confer a legal and corporate status on registered trade unions. The Act provides immunity from civil and criminal liability to trade unions executives and members for bonafide trade unions activities. The main provisions of the Act relate to (i) registration of unions, (ii) rights and privileges, (iii) Obligations and liabilities of registered trade union etc.

#### **The Industrial Employment (Standing Order) Act, 1946**

The Act came into force in April, 1946 and extends to workers employed in Industrial Undertakings/establishments wherein 100 or more workers are employed. The object of the Act is to regulate the conditions of requirements, discharge, disciplinary action, holidays etc., the employers are required to define precisely the conditions of an employment in Industrial Establishments and to make such conditions known to the workmen employed therein. The main provisions of the Act relate to (i) procedure for submission of draft standing orders, (ii) conditions of certification, (iii) date of operation and display of these orders, (iv) procedure for modification etc.

#### **The Industrial Disputes Act, 1947**

This Act is a comprehensive measure adopted by the Central Government with a view to providing industrial relations. It provides for a machinery for peaceful settlement of Industrial Disputes and for the establishment of works Committees to promote harmonious between the employers and workers. The main provisions of the Act as amended upto date relate to (i) constitution of works Committees (ii)

conciliation and adjudication machinery, (iii) strikes and lock outs and (iv) layoff and retrenchments compensation.

#### **The Employment of Children Act, 1938**

The Act provides for the prohibition of employment of children in industrial employments, below the age of 15 in an occupation connected with the handling of goods within the limits of any part and or any other establishment specified in schedule.

#### **The Contract Labour (Regulation and Abolition) Act, 1970**

The object of the Act is to regulate the employment of contract labour in certain establishments and to provide for its abolition in certain circumstances. The Act applies to every establishment in which 20 or more workmen are employed or were employed. The main provisions of the Act relate to (i) setting up of advisory boards (ii) registration of establishments employing contract labour and licensing of contractors, (iii) welfare and health of contract labour and penalties and procedure.

#### **The Equal Remuneration Act, 1976**

The main object of this Act is to provide for the payment of equal remuneration to men and women workers and for the prevention of discrimination on the ground of sex, against women in the matter of

employment and the matters connected therewith or incidental thereto.

#### **The Bonded Labour System Abolition Act, 1976**

The Act aims to provide for the abolition of bonded labour system with a view to preventing the economic and physical exploitation of the weaker section of the society and from matters connected therewith to. The Act came into force on 25th October, 1975 and on the commencement of the Act, the bonded labour system shall stand abolished and every bonded labourer shall on such commencement stand full and discharged from any obligation to render any bonded labour.

#### **The Sales Promotion Employees (Conditions of Service) Act, 1976**

The main object of this Act is to regulate certain conditions of service of Sales Promotion Employees in certain Establishments. Under the Act, the term "Sales Promotion Employees" means any person by whatever name called including an apprentice employed or engaged in any establishment for hire or required to do any work relating to promotion of sales or business or both.

By and large, the labour situation in Himachal Pradesh is satisfactory and field agencies are taking precautionary measures to meet any situation that may arise in the field of labour administration.

## PROBLEMS OF THE UNEMPLOYED

—Shri Chaman Lall,  
Former Deputy Director, Employment,  
Himachal Pradesh.

“Shrama Eva Jayate”, that is, Labour Alone Triumphs, was a slogan given by our Late Prime Minister Mrs. Indira Gandhi to the nation, is not only the last of the notes to rhyme the “Satyameva Jayate”, that is, Truth Alone Triumphs, but also the lines so sub-lime to symphonise with Longfellow’s immortal lines :—

“Let us then be up and doing with a heart for  
any fate; Still achieving, Still pursuing,  
Learn to Labour and to Wait”.

The Employment Assistance programme, took its roots in Himachal Pradesh in the year 1946 when a Sub-Region Employment Exchange came into being at Dharamshala followed by Districts Employment Exchange at Shimla in 1948 and at Mandi in 1952 and trickling down office after office with specialised services for Ex-Servicemen and the Physically Handicapped unemployed persons and now sprung up to even in rural area where sub-offices of the Employment Exchanges function, is being done through a net-work of 12 District Employment Exchanges, One Project Employment Exchange, One University Employment Information and Guidance Bureau Special Cells for the Placement of Ex-servicemen and Physically Handicapped besides Vocational Guidance Units at the State Headquarters and Shimla and Dharamshala Employment Exchanges and also Employment Market Information Units which help the effective functioning of Employment Exchanges. With a view to take these measures to the ruralities number of Sub-Offices, Employment Exchanges, which was only 9 in addition to the district level offices or above has been increased to 31 sub-offices Employment Exchange. This streamlined process results in facilitating the job-seekers living in rural areas, further, sponsoring of applicants against the vacancies notified to the Employment Exchange has been rationalised and now the number of applicants to be sponsored has been so fixed as to increase the probability of selection of job-seekers and avoiding unnecessary botheration to employers. The Programme of providing guidance and counselling to the job-seekers has been geared up and the functionaries have been assigned specific functions, in bettering the employment prospects alongwith providing orientation to the needy persons to set up their own self employed ventures.

In between the employers and employees, workers and managements and the mass of unemployed and employed there stands out another class to be



known as self-employed or seekers of self-employment. The gigantic and multidimensional postures of unemployment problem caused by the phenomenal increase in the employment seekers from 65,473 in 1973 to some two lakhs during the current year in the Pradesh with somewhat unhealthy state of workforce led to the emergence of this new class of self-employment seekers wherein the same persons in his own employer. This new need of the hour, new creed, new philosophy new approach placed the organisation in different position of disseggregated approach to unemployment problem as outlined in the planning strategies. In the all-out efforts of Himachal Pradesh Government in this regard almost every concerned department had schemes to meet the requirement of training, assistance, marketing and production particularly the ‘package of assistance’ programme of the Industries Department with the main thrust on the extension of training facilities almost covered by every agency about which the Government is very keen to implement.

### Research and Surveys

Research and surveys have been considered as one of the most important and significant ingredient of any developmental or welfare activity. Although the Department has been making significant contribution in this regard whenever called upon to present such papers at the national or zonal level various conferences, meetings and seminars, yet sum full-fledged research projects have come out. In a Research Project entitled “RECRUITMENT THROUGH EMPLOYMENT EXCHANGES WITH SPECIAL REFERENCE TO HIMACHAL PRADESH”, Mr. Rameshwar Sharma, while analysing the types and causes of unemployment and assessing manpower and employment assistance agency has made some suggestions for improvement in the Employment Service in Himachal Pradesh, as below :—

- (1) The Employment Exchanges should have more rural bias.



- (2) The Vocational Guidance should be extended in scope and content so as to cover wider spectrum of unemployed mass.
- (3) The Labour Market Information programme should be modelled so as to become positive contribution to Manpower Planning and Adjustment.

Happily, the opening and upgradation of various Sub-Offices of the Employment Exchanges to facilitate the clientage in rural area has taken places to gear up vocational guidance and to explore the extension of the programme of Labour Market Information.

Another Research Project by the author entitled "Survey on the problems of Vocational Guidance including Related Apparatus, Operations and Activities with special reference to Himachal Pradesh" (1978) has been considered as an authoritative treatise on the work in operation in Himachal Pradesh with more than a side-view of things in the neighbouring Punjab, Haryana and Chandigarh that fits in the "ILO's Scheme" by which explains several parameters of Vocational Guidance commencing from definitional basis, conceptual framework to historical perspectives of the growth of vocational guidance movement with frequent references to the Indian situation and the discussion of the theme of vocational guidance draws upon several original sources arguing with emphasis the multi-dimensional approach which has to be adopted to make vocational guidance in India meaningful.

Some of the recommendations contained in the study are enumerated below :—

- (1) Developing of National Employment Service into a 'grown up' stature of multi-functional manpower organisation.
- (2) National Employment Service should have an objective to provide employment to such persons who have no earning member in their family.
- (3) The relaxation of age limits in the matter of employment in the public sector to the extent of the continuance of an applicant on the Live Registers of the Employment Exchanges.
- (4) Amalgamation of Labour Law Enforcement and Labour Market Information programme to ensure wider and intensive coverage and channelisation of manpower to ensure better development and utilisation of human resources.
- (5) Development of Unemployment Code structure to give better deal to senior applicants on the Live Register.

#### Look ahead

Despite all what has been expressed in the preceding paragraphs much is yet to be achieved. To quote the Hon'ble Prime Minister : "Looking at the

country as a whole we have not yet turned the corner in the way which we should". We have to go ahead with increased energies, extended programmes and intensive efforts especially when our Seventh Plan is on the anvil. Therefore, the Manpower Planning and Adjustment machinery which quite long remained a low priority service requires a great deal of concern and attention. The working Group of Employment service constituted by the Planning Commission recommended "sustained efforts to boost the sagging image of the Employment Exchanges" by way of gradually transforming them into a nuclei of a manpower oriented Labour Market Information System. The quality of career literature turned out requires much improvement which would need huge financial resources to be diverted towards this aspect. The prompt release of data is an essential ingredient. Adequate staff with regular training-set-up is essential to ensure qualitative service to the already dissatisfied section of the unemployed mass. Better, modern and sophisticated equipments, efforts and developed expansion have become over due. The entrepreneurial development in collaboration with expert agencies together with aptitude tests administration have become pre-requisites in this dynamic development. Entrusting of more power and authority to the Employment Exchange personnel alone can enable them to play their role effectively. Maintenance of a special funds at the disposal of employment exchanges which could be advanced as margin money assistance to self-employment seekers is yet another suggestion. The net-work of Employment Service should be extended to the remaining tehsils or sub-tehsils not covered so far. Decentralisation of functions of the State Headquarters by creating more divisional or zonal offices are required so that early and better facilities can be assured to the public. The integration of labour market information as well as enforcement of laws concerning employment exchanges together with the labour enforcement machinery or inspectorate can ensure better, adequate and exact coverage as the influence and better positioned labour inspectorate can have concrete results. Provision of small press to timely publicise the data and reports and reviews and write-ups results in much effective fruits. The mobile service units cannot be ignored in view of the topography, terrain and general economic set-up of the State. Research Cell for study, survey and indepth study of labour and employment problems in the wake of speedy development can no longer be ignored. The Job Development unit, Career study Advice, Labour consultancy service apparatus are required to be added to the State Directorate.

Likewise, the role of workers participation in management was an important element in industrial relations policy, and to tackle the problems of the sick units, minimum wages for agricultural or horticultural workers and conditions of employment of children, Enhancement of plan outlay for the Labour Department is a must to enable the Department to discharge its responsibility to ensure fair deal to labour to create more positive and healthy industrial harmony and continued flow of goods and services Himachal Pradesh's new experiment of Class III recruit-

ment through Employment Exchanges by public Service Commission, a new challenge, requires what the Prime Minister Said that we should "have a look at the procedure and practice in the Employment Exchange' for an effective help to the labour workers in remote areas."

Another suggestion which needs a fair trial is the setting up a Private Employment and Labour Consultancy Service on an experimental basis. At present this aspect is quite neglected and such a project may be considered somewhat paradoxical contrary to current climate yet this can enlist the effort the missionary type of personnel who are hardly available in the public sector agencies. Some private agencies duly licenced and subject to verification and regulated inspection system of course should be entrusted the functions of guidance, counselling and submitting particulars and helping the applicants applying for the jobs. Some sort of brief coaching can be given to some of the applicants through post or through person. Those private organisations can be paid remunerations on piece rated basis.

The functioning of this agency to operate upon in limited areas or in such areas which are much more

difficult than those attended to by the Employment Exchanges can lead to additional achievements. Similarly, on labour side workers sometime feel shy of approaching the governmental agencies and they can be suitably advised the right type of course and can also be given orientation to avoid unnecessary conflicts and pursue the right courses and can be advised to contact right type of agencies. The guidance and counselling aspects in both the spheres of labour and employment can render effective help and can also have some healthy effect on the various wings of the organisation leading to fruitful results benefiting the people of the State. This will result in co-existence of private and governmental organisation having healthy impact on each other.

But all this needs release of adequate funds, sympathetic and benevolent attitude of the planners and financial agencies, higher allocation of funds in the plan outlay. It is only then that the aspiration of the Hon'ble Prime Minister could be met to see that the "ideas are properly implemented, so that desired results are achieved and we can move forward in our great task of building up this nation".

## SOME SUGGESTIONS FOR RURAL DEVELOPMENT

—Shri Naval Kishore,  
Deputy Director,  
Economics & Statistics, Department,  
Himachal Pradesh.

The appraisal of the actual implementation of various rural development programmes makes it clear that optimum utilisation of resources has not been possible due to weakness in the overall administrative structure. The block level development administrative machinery has become "very weak" due to either dual control or multiplicity of other sectoral programmes. Difficulties also arose from the lack of coordination between different departments at the district level, resulting in considerable overlapping and multiplicity in programmes being operated at the ground level.\*

The concept of rural development generally covers such subjects as technical, economic, social and cultural development of rural India. Provision of employment and improvement in productivity of working leading to increasing income levels are some of the challenging aspects of rural development. In this direction the Government has introduced a succession of employment generation programmes to launch a frontal attack on rural poverty. At first it was Crash Programme, followed by SFDA & MFAL, then came Anfodaya, and the current programme is IRDP along with its sister scheme of NREP. The programmes content of all these programmes is almost identical. But it has been realised by the Planning Commission that we could have got much better results with the investment made.

In Himachal Pradesh, the 5th ranking state according to per capita income, the previous plans have mainly concentrated on the building up of the infrastructure of motorable roads (25 km per 100 sq. km of area), rural electrification (over 80 per cent villages electrified), drinking water supply (nearly 70 per cent villages covered) and a set up of educational and health institutions throughout the state. The Pradesh has literacy rate of 42.48 according to 1981 Census, which is higher than all India average. With such a background the time is now ripe to streamline the implementation of IRDP to remove the poverty of 43 per cent rural households.

The Planning Commission has said in the guidelines for the preparation of 7th Plan that the states should give emphasis to growth centres with provision for ancillarisation and dispersal of industry, away from the urban concentration. They have also laid emphasis



on the decentralisation of planning, increased role of Panchayati Raj institutions and closer coordination between different sectoral line agencies.

This in fact mean planning at micro-level. The experience in the past has indicated that useful potential could not be tapped due to lack of micro planning e.g., irrigation potential could not be utilised due to non-provision of field channels. It is also an irony that the Pradesh has still to impart most of the dairy, poultry and textile products from the neighbouring states while its nearly 3 lakh families are waiting to be gainfully employed. Under the IRDP programme a lot of milch cattle, poultry and other schemes have been introduced but they have not really been integrated with marketing and servicing net work. This is actually the missing link which has held up the clicking of the programme. This net work can be viewed in the concept of growth centre, focal point or rural mart.

The concept of growth centre is not a new one but what is new is the realisation of its importance at this stage in the process of rural development. These growth centres would generate employment in secondary and tertiary sectors of economy by tapping the pent up energies of the unemployed and also by providing supplemental occupations to the underemployed. The employment would be provided at the door steps of the villagers in the line with Gandhian concept of Planning. The growth centres would be centres of two-way communication, they would provide inputs and market away the surplus output. This will require intensive coordination amongst various agencies to play their respective roles effectively. The Government shall have to do minute planning exercises to select appropriate sites, say about 5 sites per block to start with, for the growth centres, link these sites by road, both with the hinterland and also with main market. The Government shall then locate centres for

\*Note of Planning Commission—Indian Express 10-9-84.

milk chilling, poultry, collection, warehouse, cold storages, input supplies, power and regulated market as the need be. For this purpose a Growth Centres Development Corporation can be set up with a revolving fund. Five centres per block can be spread over a period of five years.

The role of industry would be to establish such units as atta chakki, rice mill, oil ghani, sawing machine,

carding unit, weaving centres etc. The raw material for household units, such as, wool, cotton yarn, leather etc. would be provided by the Khadi Board, Handloom and Handicrafts Corporation or Small Industries Export Corporation. Their individual role shall have to be clearly defined in supplying raw materials and marketing of finished products to avoid duplication in activities.



Carpet Weaving

The growth centres would also have a lot of scope for setting up some units in tertiary sector e.g., barber shop, repair shops, video centre, tea shop, restaurant, and small market of article of domestic use, besides a bank to provide credit. Some transport activities will provide additional opportunities of employment.

The Seventh Plan anticipates that the poverty line would fall to 23 per cent by the end of the Plan and would be further reduced to 10 per cent by the end of Eighth Plan (1994-95). The size of employment generation under IRDP is proposed to be raised to 1,000 persons per block per year. This would call for a real efforts on the part of all concerned and the

establishment of a strong monitoring and evaluation set up.

Success of any programme is hard to measure. We can always say that it would have been even slower had the Government not made any efforts. We do not really know why some countries are more dynamic than others. Who could predict that West Germany and Japan would rule the economic world so soon after being perished and reduced to ashes in the Second World War. As the saying goes one can take the house to water but one cannot make it drink unless it is thirsty. In reviving this thirst lies the secret of success, where the leadership can play a vital role.

## DEVELOPMENT OF SCHEDULED CASTES IN HIMACHAL PRADESH

—Sh. M. L. Kapur,  
Deputy Director,  
Tribal Development,  
Himachal Pradesh.

The scheduled castes are those castes which have been notified as such by the Presidential Order in pursuance of Article 341 of the Constitution of India. In Himachal Pradesh, the scheduled castes were earlier notified in 1956 separately for the old areas as well as the merged area which was further amended by the Scheduled Castes and Scheduled Tribes Order (Amendment) Act, 1976 (No. 108 of 1976). The main purpose of the Amendment Act was to remove area restriction in respect of scheduled castes with the result that most of the scheduled castes are now notified as such throughout the State, unlike that in 1956 order where these were notified in relation to different regions of the State, registering area restrictions. According to the Amendment Act, (1976), there are 56 scheduled castes in Himachal Pradesh. Of these, major concentration is that of the following 5 castes who covered 78.9% of the total scheduled castes population of the Pradesh:—

Name of the Scheduled Castes Community	Population (1971 census)	Percentage to total SC population of the State
1	2	3
1. Chammar, Ravidasi etc.	2,24,574	29.18
2. Doom, Mahasha etc.	39,022	5.07
3. Kabirpanthi, Julaha	64,158	8.33
4. Koli or Kori	2,37,614	30.88
5. Lohar	41,916	5.45
Total	6,07,284	78.91

There are 10.54 lakh scheduled castes in Himachal Pradesh according to 1981 census. Over the decade 1971—81, the scheduled castes have registered a growth rate of 36.95% as against the total State's population growth rate of 23.71%. Within the districts, the SC population has varied concentration, Solan district with 31.78% has the highest scheduled caste population; closely followed by Sirmaur district (30.02%) and lowest SC population lives in Lahaul-Spiti district (2.25%) only. Next above it comes Kinnaur district with 10.63% SC population. Also a



major segment of SC population in Himachal Pradesh reside in rural areas and account for 94.6%; only 5.4% scheduled castes live in urban areas. Sex-wise, 5.37 lakh SCs are males while 5.16 lakhs are females.

The occupational distribution of Scheduled caste population in the Pradesh is given in the table below:

Occupational Distribution (1981 census)

Occupational pattern	Total	Scheduled Castes	%age to total population	%age to total workers
1	2	3	4	5
1. Main workers				
(i) Cultivators . . . . .	9.97	2.69	27.0	71.7
(ii) Agricultural labourers . . . . .	0.42	0.19	44.0	4.9
(iii) Household Industries, manufacturing, processing, servicing and repairs . . . . .	0.38	0.15	40.7	4.1
(iv) Other workers . . . . .	3.59	0.73	20.2	19.3
Total : Main Workers . . . . .	14.36	3.76	26.2	100.00
2. Marginal Workers . . . . .	3.19	0.84	26.4	—
3. Non-workers . . . . .	24.83	5.94	23.9	—

It would be revealed from the above figures that as large as 76.6% of main scheduled caste workers are cultivators and agricultural labourers who are naturally, dependent on land and constitute the main target group. There are 1.97 lakh scheduled caste families in the State of whom 1.52 lakh are estimated to be marginal and small farmers and agricultural labourers.

In view of non-availability of 1981 census data on traditional occupations among scheduled castes,

the classification as such according to 1971 census is given below:

Traditional occupation	Total number	Percentage to total
1	2	3
1. Weavers & Spinners . . .	1,83,187	53.88
2. Leather workers . . .	79,187	23.29
3. Carpenters and iron smiths	56,208	13.59
4. Sweepers and Scavengers . .	23,360	6.87
5. Basket, mat & rope making	3,682	1.08
6. Washing of clothes, dyers & painters . . . . .	2,356	0.69
7. Gold washers, floating of timber, catachu makers and masonary workers etc. . .	1,065	0.31
8. Fine metal works artisans and ornaments and lac bangles . . . . .	708	0.21
9. Toddy tapping, tari and liquor making and pig rearing . . . . .	151	0.04
10. Fruit and vegetable sellers and dealers of milk products	105	0.04
Total . . . . .	3,40,009	100.00

It would be seen that weavers and spinners and leather workers constituted 77.17% of the total workers while the rest 22.83% accounted for other traditional occupations, which calls for bold steps to be taken for the uplift of weavers, spinners and leather workers.

As a result of serious efforts made in the field of education, the literacy amongst scheduled castes has gone up from 18.82% in 1971 to 31.50% in 1981. Correspondingly, the overall literacy in the State has gone up from 31.96% to 42.48% during the same period. Within the districts, Lahaul-Spiti is at the top where the scheduled castes literacy is as high as 49.52% against the general literacy of 31.50% as a whole. This contrasting phenomenon is mainly because of the fact that in the general population there is a large number of labour class from outside the district. Next comes Hamirpur district with 45.47% scheduled castes literacy as compared to 52.7% general literacy followed by Una district with 42.75% scheduled castes' literacy as compared to 50.05% general literacy. Chamba district is at the lowest rung where scheduled castes' literacy is as low as 20.16% compared to 26.45% general literacy. Next in the ascending order comes Kullu district where scheduled castes literacy is 21.11% compared to 33.82% of general literacy rate.

The Constitution of India, in its preamble, pledges to secure to all citizens justices, social, economic and political. The State committed to a policy of "Growth with Social Justice", has necessarily to devise policies and programmes in the maner that

should minimise the gap between the rich and the poor and the benefits of development should flow in just and equitable manner to all groups and communities for reducing socio-economic cleavages. Article 46 of the Constitution of India further states that "the State shall promote with special care the educational and economic interests of the weaker sections of the people, and in particular, of the Scheduled castes and scheduled tribes, and shall protect them from the social injustice and all forms of exploitations". The scheduled castes constitute vulnerable groups and since the very beginning, the State Government has been committed to pull them out of the abysmally low level of living to enable them ultimately to join the mainstream and share the fruits of planned progress.

It is a matter of grave concern that even after three decades of planning, the economic position of scheduled castes has not improved much and there is an ample scope for their economic amelioration. The scheduled castes constitute 24.62% of the total population in the Pradesh but their proportion is much higher in the poverty group. They are mostly agricultural labourers, weavers, spinners, and leather workers etc. From times immemorial, the scheduled castes had to pursue unclean occupations such as scavenging and sweeping, flaying and tanning. It is a matter of common observation based on the earlier plans that the process of economic development and modernisation has not benefited this weaker section to the extent it did the other communities; the fruits of progress and flow of benefits have not reached the majority of scheduled castes to the extent these should have.

Since the attempts made in the earlier Five Year Plans could not yield the desired results and efforts to uplift these down-trodden communities were actually found lacking, it was thought necessary to undertake various developmental activities in an integrated manner so as to ensure that scheduled caste beneficiary families received a package of developmental assistance. These efforts were given a new shape during 1979-80 when the State Govt. formulated for the first time, the Special Component Plan for scheduled castes. For this purpose an outlay of Rs. 4.61 crores was set apart against which the expenditure incurred was Rs. 2.98 crores. This was an encouraging maiden experience which provoked further thinking on the subject.

The concept of formulation of specific Special Component Plans for scheduled castes got concretised during subsequent years both at the State and the central level, in the Planning Commission and the Union Ministry of Home Affairs. Practical and useful guidelines started flowing from the central government even at the Prime Minister's level and more and more clarity and comprehension was available in the form of Special Component Plans for scheduled castes. It was laid down as a national objective that community/family/individual beneficiary oriented schemes and related programmes should form important constituents of the plans which should take care to provide requisite assistance to the scheduled caste families living below

the poverty line so as to enable 50% of them to cross the rubicon of poverty by the end of Sixth Five Year Plan.

As a significant step in this direction, to study and understand more vividly the existing mechanism of plan formulation and to evolve a strategy for ensuring actual delivery of goods, a working Group was constituted by the Planning Commission, Govt. of India, in mid, 1980. The following are the salient recommendations of the Working Group—

- (i) Family oriented programmes for the scheduled castes should be taken up in the required magnitude so that 50% of the scheduled caste families are enabled to cross the poverty line in the 6th Plan period as indicated by the Prime Minister; suitable phasing from year to year may be made.
- (ii) These family oriented programmes of economic, development should be formulated on the basis of the needs of the scheduled castes and should meet the specific problems faced by them, further there should be composite programme and it should be ensured that all essential linkages are planned for and organised.
- (iii) The provision of all minimum and basic amenities should be fully incorporated in the Special Component Plan; these would include drinking water; housing; drainage; link roads, supply of essential commodities etc; and in the urban areas also, all services and facilities for the improvement of slums.
- (iv) The educational development of scheduled castes especially at the Primary level should be fully reflected in the Special Component Plan; it is necessary that the lag in the education of the scheduled castes is removed and they are brought on a par with general population in the Sixth Plan period.

Unlike the scheduled tribes, the scheduled castes are spread throughout the State which renders the formulation and implementation of programmes/schemes for their development difficult. They suffer from dual disability of severe economic exploitation

and social discrimination. As a bold leap forward, the Special Component Plan for scheduled castes 1980-81 was drawn up of the size of Rs. 6.81 crores within the overall 6th Plan parameters of Rs. 61.60 crores. Significant supplementation by way of Special Central Assistance from the Ministry of Home Affairs, Govt. of India was made available to the tune of Rs. 0.83 crores during 1980-81 within the overall ceiling of Rs. 5.55 crores for the 6th Plan period. The flow from the State Plan to the Special Component Plan has shown consistently upward trend from 7.41% in 1980-81 to 11% in 1983-84. The size for the 1984-85 Special Component Plan has been determined at Rs. 15.75 crores in the total State Plan size of Rs. 165.00 crores which comes to 9.6%. The earmarking of funds has slightly come down during 1984-85 but it is still above the national average of 9.53% of Plan funds at the national level. Likewise, the special central assistance from the Union Home Ministry has shown gradual upward trend over the year; Rs. 1.50 crores for 1984-85. The proposed outlay on community/ family/individual beneficiary-oriented schemes would be around 65% of the total sub-plan size. The balance 35% would be on schemes of infrastructural nature.

The outlays provided under the Special Component Plan for scheduled castes have, more or less, kept in line with the outlays under the overall State Plan of the Pradesh. The figures given in the table below would bear out this contention:—

Plan period	State Plan outlay	Flow to SCP	%age of col. 3 to col. 2
1980-85 . . . . .	560.00	61.60	11.00
1980-81 . . . . .	91.92	6.81	7.41
1981-82 . . . . .	105.25	10.98	10.44
1982-83 . . . . .	120.00	13.54	11.28
1983-84 . . . . .	143.00	15.40	10.77
1984-85 . . . . .	165.00	15.75	9.55

Year-wise outlay and expenditure (State Plan as well as Special Central Assistance) over the Sixth Plan period under the Special component plan is as shown in the table below:—

Sector	STATE PLAN										(Rs. in lakhs)
	Sixth Plan Outlay	1980-81		1981-82		1982-83		1983-84		1984-85 Outlay	
		Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.		
1	2	3	4	5	6	7	8	9	10	11	
1. Agriculture and Allied Services . . . . .	1,780.00	275.49	164.73	311.50	245.99	389.50	396.46	447.00	392.00	489.00	
2. Cooperation . . . . .	100.00	2.50	2.50	18.00	17.92	19.00	19.00	18.00	18.00	18.00	
3. Water & Power Development . . . . .	682.00	98.50	58.86	112.00	127.33	138.00	121.70	163.00	125.00	58.00	
4. Industry and Minerals . . . . .	280.00	36.60	29.89	50.00	30.82	51.00	31.47	54.00	49.00	69.00	
5. Transport and Communications . . . . .	1,513.00	..	..	262.90	316.16	300.00	328.33	300.00	273.00	405.00	
6. Social and Community Services . . . . .	1,805.00	268.06	283.01	344.10	328.99	456.00	437.44	556.00	544.80	532.50	
7. Economic Services . . . . .	..	..	..	..	..	..	..	..	..	..	
8. General Services . . . . .	..	..	..	..	..	..	..	2.00	2.20	4.00	
<b>Total 1—8</b>	<b>6,160.00</b>	<b>681.15</b>	<b>538.99</b>	<b>1,098.50</b>	<b>1,067.21</b>	<b>1,353.50</b>	<b>1,334.40</b>	<b>1,540.00</b>	<b>1,404.00</b>	<b>1,575.50</b>	

## SPECIAL CENTRAL ASSISTANCE

(Rs. in lakhs)

Sector	Sixth Plan Outlay	1980-81		1981-82		1982-83		1983-84		1984-85 Outlay
		Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Likely Exp.	
1	2	3	4	5	6	7	8	9	10	11
1. Agriculture and Allied Services . . .	390.00	57.51	55.54	98.20	96.67	79.00	108.21	93.00	105.12	124.00
2. Cooperation . . .	20.00	3.50	3.50	3.00	3.00	3.00	3.00	3.00	3.00	1.00
3. Water & Power Development . . .	..	..	..	..	..	..	..	..	..	..
4. Industry and Minerals . . .	50.00	10.00	10.00	10.00	10.00	12.00	12.00	12.00	12.00	8.00
5. Transport and Communications . . .	..	..	..	..	..	..	..	..	..	..
6. Social and Community Services . . .	75.00	10.99	10.89	5.00	8.00	10.00	—	7.00	7.00	..
7. Economic Services . . .	..	..	..	..	..	..	..	..	..	..
8. General Services . . .	20.00	1.00	..	5.00	1.75	8.00	4.03	10.00	10.00	17.00
Total 1—8 . . .	555.00	83.00	79.93	121.20	119.42	112.00	127.24	125.00	137.12	150.00

All through these years, the first priority has been accorded to Social and Community Services sector, followed by Agriculture and Allied Services, Transport and Communications, Water and Power Development, Industry and Minerals and Cooperation sectors. These priorities have been assigned keeping in view the situation obtaining in the State.

Implementation of scheme under the Special Component Plan has received a set back on account of non-availability of details about the areas of scheduled castes concentration in the Pradesh. In order to overcome this difficulty, the SC/ST Development Department have compiled the following two publications based on census data—

1. List of villages of scheduled castes concentration in Himachal Pradesh (1971 census).

2. Supplementary list of villages of Scheduled Castes concentration in HP (1971 census).

The first publication gives details of villages with 50% and above scheduled castes concentration and the second one gives details of villages having 90 or above scheduled castes. These are tehsilwise and the former also given locational maps so as to facilitate identification of these village on ground. These publications have been widely circulated to the implementing departments/field functionaries which would help them to implement infrastructural activities for the benefit of scheduled castes in the State. Put together, the villages identified in these two publications number 3,990 and in all 66.45% of total scheduled castes are covered according to 1971 census. The district-wise scatter of these villages of SC concentration is as given below:—

Name of district	Particulars of villages of SC concentration			Total SC population	%age of col. 4 to col. 5
	No.	Total population	Sch. Caste population		
1	2	3	4	5	6
<i>A—Villages having 50% and above SC concentration</i>					
Bilaspur . . . . .	90	15,269	9,276	47,655	19.46
Chamba . . . . .	62	11,154	7,157	38,629	18.70
Kangra . . . . .	495	66,976	44,501	2,33,478	19.06
Kullu . . . . .	10	9,623	5,234	48,361	10.82
Mahasu . . . . .	593	65,244	42,362	1,29,362	32.75
Mandi . . . . .	415	74,248	48,426	1,34,531	35.97
Shimla . . . . .	455	30,552	21,917	54,057	40.54
Sirmaur . . . . .	237	43,294	27,180	73,949	37.11
Himachal Pradesh . . . . .	2,357	3,16,360	2,06,053	7,59,662	27.12



1	2	3	4	5	6
<i>B—Villages having 90 % or above scheduled castes</i>					
Bilaspur . . . . .	120	69,669	20,520	47,655	43.06
Chamba . . . . .	81	37,082	11,712	38,269	30.50
Kangra . . . . .	570	4,43,759	1,06,471	2,33,478	45.60
Kinnaur . . . . .	34	29,993	7,733	9,669	90.32
Kullu . . . . .	119	1,51,996	40,274	48,361	83.18
Mahasu . . . . .	255	1,34,721	44,033	1,29,362	34.04
Mandi . . . . .	265	1,18,396	39,478	1,34,531	29.34
Shimla . . . . .	44	23,306	6,821	54,057	12.62
Sirmaur . . . . .	145	88,940	27,155	73,949	35.76
Himachal Pradesh . . . . .	1,633	10,97,862	3,05,197	7,69,331	39.58
Total (A + B) . . . . .	3,990	14,14,222	5,11,250	15,28,993	66.45

Two chief characteristics of the scheduled castes of Himachal Pradesh require special mention, firstly, most of them are cultivators and agricultural labourers and secondly, they live with the majority community in the same village or slightly away but there are no exclusive basties of scheduled castes as in some other States. This makes formulation of Special Component Plan for them a slightly difficult task, for an area approach cannot be applied in preparing various developmental programmes/schemes. In this backdrop, while formulating Special Component Plan for scheduled castes, emphasis has been laid on community/family individual beneficiary-oriented schemes/programmes in pursuance of guidelines received from the Ministry of Home Affairs, Government of India and the Planning commission from time to time. This has been done to ensure that the scheduled castes living below the poverty line are enabled to come above it.

The matter with respect to adoption of "Lump-sum" approach on the lines of Tribal Sub-Plan is engaging the attention of the State Govt. For better quantification of funds, separate sub-heads under each major head of Accounts have also been introduced from 1981-82; single consolidated demand for SCP is also under consideration.

The following specific steps have been adopted in the State to ensure that the scheduled castes receive the maximum benefits from the schemes and programmes implemented.

#### A—Infrastructural Sectors

- (i) The State Govt. took a decision at the beginning of the Sixth Five Year Plan to provide massive subsidies under the rural electrification programme, to cover the left out scheduled caste households and predominantly SC concentration localities; one lighting point to be provided to each SC household free of cost.
- (ii) Provision of public hydrants in pre-dominantly SC localities under all water supply schemes being implemented by the State Govt.

- (iii) Opening of 23% of new schools and Health sub-Centres in harijan basties/villages having more than 50% concentration of scheduled castes in order to provide better education and health cover.
- (vi) To link all scheduled caste village/basties by link roads.
- (v) In the case of minor irrigation schemes, expenditure would be debited to the SCP only if the scheme covers a village with more than 50% SC population and also if the CC/A of the schemes covers a minimum 1/4th of total area belonging to scheduled castes.
- (vi) In the case of Medium Irrigation schemes, expenditure will be debitable to SCP only if the main feeder channel and distributory channels are constructed to cover the land belonging to scheduled caste.

#### B—Beneficiary Oriented Programmes

- (i) Subsidies on inputs provided to scheduled castes were raised to 50% in the case of SC beneficiaries. In the case of fertilizers, this has recently been reduced to 40%.
- (ii) In order to equip the SC/ST children better for admission to MBBS courses, 20 out of a total of 40 seats are reserved in the pre-coaching course of one month's duration being organised in the Himachal Institute of Public Administration. Similarly, pre-coaching classes are organised for the benefit of SC/ST candidates for entry into IAS/HAS and Banking Services in the Institute for 3 months duration each. The SC/ST candidates are provided free boarding and lodging for the full duration of the course.
- (iii) A special drive to provide land to landless and to those persons who owned less than 5 bighas of land which was launched during 1975, is continuing since then.

- (iv) 50 per cent coverage of SC population in various programmes under integrated rural development programmes has been ensured.
- (v) Free legal aid to scheduled castes whose family income from all sources does not exceed Rs. 7,200 per annum.
- (vi) Margin money to scheduled caste entrepreneurs at the rate of 1% as against 6% and 4% rate of interest in respect of other entrepreneurs.
- (vii) The rate of interest on term loans has been reduced to 4%. The difference between this and actual rate of interest to be paid from out of the funds under SCP for Schedule Castes.
- (viii) SC entrepreneurs to be given 90% subsidy on actual cost of preparation of feasibility reports besides 100% subsidy for carriage and installation of machinery.
- (b) free hostels for SC students;
- (c) conversion of dry latrines into handflush latrines to eliminate the age old practice of carrying night soil as head load;
- (d) relief in the case of atrocities on scheduled caste and
- (e) development of floriculture as inter-crop by SC orchardists.

### Poverty Reduction Programme

The national objective for poverty reduction programme lays down that at least 50% of the target group families should be enabled to cross the poverty line by the end of Sixth Five Year Plan. In order to identify the target-group SC families living below the poverty line a specific survey has been undertaken by the Rural Development Department in the rural areas. Similar survey in the urban areas has been undertaken by the Economics and Statistics Department. The results thrown up by these surveys are depicted in the table below;

The following innovative schemes have also been included in the Special component Plan:

- (a) scholarships to SC girl students;

#### Identified Target Group Families

District	Block	Scheduled Caste families	Scheduled Tribe families	Others	Total
1	2	3	4	5	6
<b>URBAN</b>					
Bilaspur . . . . .		73	1	129	203
Hamirpur . . . . .		142	—	312	454
Chamba . . . . .		50	7	71	128
Kangra . . . . .		150	6	349	505
Kullu . . . . .		64	8	64	136
Mandi . . . . .		270	10	362	642
Shimla . . . . .		199	1	290	490
Sirmaur . . . . .		138	..	228	366
Solan . . . . .		141	14	258	313
Una . . . . .		181	..	331	512
Lahaul Spiti . . . . .		..	..	..	..
Kinnaur . . . . .		..	..	..	..
<b>HIMACHAL PRADESH.</b>		<b>1,408</b>	<b>47</b>	<b>2,294</b>	<b>3,749</b>
<b>RURAL</b>					
Bilaspur . . . . .	1. Bilaspur . . . . .	2,343	433	4,671	7,447
	2. Gehrwin . . . . .	1,456	115	1,712	3,283
	3. Ghumarwin . . . . .	1,659	106	2,690	4,455
	<b>Total</b>	<b>5,458</b>	<b>654</b>	<b>9,073</b>	<b>15,185</b>

1	2	3	4	5	6
RURAL—contd.					
Hamirpur . . . . .	1. Hamirpur . . . . .	1,687	..	3,137	4,824
	2. Bijhari . . . . .	1,730	..	4,173	5,903
	3. Nadaun . . . . .	1,053	..	3,042	4,095
	4. Bhoranj . . . . .	1,886	..	2,788	4,674
	5. Sujanpur . . . . .	730	..	1,171	1,901
	Total . . . . .	7,086	..	14,311	21,397
Chamba . . . . .	1. Bharmour . . . . .	639	3,303	3	3,945
	2. Chamba . . . . .	1,289	708	959	2,956
	3. Mehla . . . . .	1,543	4,456	1,741	7,740
	4. Tissa . . . . .	1,471	679	2,176	4,326
	5. Salooni . . . . .	2,086	773	4,099	6,958
	6. Pangi . . . . .	291	1,216	10	1,517
	7. Bhattiyat . . . . .	1,148	1,494	2,285	4,927
	Total . . . . .	8,467	12,629	11,273	32,369
Kangra . . . . .	1. Kangra . . . . .	905	..	3,180	4,085
	2. Rait . . . . .	1,095	..	5,409	6,504
	3. Nagrota Bagwan . . . . .	992	..	6,593	7,585
	4. Baijnath . . . . .	1,596	..	3,085	4,681
	5. Bhawarna . . . . .	1,752	..	4,859	6,611
	6. Lamba Gaon . . . . .	1,137	..	1,372	2,509
	7. Panchrukhi . . . . .	1,547	..	2,353	3,900
	8. Nurpur . . . . .	3,657	..	10,069	13,726
	9. Indora . . . . .	2,766	..	6,389	9,155
	10. Dehra . . . . .	2,086	..	5,589	7,675
	11. Mangwal (NS) . . . . .	1,158	..	3,982	5,140
	12. Pragpur . . . . .	2,370	..	5,846	8,216
	Total . . . . .	21,061	..	58,726	79,787
Kullu . . . . .	1. Ani . . . . .	1,520	9	2,490	4,019
	2. Banjar . . . . .	1,380	5	2,435	3,820
	3. Kullu . . . . .	2,073	46	2,666	4,785
	4. Nagar . . . . .	1,867	270	3,752	5,889
	5. Nirmand . . . . .	1,811	..	1,602	3,413
	Total . . . . .	8,651	330	12,945	21,926
Mandi . . . . .	1 Chachiot . . . . .	1,873	5	2,578	4,456
	2 Sundernagar . . . . .	2,278	106	2,256	4,640
	3 Karsog . . . . .	2,552	66	2,883	5,501
	4 Mandi . . . . .	3,911	171	3,576	7,658
	5 Rewalsar . . . . .	1,416	84	3,142	4,642
	6 Seraj . . . . .	1,202	3	2,893	4,098
	7 Chauntra . . . . .	780	35	1,306	2,121
	8 Gopalpur . . . . .	2,047	38	2,408	4,493
	9 Darang . . . . .	1,225	152	2,496	3,873
	10 Dharampur . . . . .	1,891	--	2,378	4,269
	Total . . . . .	19,175	660	25,914	45,751

1	2	3	4	5	6
<b>RURAL—concl.</b>					
Shimla	1. Chhohara	1,295	3	894	2,192
	2. Kasumpati	1,313	3	870	2,186
	3. Theog	1,722	..	1,758	3,480
	4. Kumarsen	779	3	693	1,475
	5. Rampur	1,677	9	1,219	2,905
	6. Jubbal	888	..	1,272	2,160
	7. Rohru	1,068	..	712	1,780
	8. Chopal	1,499	35	1,008	2,542
	Total	10,241	53	8,426	18,720
Sirmaur	1. Nahan	1,021	76	1,427	2,524
	2. Shillai	1,968	..	2,720	6,488
	3. Pachhad	2,974	..	3,437	6,411
	4. Sangrah	2,899	..	2,831	5,730
	5. Paonta	3,682	..	3,593	7,275
	Total	12,544	76	14,008	26,628
Solan	1. Dharampur	1,239	..	1,202	2,441
	2. Kandaghat	891	..	618	1,509
	3. Nalagarh	2,292	..	3,501	5,793
	4. Kunihar	1,167	..	1,865	3,032
	5. Solan	1,418	..	1,066	2,484
	Total	7,007	..	8,252	15,259
Una	1. Una	1,815	..	5,972	7,787
	2. Gagret	1,801	..	3,189	4,990
	3. Amb	1,141	..	1,372	2,513
	4. Dhundla	1,717	..	3,291	5,008
	Total	6,474	..	13,824	20,298
Lahaul-Spiti	1. Lahaul	140	840	76	1,056
	2. Spiti	134	1,226	..	1,360
	Total	274	2,066	76	2,416
Kinnaur	1. Nichar	746	857	..	1,603
	2. Pooh	501	757	..	1,258
	3. Kalpa	740	336	..	1,076
	Total	1,987	1,950	..	3,937
<b>HIMACHAL PRADESH</b>		1,08,425	18,419	1,76,829	3,03,673

To achieve this national objective, about 55,000 families out of a total of 1.10 lakh SC identified families are required to be assisted to cross the poverty line by 1984-85. It is estimated that about 89,000 SC families would be assisted during 1980-85. This however, includes some families who have been coun-

ted multiply, even after eliminating this factor, it can safely be assumed that the target laid down would be achieved successfully. The number of scheduled caste families who have been given package of assistance during 6th Plan period through different departments is given in the table below:—

Head of Development	No. of SC families assisted during				
	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6
1. Agriculture and Soil Conservation	5,650	6,185	6,603	3,900	4,700
2. Horticulture	1,012	2,375	2,500	1,100	1,150
3. Rural Development	10,000	16,000	18,600	18,600	18,800
4. Animal Husbandry	2,125	2,500	3,000	3,500	3,600
5. Scheduled Castes Dev. Corporation	6,400	20,000	16,000	2,000	2,000
6. Industries	2,060	2,314	2,615	2,240	3,360
7. Cooperation	100	300	400	..	..
8. Fisheries	28	255	169	170	170
Total	27,375	49,929	49,887	31,510	33,780

In order to eliminate chances of multiple counting, a novel method of monitoring the target group families being assisted to cross the poverty line has been devised, which has been highly appreciated by the Ministry of Home Affairs. The following procedure has been adopted in this regard—

- (i) All departments implementing the beneficiary oriented programmes shall select the families to be assisted from out of the list of families identified as living below poverty line available with the block agencies.
- (ii) The Director (RD) will supply list of families living below poverty line to all the concerned heads of department in sufficient number.
- (iii) All departments will make available the serial number of the families assisted each month from their district agencies to BDOs concerned so that the BDOs eliminate the serial number of families assisted by more than one department while reporting the number of families assisted each month to the Project Officers, RUDAs.
- (iv) It has generally been impressed upon all Heads of Departments to assist families living below poverty line as a first charge on their departmental Special Component Plan resources. They could, however, assist other families (not living below poverty line) but such coverage would be exceptional and the concerned departments must inform the Commissioner (SC/ST) in each one of such cases of families assisted who are not living below poverty line.
- (v) The departments may internally, continue receiving the progress from their district level officers as in the past.

The New 20-Point Programme is the charter of the hopes and aspirations of the people and was given to the nation by the Prime Minister on the 14th January, 1982. This programme in itself pin-points our

development efforts to ensure speedy economic amelioration of the people living in the sub-poverty conditions and calls for the utmost dedication and commitment from the implementing agencies at all levels. It is a package of much-needed social and economic measures to accelerate production and tone down the hardships of weaker sections of the society. In view of the very high primacy attached to this programme, the Himachal Pradesh Government has geared itself for effective implementation of the programme and expeditious delivery of benefits to the target-groups.

For effective implementation and monitoring of the programme the Chief Secretary is holding monthly reviews at the State level. The Chief Minister also critically reviews the implementation of the programme every quarter. Point 7 under this programme relates to accelerated development of scheduled castes and scheduled tribes. The progress under this point is also reviewed critically alongwith the rest of the programmes according to the above time schedule.

The quantum of financial outlays earmarked under the Special Component Plan for scheduled castes during 1983-84 and 1984-85 is as indicated in the table below:—

		(Rs. in lakhs)	
Programme	Approved outlay 1983-84	Proposed outlay for 1984-85	
1	2	3	4
1. Minor irrigation	68.00	27.50	
2. Rural Water Supply	300.00	405.00	
3. Rural Latrines	6.00	3.00	
4. IRD Programme	138.00	138.00	
5. National Rural Employment Programme	34.00	25.00	
6. Slum Improvement	5.00	10.00	
7. Rural Electrification Programme	125.00	25.00	
8. Installation of Bio-gas plants	3.50	4.50	
9. Health sub-centres	12.17	18.17	

1	2	3	4
10. Special Nutrition Programme for pregnant and lactating mothers as also for SC children		78.10	19.00
11. Elementary Education facilities		66.10	..
12. Liberalised incentives and other amenities to SC entrepreneurs		60.00	65.00

Effective implementation of a plan is as important as its formulation. As such, the arrangements for the concurrent monitoring of programmes/schemes have got their obvious importance for the success of the Special Component Plan. As mentioned in the preceding paragraphs, point 7 under the New 20-Point Programme which is devoted to accelerated development of scheduled castes and scheduled tribes, is reviewed critically at the State level. At the district level, the Deputy Commissioners have been entrusted with the overall responsibility for the implementation of the programme in their respective districts. In the case of Special Component Plan, District Level Implementation Committees have been constituted under the chairmanship of respective Deputy Commissioners. In order to make the process of monitoring more effective, a High Powered Coordination and Review Committee has been set up under the chairmanship of the Chief Minister at the State level. This Committee has been given the task of overseeing the formulation and implementation of programmes for

these target-group communities. This three tier review and monitoring mechanism has proved very effective.

The most critical determinant for the success of a Plan, besides the field level implementation is its critical evaluation through an independent agency. Such evaluation provides useful feed back which is so essential for taking timely corrective measures to ensure that the desired objectives are fulfilled. In this direction, specific studies for the evaluation of schemes/programmes under the Special Component Plan for Scheduled Castes have been undertaken by the HP University, Shimla and HP Krishi Vishwa Vidyalaya, Palampur. The results of their studies have now become available. For the conduct of these evaluation studies, requisite funds were allocated to the two Universities at the rate of Rs. 20,000 per district. The results thrown up by these studies have revealed useful information which would be advantageously dovetailed while formulating schemes/programmes for the economic upliftment of scheduled caste communities.

The year 1984-85 is the last year of the 6th Plan and will be the base year for the Seventh Five Year Plan 1985-90. The State Govt. is genuinely concerned about the speedy development of scheduled castes in the Pradesh. The experience gained in the past would be gainfully deployed for the formulation of the Special Component Plan for Scheduled Castes during the Seventh Plan to be implemented with a renewed vigour and dedication.

## STUDIES IN CONSUMPTION EXPENDITURE

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The importance of consumption in socio-economic thought is of recent origin in our country. Prior to the era of planning, there was hardly any obligation on the State towards the material welfare of the people. With the advent of planning, there were concerted efforts on the part of the Govt to rise the level of living and quality of life of the common man. Our Constitution also enjoins on the state specific responsibility to adopt suitable policies and programmes for evolving socialistic pattern of society so that the benefits of development could infiltrate to the lowest section of society. Simultaneously, some of the measures to reduce disparities in the distribution of income and wealth like minimum wage fixation, social security schemes, equality of opportunity and expansion of opportunities to the hitherto neglected sections of society, graded taxation policies etc. are also undertaken. In addition to giving minimum essential facilities, the basic objective of the planning effort has been to adopt suitable production-oriented strategy for providing income-generating schemes on long term basis, since income has a close bearing on consumption. The consumption level always shows a change with the change in income and level of prices.

Consumption implies utilisation of goods and services to satisfy the human desires and wants. The pattern of consumption varies from place to place and may be influenced by the socio-economic and psychological considerations. But for the purpose of general studies, consumption expenditure\* implies "all expenditure incurred by a household exclusively towards its non-productive domestic consumption, thus excluding all expenditure towards the enterprise activities of the household. Transfer payments in kind like loans advanced, charities, gifts and other payments in kind are not considered consumption expenditure. But any consumption out of transfer receipt in kind or free collection is considered for determining total consumption".

It is mainly for the purpose of poverty studies that the data on consumption expenditure is most frequently required. The indicators like per capita income and savings etc. have their own drawbacks in such matters and per capita consumption is regarded as more relevant. The data on consumption expenditure is normally studied under the broad two groups viz. Family Budget Enquiries and Household Consumer Expenditure studies.



### Family Budget Enquiries

These enquiries relate mainly to selected segments of the population and serve a limited purpose. These are primarily conducted to study the movement of the consumer prices, relevant to a particular class of persons. They also show how a particular section of public consumes goods and services at a particular time. The Labour Bureau, Govt. of India, through a Family Living Survey among the industrial workers in H.P. in 1965 collected the data on consumption which was utilised for building the weighting diagram for consumer price index numbers. This consumption expenditure of the industrial workers does not present an over all picture relevant to the Pradesh in view of the fact that almost the whole area is industrially backward. Moreover, the industries are mainly clustered around the towns whereas 92.4 per cent of the population of Himachal Pradesh is rural.

What we need specifically is to know the level of living of the masses in the rural as well as urban areas and pattern of household consumption expenditure. The data made available by the Family Budget Enquiries does not throw sufficient light on these aspects. For this purpose, regular and reliable flow of data is essential and the same is being collected on a limited scale, through the sample surveys by the NSSO.

### Household Consumer Expenditure Studies

The data on household consumer expenditure has been regarded as a pre-requisite for planning in India. Its importance was realised for the drafting of programmes of the First Five Year Plan and subsequent Plans in the country. The Plans lay considerable stress on the development of the rural areas and improvement of the living standards of the poorest groups. These were the dark areas in so far as the availability of any all-India information base was

\* This definition has been adopted by the National Sample Survey Organisation for various rounds/studies.

concerned. So the task of collecting this information was assigned to the NSSO, which has been collecting it since its inception in 1950.

All the rounds of the National Sample Surveys upto the twenty eighth round (covering the period from October, 1973 to June 1974) had covered the consumer expenditure. Subsequently it was decided to undertake the collection of this information quinquennially and the 32nd round (July 1977 to June 1978) and 38th Round (January to December, 1983) covered this aspect. The data is collected for a period of thirty days preceding the date of survey. The value of total consumption is studied under two main groups (a) food and (b) non-food and twenty one sub-groups. The results of the 28th round has been published so far.

### Participation in N.S.S. Programme

Himachal Pradesh started participation in the National Sample Survey Scheme from the 27th Round in 1972 and a hundred percent matching sample was convessed by the staff of the Directorate of Economics and Statistics and its district agency (Distt. Statistical Officers). The results of the 28th round (October 1973—June 1974) have been published in the report No. 4 "Household Consumer Expenditure in Rural and Urban Area of Himachal Pradesh" issued by the Directorate of Economics and Statistics, Shimla. The results of the 32nd round (July, 77—June 1978) are expected shortly.

The results of the 28th round are discussed in the subsequent paragraphs. Though there is likelihood of considerable change in the pattern of consumption expenditure since 1974, mainly due to planning effort, the results may still be of interest to those engaged in planning and development in Himachal Pradesh.

The Sixth Plan places a high priority on the alleviation of poverty. A quantitative index of poverty—wise formulated on the basis of the report of an expert committee set up by the Planning Commission. Accordingly, poverty line is defined as the per capita monthly expenditure on a daily calorie intake of 2400 per person in rural area and 2,100 in urban area. During 1979-80 the expenditure on this was estimated at Rs. 76 in the rural and Rs. 88 in the urban areas.

The NSS data on household consumption expenditure has been used for the determination of poverty estimates, which are as follows :

Percentage of people below poverty line.

Area/Years	1972-73	1978-79
Rural	54.09	50.82
Urban	41.22	38.19
All-India	51.49	48.13

Result of 28th Round of N.S.S. (Oct.; 1973 to June, 1974).

The rural sample of H.P. consisted of 368 households. The monthly per capita consumption expenditure of these households is classified according to

expenditure ranges in the following table. For comparative purposes, the corresponding all-India figures are also given alongwith. The table-I gives expenditure at current prices. The first range up to Rs. 28 has been worked out by taking a weighted average of six preceding ranges upto this level from the published Report No. 4 of Himachal Pradesh.

(RURAL)

TABLE-I

The table-I shows that there are 13 (3.5%) households which have per capita monthly expenditure of less than Rs. 28. Another 261 households (71.0%) have monthly per capita consumption expenditure ranges between Rs. 28—75. The remaining 25.5% of the households have per capita monthly expenditure of more than Rs. 75.

### Food Group

The per capita expenditure on consumption in H.P. is slightly (9.8%) higher than the all India average. The per capita average of food group is Rs. 42.21, which is also 6.3% higher than the corresponding figures for the country. The food group constitutes 72.5% of the total per capita consumption in H.P. The cereals, gram and pulses account for the biggest chunk i.e. 57.1% of the food group. Another 24.7 percent of this group is spent on milk and its products and edible oils. Such a high percentage of expenditure on main food items indicates relatively more physical requirement of the people in view of the colder climate and the hilly terrain of the Pradesh. Meat/eggs and sugar meat other protein and calorie requirements and account for 8.1% of the per capita expenditure on food group. These figures are also slightly higher than the corresponding all India averages.

### Non-Food Groups

The non-food group accounts for 27.5% in H.P. as compared 25.1% for the country. Fuel and light requirement is higher in the Pradesh and constitutes 29.7% of the non-food group expenditure. Hardly 1.5% of the non-food expenditure goes into the purchase of relatively durable goods.

### Urban Areas

The urban sample of H.P. consisted of 70 households, giving an average per capita expenditure of Rs. 97.66 compared to Rs. 70.77 for the country. A significant feature of the urban area is that hardly 1.5% of households have per capita monthly expenditure of less than Rs. 28. The percentage of expenditure on food and non-food groups comes to 64.9% and 35.1% respectively. The following table gives the distribution of households according to monthly per capita expenditure classes.

The pattern of expenditure on food is more or less similar in the urban areas though the percentages within the groups vary. The cereals, grain and pulses constitute 35.1% whereas milk & products and edible oils 28.2% of the food group. A significant characteristic of the urban areas is higher per capita expenditure on beverages and refreshments which account for 14.6% of this group.



TABLE—I Consumer expenditure (Rs. 0.00) per person for a period of 30 days by broad group of items and by monthly per capita expenditure classes

## HIMACHAL PRADESH (RURAL)

Number of sample households: 368

Item	Monthly per capita expenditure class in rupees										All Classes	All India
	Below 28	28-34	34-43	43-55	55-75	75-100	100-150	150-200	200 & above			
1	2	3	4	5	6	7	8	9	10	11	12	
1. Cereals . . . . .	10.39	16.74	16.87	19.40	23.36	25.71	27.86	23.12	53.51	20.68	23.00	
2. Gram . . . . .	..	0.10	..	0.01	0.02	0.04	0.07	..	..	0.02	0.25	
3. Cereal substitutes . . . . .	..	..	..	..	..	..	..	..	..	..	0.38	
4. Pulses & products . . . . .	1.71	2.37	2.56	3.19	3.79	4.48	5.40	5.16	6.75	3.40	1.99	
5. Milk & products . . . . .	2.59	2.52	4.70	6.60	9.26	13.10	14.69	25.08	17.88	7.96	3.82	
6. Edible oils . . . . .	1.10	1.08	1.88	2.23	2.52	3.42	4.14	5.80	5.38	2.45	1.99	
7. Meat, fish & eggs . . . . .	0.33	0.27	0.21	0.37	0.56	1.40	3.07	1.76	5.63	0.65	1.37	
8. Vegetables . . . . .	0.93	1.13	1.19	1.54	2.09	2.34	2.67	4.92	5.38	1.77	2.00	
9. Fruits & nuts . . . . .	0.08	0.06	0.10	0.14	0.23	0.15	1.23	2.84	1.13	0.23	0.61	
10. Sugar . . . . .	0.80	1.15	1.90	2.24	3.26	4.03	6.27	6.52	7.00	2.77	1.67	
11. Salt . . . . .	0.05	0.09	0.07	0.07	0.07	0.08	0.11	0.08	0.25	0.07	0.09	
12. Spices . . . . .	0.45	0.90	0.94	1.13	1.40	1.66	2.11	2.12	5.63	1.25	1.35	
13. Beverages & refreshments . . . . .	0.15	0.24	0.72	0.62	0.91	1.41	1.61	11.88	3.75	0.96	1.18	
14. Food total . . . . .	18.58	27.55	31.14	37.54	47.47	57.82	69.23	89.28	112.29	42.21	39.70	
15. Pan, tobacco & intoxicants . . . . .	0.53	0.74	1.08	1.10	1.19	2.71	2.53	10.20	4.68	1.45	1.53	
16. Fuel & Light . . . . .	1.09	1.65	3.27	4.36	5.19	7.68	9.06	7.68	11.83	4.74	2.96	
17. Clothing . . . . .	..	0.34	0.67	2.46	3.47	6.30	221.44	22.76	31.25	3.71	3.58	
18. Foot wear . . . . .	..	0.27	0.58	0.76	1.15	1.38	3.76	0.40	5.25	0.97	0.26	
19. Misc. goods & services . . . . .	2.15	1.73	2.16	2.68	4.18	6.21	8.09	34.12	58.75	4.19	4.18	
20. Rents . . . . .	..	0.01	0.05	0.03	0.04	0.12	0.49	3.40	3.88	0.12	0.05	
21. Taxes . . . . .	..	..	1.96	..	..	1.75	..	..	..	0.54	0.01	
22. Durable goods . . . . .	..	..	0.05	0.21	0.08	0.38	2.54	2.92	..	0.26	0.74	
23. Non-food total . . . . .	3.77	4.74	9.82	11.60	15.30	26.53	47.91	81.48	115.64	15.98	13.31	
24. Total consumption expenditure . . . . .	22.35	32.29	40.90	49.14	62.77	84.35	117.14	170.76	227.93	58.19	53.01	
25. (a) Number of sample households . . . . .	13	15	51	89	106	57	23	11	3	368	..	
(b) Cumulative total . . . . .	13	28	79	168	274	331	354	365	368	368	..	

TABLE—2 Consumer expenditure (Rs. 0.00) per person for a period of 30 days by broad group of items and by monthly per capita expenditure classes

## HIMACHAL PRADESH (URBAN)

Number of sample households : 70

Item	Monthly per capita expenditure class in rupees										All India
	Below 28	28-34	34-43	43-55	55-75	75-100	100-150	150-200	200 & above	All Classes	
1	2	3	4	5	6	7	8	9	10	11	12
1. Cereals . . . . .	2.10	15.08	14.19	15.43	20.58	17.38	21.49	19.67	16.33	18.17	19.03
2. Gram . . . . .	..	..	..	0.10	0.32	0.20	0.21	0.41	..	0.22	0.12
3. Cereal Substitutes . . . . .	..	..	..	..	..	..	..	0.45	..	0.07	0.11
4. Pulses & Products . . . . .	0.60	1.85	1.91	3.23	3.28	4.68	4.71	6.14	6.11	3.79	2.36
5. Milk & products . . . . .	3.60	3.46	6.82	4.30	7.40	13.82	18.50	22.93	27.67	13.09	6.50
6. Edible oils . . . . .	0.30	1.54	1.82	3.80	3.86	4.93	6.65	6.82	6.22	4.80	3.70
7. Meat, fish & eggs . . . . .	..	..	..	0.43	1.89	1.50	2.83	3.07	3.89	1.87	2.43
8. Vegetables . . . . .	1.10	1.62	1.91	1.67	2.21	3.80	6.15	5.66	5.22	3.75	3.15
9. Fruits & nuts . . . . .	0.30	0.31	..	0.13	0.25	1.95	2.86	3.89	5.44	1.77	1.39

Table 2—contd

1	2	3	4	5	6	7	8	9	10	11	12
10. Sugar . . . . .	0.70	1.00	1.00	1.90	3.91	5.20	6.63	7.66	8.56	4.81	2.32
11. Salt . . . . .	..	0.08	..	0.10	0.09	0.32	0.12	0.11	0.11	0.13	0.08
12. Spices . . . . .	0.10	0.85	1.27	1.03	1.16	1.64	2.50	2.18	2.00	1.63	1.65
13. Beverages & refreshment . . . . .	1.50	0.23	0.27	2.00	2.35	6.57	10.48	18.25	72.00	9.26	5.09
14. Food total . . . . .	10.30	26.02	29.19	34.12	47.30	61.99	83.12	95.24	153.55	63.36	47.93
15. Pan Tobacco & intoxicants . . . . .	..	..	2.45	1.30	1.53	2.80	3.02	3.59	13.67	2.64	1.83
16. Fuel & Light . . . . .	0.50	1.62	2.45	4.63	4.79	5.66	10.13	9.45	12.78	6.56	4.25
17. Clothing . . . . .	..	..	..	..	1.32	4.66	6.63	23.64	21.22	6.87	3.36
18. Foot wear . . . . .	..	..	..	0.27	..	1.18	..	3.73	..	0.83	0.27
19. Miscellaneous goods & services . . . . .	0.70	3.23	5.64	4.80	8.16	10.09	14.56	26.14	35.33	12.55	9.56
20. Rents . . . . .	4.00	0.08	..	1.23	1.54	2.23	7.54	7.61	18.67	4.29	2.50
21. Taxes . . . . .	..	..	..	..	..	..	..	0.23	..	0.04	0.07
22. Durable goods . . . . .	..	..	..	..	0.19	0.66	..	2.27	..	0.52	1.00
23. Non-food total . . . . .	5.20	4.93	10.54	12.23	17.53	27.28	41.88	76.66	101.67	34.30	22.84
24. Total consumer expenditure . . . . .	15.50	30.95	39.73	46.35	64.83	89.27	125.00	171.90	255.22	97.66	70.77
25. (a) No. of sample households . . . . .	1	1	2	5	9	9	20	14	9	70	..
(b) Cumulative total . . . . .	1	2	4	9	18	27	47	67	70	70	..

The expenditure on fuel and light in the urban area comes to 19.1% of the non-food group, whereas clothing accounts for 20.0 percent. There is not much variation in the expenditure on durable goods when compared with the rural areas.

#### Other Studies

An interesting study in food-intake and its nutritional value was undertaken by the Food and Nutrition Board, Department of Food, Ministry of Agri-

culture and Irrigation, Government of India and the results were published in "Food & Nutrition Atlas of H.P." The study relates to the period June 1974 to October, 1975 and covers 25 villages (two villages per district except Lahaul & Spiti District where 3 villages were covered). Similar and even more detailed studies should be undertaken periodically to understand the change in consumption expenditure of the people and to suggest positive measures and nutrients to improve consumption for the better and healthy growth of masses.

## IMPACT OF PRICES

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### Introduction

Since the Second Five Year Plan, the general level of prices in India has been rising. During the first decade of planning, the prices rose at about 1 per cent per annum while during the second decade it was about 6 per cent. The average rate of rise during 1971-72 to 1974-75 had been 16.4 percent per annum. Then for some time the prices remained stationary. Again the rise was 17.1 per cent during 1979-80 and about 18 percent in 1980-81.

The behaviour of prices has been one of the more encouraging features of the economic scene in 1982-83. The improvement in the overall price situation was all the more remarkable against the background of a set-back to agricultural production due to drought. For the purpose of our analysis, let us consider the price behaviour during the first three years 1980-83 of the current Sixth Five Year Plan. The price movements since 1980 show the following trends :

Year	Index number of whole sale prices Base : 1970-71 100	Inflation rate (in per cent)
1	2	3
1979-80	217.6	+ 17.1
1980-81	257.3	+ 18.2
1981-82	281.3	+ 9.3
1982-83(P)	288.5	+ 2.6

It is clear from the foregoing data that though inflationary pressures continued to persist yet the wholesale prices climbed at a slow pace. From 18.2 percent in 1980-81 the rate of inflation dropped to 9.3 percent in 1981-82 and further down to 2.6 percent in 1982-83. Compared with 1979-80, the last year of the Fifth Five Year Plan, the inflationary rate was 32.6 per cent. It means that though inflation has not been eliminated but its pace has been slowed down which itself is a big achievement.

Month	1979-80	1980-81	1981-82	1982-83
1	2	3	4	5
April	195.5	235.0	275.7	276.9
May	198.5	240.0	277.9	278.1
June	202.4	247.2	279.8	285.8
July	211.7	257.8	286.2	291.5
August	218.5	260.3	289.2	294.5
September	221.2	263.8	284.8	290.9
October	222.2	264.6	284.1	289.5
November	222.0	258.6	281.5	289.5
December	227.0	257.1	279.5	289.5
January	227.7	263.2	281.1	289.1
February	231.3	268.8	278.7	291.6
March	233.2	270.0	277.1	294.0



The inflationary pressures which had triggered off in April, 1979 began weakening in July, 1980. The inaugural year of the Sixth Plan was described as 'a year of recovery' during which the country's economy shattered by the crises in 1979-80 had been brought back on to the rails. The factors contributory to the price variations may be examined at some length. Broadly speaking there are certain prices which have accelerated while others have decelerated the pace of prices. Let us examine each set of forces separately.

### Price Accelerators

In our agriculture dominated economy the agricultural output is mainly dependent on the weather conditions. The country had good harvest in 1980-81, despite the erratic rainfall in several parts of the country. The weather conditions in 1981-82 were favourable but the last year i.e. 1982-83 had a drought even worse than the one of 1979-80. The 1982 drought had affected 42 million hectares of land and 200 million people whereas during the 1979-80 drought only 38 million hectares and 220 million people were affected.

There was a contra-reasonal increase in the whole-sale price index for wheat which moved up from 186.7 in May, 1982 to 195.8 in July, 1982 and further increased to 210.2 in September, 1982. The increase during this period was much larger than in the corresponding period of 1981. This was mainly the result of unseasonal rains during April-May, 1982, which damaged the harvested wheat. The uneven distribution of rainfall in the kharif season adversely affects the expenses of production expenditure on

index for rice which moved up from 231.2 in March, 1982 to 258.7 in December, 1982 i.e. 11.9 per cent increase. To a certain extent, the increase in these prices reflects the increase in the procurement and issue prices of rice. Adequate supply of foodgrains through the public distribution system checked the increase in these prices which otherwise would have risen more sharply. The timely decision to import about 4 million tonnes of wheat also helped in restraining speculative expectations. The prices of pulses registered a decline of 2.5 per cent in 1982-83 as against a fall of 4.4 per cent and a rise of 52.2 per cent during 1981-82 and 1980-81.

The continued relative stability in the prices of the sugar group in the period of seasonal pressures and decline since October, 1982, played an important role in keeping down the overall price index. The group had a very significant destabilising impact during 1979-80 and 1980-81. Sugar production reached a record level of 84.4 lakh tonnes in 1981-82 sugar year and the prospects for the current year are equally good which had a bearish impact. Further, the dual pricing policy in respect of levy and non-levy sugar and the operation of the mechanism for the release of specific quantity of sugar out of the total stocks available exercised a moderating effect on the sugar prices and the escalation of prices of other commodities.

The whole sale price index of oil seeds has risen in the current financial year by 15.0 per cent which is significantly higher than the increase of 5.9 per cent during 1981-82. This is partly because of set-back to oilseeds production during the kharif season of 1982-83. The increase in the wholesale prices of edible oils in 1982-83 has, however, been less at 9.0 per cent only, though it is some what more than the increase in the corresponding period of 1981-82.

With the emergence of high yielding varieties of cotton, the overall supply position of raw cotton improved during the past few years. A good cotton crop during 1981-82 and the prolonged labour strike in 1982 in Bombay textile industry leading to constrained demand generally exercised a moderating influence on cotton prices. The wholesale price index of raw cotton moved within a narrow range i.e. from 202.1 in March 1982 to 209.9 in July, 1982 and 207.4 in September, 1982.

It is note worthy that wholesale prices of most of the commodities of daily use remained more or less stable. The wholesale price index of soap continued to rule steady at 234.2 throughout during 1982-83. The index for kerosene stayed at 320.5 since April, 1982 till August, 1982 while that of salt declined from 238.4 in March, 1982 to 213.8 in August, 1982. The index for coffee moved down from 141.1 in March, 1982 to 137.2 in July, 1982 and then risen to 141.2 in September, 1982. The index of cotton textiles also remained almost stable and ranged from 229.8 in March, 1982 to 233.4 in September, 1982.

## Consumer Prices

The annual rate of inflation in terms of the All India Consumer Price Index of Industrial Worker (Base : 1960= 100) also declined quite perceptibly. The annual rate of inflation which was as high as 14.4 per cent in August, 1981 showed a declining trend and decreased to 7.5 percent in August, 1982. The rate of inflation during August, 1982 and July, 1983 was 10.9 percent. An important reason why the Consumer Price Index shows a higher annual rate of inflation compared with that in terms of the wholesale Price Index during 1982-83 is the higher weightage of items like foodgrains and other items whose administered prices have been revised upward in line with higher prices paid to farmers and producers. There is also a time lag in the transmission of the effect of decline in wholesale prices to consumer prices.

Period	Consumer price index number for industrial workers in India Base : 1960=100	Rate of inflation (in per cent)
1	2	3
August, 1979 . . . . .	360	+ 8.8
August, 1980 . . . . .	397	+ 10.3
August, 1981 . . . . .	454	+ 14.4
August, 1982 . . . . .	488	+ 7.5
July, 1983 . . . . . (Latest available)	541	+ 10.9

The notable moderation in inflationary pressures, despite the set back to kharif crop was brought about by concerted measures taken by the government both on the demand and supply side. During 1981-82 and also in 1982-83, the focus of anti-inflationary policies was on bringing about improvement in the performance of infrastructure, stepping up production in vital sectors, strengthening the public distribution system and better management of supplies. The public distribution system was geared to prevent emergence of artificial scarcities and timely supplies were arranged in area suffering from drought or affected by floods. On demand side, efforts were directed at preventing any excessive increase in liquidity but at the same time ensuring that the genuine requirements of the productivity and the priority sectors were adequately met. Appropriate adjustments were made in administered prices which was consistent with the overall policy objectives.

## Minimum Support/Procurement Prices of Agricultural Commodities

(Rs. per quintal)

Commodity	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7	8	9
1. Wheat . . . . .	105	110	112.50	115	117	130	142	..
2. Paddy . . . . .	74	77	85	95	105	115	122	..
3. Coarse grains . . . . .	74	74	85	95	105	116	118	..
<b>MINIMUM SUPPORT PRICE</b>								
4. Barley . . . . .	65	65	67	..	105	116	..	..
5. Gram . . . . .	90	95	125	140	145	..	..	235
6. Arhar . . . . .	..	..	155	165	190	..	215	..
7. Moong . . . . .	..	..	165	175	200	..	240	..
8. Urad . . . . .	..	..	..	175	200	..	230	..
9. Mustard . . . . .	..	..	225	245	..	..	..	255
10. Groundnut . . . . .	140	160	175	190	206	270	295	..
11. Sun flower seed . . . . .	150	165	175	175	183	250	250	..
12. Soyabean . . . . .	..	145	175	175	183	210	220	..
13. Cotton (Kapas 320F) . . . . .	..	255	255	275	304	..	380	..
14. Sugarcane (Statutory minimum price) . . . . .	8.50	8.50	10.00	12.50	13.00	13.00	13.00	..
15. Jute (W-5 grade) . . . . .	136	141	150	155	160	175	175	..

The economy of Himachal Pradesh also received a set back by a severe drought and recorded a decline of 5.5 per cent during 1979-80. The production of foodgrains had gone down from 10.6 lakh tonnes in 1978-79 to about 9 lakh tonnes during 1979-80. The foodgrain production during 1980-81 was 11.57 lakh tonnes and during 1981-82 it increased to 11.91 lakh tonnes.

The Pradesh during 1979-80 witnessed a sharp rise in prices. The most significant inflationary impulses originated from a few commodities notably crude oil, petroleum products, sugar, khandsari and gur. The Consumer Price Index Number for industrial workers in Himachal Pradesh (Base : 1965 = 100) recorded an increase of 39 points or 14.5 per cent from 269 in December, 1979 to 308 in December, 1980. Again it increased to 355 in December, 1981 and the same in December, 1982 was 359. The Index numbers for some of the periods are as given in the following table.

Period	Himachal Pradesh Base : 1965=100	All India Base : 1960=100
1	2	3
December, 1979 . . . . .	269	374
March, 1980 . . . . .	274	373
June, 1980 . . . . .	283	386
September, 1980 . . . . .	293	402
December, 1980 . . . . .	308	408

1	2	3
March, 1981 . . . . .	313	420
June, 1981 . . . . .	321	439
September, 1981 . . . . .	331	456
December, 1981 . . . . .	335	460
March, 1982 . . . . .	341	457
June, 1982 . . . . .	346	470
September, 1982 . . . . .	356	489
December, 1982 . . . . .	359	497
March, 1983 . . . . .	366	502
June, 1983 . . . . .	383	533

To analyse the price behaviour during the first three years 1980-83 of the current Sixth Five Year Plan, the following table is depicting the price movements since 1980 :—

Year	Consumer Price Index Number for industrial workers in H.P. Base : 1965=100	Inflation rate (In per cent)
1	2	3
1979-80 . . . . .	262	+8.3
1980-81 . . . . .	297	+13.4
1981-82 . . . . .	330	+11.1
1982-83 . . . . .	354	+7.3

It is clear from the above data that as a result of serious efforts to control the prices, the rising trend has been arrested. There was a significant decline in the rate of inflation from 13.4 per cent in 1980-81 to 7.3 per cent during 82-83.

The relentless battle against the upward price push has continued all these years. It is gratifying to note that the incessant and well thought out efforts have yielded satisfactory results. No let-up in the anti-inflationary measures is, however, warranted. Broadly, two-pronged attack on the price front has been mounted. It encompasses supply management and demand management measures.

### Supply Management Strategy

In supply management strategy, the strengthening of the public distribution system occupies the premier position. This has been achieved in three ways. First, by aggressive expansion of the fair price shops (FPS) both in urban as well as rural areas. This helped to minimise the impact of drought condition in several areas of the country. More than 2.76 lakh reorganised fair price shops provided important essential commodities at reasonable prices throughout the country. About 78 per cent of the total number of such centres are located in rural areas. Secondly, the number of commodities routed through FPSs has been increased. Apart from the foodgrains wheat, rice and levy sugar, certain other items such as Kerosene Oil, soft coke and controlled cloth are distributed through retail outlets at fixed prices. Some state governments have taken the initiative to procure and supply through the retail centres pulses, toilet soap, vanaspati ghee, cycle tyres and tubes and soda ash etc. Thirdly, the off-take of foodgrains from the buffer stocks has been increasing. More than 11.2 million tonnes of foodgrains were distributed upto December, 1982 during 1982-83. This may be compared with the distribution of 9.9 million tonnes of foodgrains in the same period of 1981-82 and 10.5 million tonnes in 1980-81.

Both the enlargement of the spatial coverage and the inclusion of more commodities in the distribution system have played a vital role in keeping the prices under check. The decision of the government to make the public distribution system a permanent feature since 1980 has paid good dividends.

### Buffer Stock

The building of buffer stock of foodgrains through interval procurement and imports as and when necessary, has been the pivotal policy and a vital adjunct of the public distribution system. The foodgrain procurement has not only helped to maintain adequate foodgrains stocks needed for smooth and uninterrupted flow of stocks for distribution but also to sustain production.

### Sugar Supplies

Since the sugar group has had a significant destabilising impact during 1979-80 and 1980-81 a speci-

fic note of its importance may be taken. During 1979-80, the very low production of sugar of 3.85 million tonnes only had sky-rocketed its price. The increase in the production of sugarcane and the record output of 8.44 million tonnes of sugar in 1981-82 which was the higher in the world, the incentives for higher production such as rebate in sugar excise for output beyond a certain level in sugar year, the dual pricing policy in respect of levy and non-levy sugar and the operation of the mechanism for the release of specific quantity of sugar out of the total stocks available exercised a moderating effect on the sugar prices and the escalation of prices of other commodities. In view of good production prospects of sugarcane crop and because of a comfortable opening stock, sugar price situation is expected to be comfortable during 1982-83.

### Subsidized inputs

To compensate for the high production costs, the government has been subsidizing some vital inputs for agriculture such as fertilizers. The total fertilizer subsidy was of the order of Rs. 648 crores in 1982-83 compared with 386 crores in 1981-82 and Rs. 505 crores in 1980-81. Alongwith this, the irrigation potential has also been raised substantially in conformity with the objectives of the 20-point programme. Additional irrigation potential of 2.5 million hectares was created during 1981-82 whereas during 1979-80 and 1980-81, the additional irrigation facilities were provided in 2.1 and 2.3 million hectares respectively.

### Infra-structure

The focus of anti-inflationary policies during 1981-82 and 1982-83 has been on improving the performance of the infrastructure notably power generation, coal production and transport. It may, however, be added that the slower growth in infra-structure sectors has not seriously affected the user industries according to the latest Economic Survey yet, it is necessary to sustain a high growth in these sectors.

### Demand Management

On the demand side, efforts have been directed to prevent any excessive liquidity. High rates of interest on loans and advances, selective credit control and containment of deficit financing have been note worthy measures in this direction while ensuring that genuine requirements of the productive investment and the priority sectors have been taken care of.

### Conclusion

The 'Suppressed' inflation should not be confused with any real price decline. Intensive efforts are required to stabilise prices at a level where the economy receives a new boost. Any complacency would be perilous.

## ECONOMIC CLASSIFICATION OF HIMACHAL PRADESH BUDGET



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### Summary

The framework in which budget was being prepared in the past was adequate for the limited functions discharged by the Government. In the planned development there is a sharp increase in investment. Accordingly there is a need to assess the impact of the Government operations on the economy for formulation of correct monetary and fiscal policies. Economic classification of the budget is a tool which is used to analyse the economic impact of the Government budget like extent of capital formation, out of budgetary resources, savings of the State Government, contribution to state income etc.

Some important results like total expenditure viz., details of consumption expenditure capital formation, transfer payments, and financial assistance and loans to the economy alongwith sources of finances for meeting the expenditure have been given for the year 1971-72 to 1983-84. Other interesting results like components of total expenditure with percentage break up as thrown by the economic classification, total state income generation out of budgetary resources in relation to total state income and total wages and salaries appearing in revenue and capital accounts alongwith per employee wages and salaries have been highlighted in the paper. The 'Annual Financial Statement' and the 'Demands for grants' are drawn up in accordance with the provision of the constitution and the needs of legislative control. The various demands give the gross expenditure and the recoveries from other Governments or Departments and by various Organisations administered by the Govt. under statutory authority. These

recoveries are deducted for arriving at the net expenditure shown in the financial statement. The demands specify various items of expenditure viz. pay of officers pay of establishment, contingencies, travel expenses etc. The Financial statement and the demands for grant together present a complete picture of government transactions.

The budget so presented reveals mere financial transactions. Such a framework was adequate for the limited functions discharged by the Govt. in the past. However, over the years the functions of the Govt. have become greatly diversified and in planned development there is a sharp increase in the scale and pattern of public investment. Therefore, the Government transactions require proper interpretation in order to assess the impact of Govt. operations on the economy for purposes of formulation of correct monetary and fiscal policies. The economic classification of budget is an attempt to reclassify and regroup the various items appearing in the budget which are too scattered and detailed into meaningful economic categories so as to have an idea of the extent of capital formation out of budgetary resources, savings of the State Govt. and contribution of the Govt. to the total state income generation, etc.

The economic classification of Govt. transactions basically follows the technique of social accounting and groups together similar types of transactions after eliminating all internal transfers. Current transactions are distinguished from capital transactions and transaction in goods and services are separated from transfers. Besides current transactions of Govt. administration are distinguished from the current operation of Departmental Commercial Undertaking as current

expenditure on the former on 'Wages and Salaries' and 'goods and services' are final outlays but those of latter are intermediate expenditures such as cost of raw material, fuels, etc. In other words such expenditure represents expenses of production and expenditure on final goods and services. Purely financial transactions are again separated from transaction in goods and services and transfers.

Some of the results obtained after recasting the budget of the Himachal Pradesh Government in the above manner from 1971-72 onwards are presented in the following paragraphs. The data upto the years 1981-82 appearing in various tables are based on actuals while for the years 1982-83 and 1983-84, these are based on revised and budget estimates respectively.

*Total Consumption Expenditure*—Total consumption expenditure of all administrative departments (other than those treated as departmental commercial undertaking viz. Forest, Irrigation, Road and

Water Transport, Milk Supply Scheme and Printing Presses) consist of 'Wages and Salaries' and 'goods and services'. Wages and Salaries include the remuneration of general government employees such as pay of officers, pay of establishment, and allowances and honoraria other than travelling and daily allowances, contribution to provident funds and pensions are included here. All expenditure under contingency such as pay and allowances of casual employees, office supplies, rent, fuel and light, printing, travel expenses, telephone and telegraph charges and other items for current operations less sales by general government of goods and services to enterprises and households are included here. Whole of the expenditure on current repairs and maintenance is also included under goods and services. The consumption expenditure has increased from Rs. 3,529 lakhs in 1971-72 to Rs. 15,958 lakhs in 1983-84 showing an increase of 352% over a period of 12 years. The consumption expenditure during different years is given in Table No. 1.

TABLE No. 1—Total Consumption Expenditure

(Rs. in lakhs)

Year	Compensation of Employees			Goods and Service			Total consumption Expenditure
	Wages & Salaries	Pension	Total	Net purchase	Repair & Maintenance	Total	
1	2	3	4	5	6	7	8
1971-72	2,429	71	2,500	703	326	1,029	3,529
1972-73	2,806	82	2,888	566	360	926	3,814
1973-74	3,005	91	3,096	703	347	1,050	4,146
1974-75	3,599	136	3,735	541	416	957	4,692
1975-76	4,022	188	4,210	581	431	1,012	5,222
1976-77	4,260	239	4,499	812	580	1,392	5,891
1977-78	4,740	213	4,953	854	597	1,451	6,404
1978-79	5,265	286	5,551	1,061	1,084	2,145	7,696
1979-80	6,157	296	6,453	1,609	1,070	2,679	9,132
1980-81	8,251	372	8,623	1,669	1,202	2,871	11,494
1981-82	9,188	362	9,550	1,423	1,539	2,962	12,512
1982-83	10,498	414	10,912	2,002	2,060	4,062	14,974
1983-84	11,930	443	12,373	2,076	1,509	3,585	15,958

*Current Outgoings of the State Govt.*—From the economic point of view, Govt. expenditure are of three types i.e. consumption expenditure, capital formation and transfers to the rest of the economy. In the economic classification scheme a distinction is made between current transfers and capital transfers on the

hypothesis that some transfers are recorded in the capital account of the classification and are included to assist capital formation. Current transfers include interest payments, grants to local bodies, co-operatives, educational institutions subsidies and other current transfers to individuals which are added indirectly to



the disposable income of the community. Current transfers alongwith consumption expenditure comprise the current outgoings of the State Govt. Table No. 2 shows the current outgoings of the State Government.

TABLE No. 2—Current Outgoings of the State Government

(Rs. in lakhs)

Year	Consumption Expenditure	Transfer payments (interest, grants, subsidies other current transfers)	Total
1	2	3	4
1971-72	3,529	887	4,416
1972-73	3,814	1,017	4,831
1973-74	4,146	1,176	5,322
1974-75	4,692	1,518	6,210
1975-76	5,222	1,745	6,967
1976-77	5,891	1,877	7,768
1977-78	6,404	1,998	8,402

	1	2	3	4
1978-79	.. .	7,696	2,706	10,402
1979-80	.. .	9,132	2,812	11,944
1980-81	.. .	11,494	3,160	14,654
1981-82	.. .	12,512	3,815	16,327
1982-83	.. .	14,974	5,161	20,135
1983-84	.. .	15,958	5,115	21,073

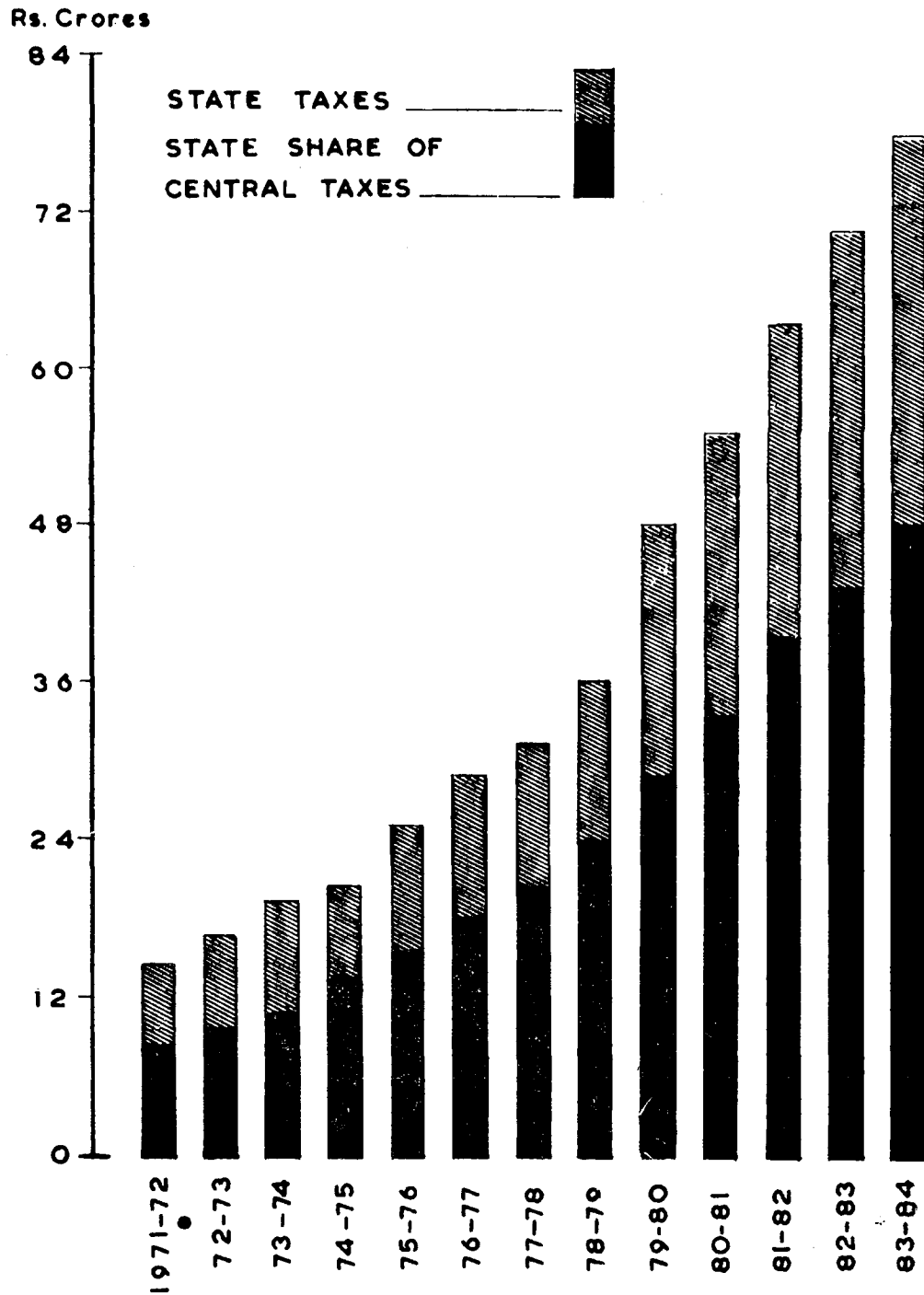
*Current receipts of the State Govt.*—To meet the current expenditure, Govt. appropriates a part of the income of community through variety of taxes miscellaneous fees, etc. accruing in the course of administration. In addition, Govt. has an investment income from property and entrepreneurship and also receives revenue grants, contributions and recoveries from the Union Govt. and rest of the economy. The current receipts of the State Govt. under different significant economic heads are given in table 3. It would be seen from the table that States own tax revenue (direct and indirect) have increased from Rs. 839 lakhs in 1971-72 to Rs. 4,885 lakhs in 1983-84 showing an increase of 482% in 12 years or about 40% per annum. Similar increase in the share of Central taxes is 385%.

TABLE No. 3—Current receipts of the State Govt.

(Rs. in Lakhs)

Year	Tax Revenue			Income from Property and entrepreneurship	Transfer from Households	Revenue grants contributions & recoveries from rest of the economy	Total
	State Taxes	State Share of Central Taxes	Total				
1	2	3	4	5	6	7	8
1971-72	839	619	1,458	137	100	2,315	4,010
1972-73	966	735	1,701	309	48	2,447	4,405
1973-74	1,082	811	1,893	786	36	2,367	5,082
1974-75	1,352	738	2,090	572	60	3,980	6,702
1975-76	1,543	972	2,515	354	120	4,168	7,157
1976-77	1,897	1,028	2,925	233	126	8,558	11,842
1977-78	2,074	1,094	3,168	305	187	7,861	11,521
1978-79	2,395	1,191	3,586	545	209	10,074	14,414
1979-80	2,867	1,953	4,820	616	25	11,227	16,688
1980-81	3,385	2,169	5,554	908	211	12,570	19,243
1981-82	3,972	2,441	6,413	906	446	13,017	20,782
1982-83	4,381	2,723	7,104	699	1,137	15,468	24,408
1983-84	4,885	3,002	7,887	426	1,328	16,033	25,674

# TAX REVENUE



*Gross and net savings*—Gross savings of the State Govt. comprises savings of Govt. Administration i.e. surplus of Govt. current receipts over Govt. current expenditure and depreciation provision of Govt. Administration and departmental commercial under-

takings. Net savings by Govt. are equal to gross savings less expenditure as renewals and replacements. As expenditure on repairs and renewals insignificant gross savings are the same as the net savings. The details of net savings are set out in Table No. 4.

TABLE No. 4 : *Gross and net savings by the State Government*

(Rs. in lakhs)

Year	Current Expenditure	Current Receipts	Savings of Govt. Admn (col.3-col.2)	Depreciation Provision of Govt. Admn. & Departmental Commercial Undertakings	Net Savings by the State Govt.
1	2	3	4	5	6
1971-72	4,416	4,010	(—)406	62	(—) 344
1972-73	4,831	4,505	(—) 326	(—) 17	(—) 343
1973-74	5,322	5,082	(—) 240	4	(—) 236
1974-75	6,210	6,702	492	26	518
1975-76	6,967	7,157	190	—	190
1976-77	7,768	11,842	4,074	—	4,074
1977-78	8,402	11,521	3,119	—	3,119
1978-79	10,402	14,414	4,012	—	4,012
1979-80	11,944	16,688	4,744	—	4,744
1980-81	14,654	19,243	4,589	—	4,589
1981-82	16,327	20,782	4,455	—	4,455
1982-83	20,135	24,408	4,273	—	4,273
1983-84	21,073	25,674	4,601	—	4,601

*Gross Capital Formation*—Gross Capital Formation represents the gross value of the goods which are added to the domestic capital stock of the state. It comprises both expenditure on the acquisition of fixed assets and the value of physical change in stock. The gross fixed capital formation has been classified into 'building and other construction' and 'machinery and equipments'.

In addition to the net capital formation directly undertaken the State Govt. also assists the rest of

the economy by way of capital transfers. Table No. 5 below represents the physical assets formation by Govt. Administration and Departmental Commercial Undertakings together with its capital transfer payments. As already mentioned, the net capital formation has been the same as the gross capital formation as the expenditure on renewals and replacements is very small.

TABLE No. 5 : *Capital Expenditure of State Govt. Administration and Departmental Commercial Undertakings.*

(Rs. in Lakhs)

Year	Gross Capital Formation				Capital Transfer	Total Expenditure
	Construction Works	Machinery & Equipment	Stock Outlay	Total		
1	2	3	4	5	6	7
1971-72	1,686	74	326	2,086	59	2,145
1972-73	1,736	148	116	2,000	29	2,029
1973-74	1,498	184	484	2,166	3	2,169
1974-75	1,496	167	784	2,447	9	2,456
1975-76	1,730	197	(—) 361	1,566	39	1,605
1976-77	1,708	223	60	1,991	67	2,058
1977-78	2,810	276	(—) 539	2,547	210	2,757
1978-79	3,857	320	(—) 193	3,984	306	4,290
1979-80	4,535	379	139	5,053	379	5,432
1980-81	6,165	395	265	6,825	497	7,322
1981-82	6,496	386	771	7,653	853	8,506
1982-83	7,517	476	(—) 92	7,901	1,417	9,318
1983-84	6,594	401	165	7,161	1,549	8,710

The sources of finance for the capital expenditure are the net savings of the State Govt. Administration given in table 4 alongwith share of Estate Duty and Capital grants, contributions and recoveries from

Union and other State Govts. Table No. 6 gives the sources of finance alongwith the deficit in all transactions in goods and services.

TABLE No. 6 Sources of Finance for Capital Expenditure and deficit in all transactions in goods and services

(Rs. in Lakhs)

Year	Sources of Finance			Disbursements (Capital formation and capital transfers) table 5	Balance (Deficit)
	Net Saving by the State Govt.	Capital Transfers (Capital grants etc.)	Total		
1	2	3	4	5	6
1971-72	(—) 344	328	(—) 16	2,145	2,161
1972-73	(—) 343	428	85	2,029	1,944
1973-74	(—) 236	374	138	2,169	2,031
1974-75	518	272	790	2,456	1,666
1975-76	190	401	591	1,605	1,014
1976-77	4,074	339	4,413	2,058	(—) 2,355
1977-78	3,119	674	3,793	2,757	(—) 1,036
1978-79	4,012	972	4,984	4,290	(—) 694
1979-80	4,744	1,059	5,803	5,432	(—) 371
1980-81	4,589	1,088	5,677	7,322	1,645
1981-82	4,455	870	5,325	8,506	3,118
1982-83	4,273	2,564	6,837	9,318	2,481
1983-84	4,601	1,663	6,264	8,710	2,446

*Change in Financial Assets*—The net change in financial assets of the Govt. i.e. financial investment in Industrial and Commercial concerns and loans and

advances granted to the rest of the economy are set out in Table No. 7.

TABLE No. 7 : Change in Financial Assets.

(Rs. in Lakhs)

Year	Investment in shares	Loans & Advances		Total outgoings	Repayment of loans	Net Increase in financial assets.
		For Capital formation	For Current consumption			
1	2	3	4	5	6	7
1971-72	121	222	71	414	101	313
1972-73	91	460	71	622	48	574
1973-74	58	387	67	512	66	446
1974-75	192	522	43	757	136	621
1975-76	288	522	51	861	115	746
1976-77	307	584	59	950	106	844
1977-78	479	1,083	76	1,638	111	1,527
1978-79	549	1,476	95	2,120	131	1,989
1979-80	818	1,299	270	2,387	160	2,227
1980-81	694	1,683	135	2,512	165	2,347
1981-82	931	1,619	129	2,679	202	2,477
1982-83	797	1,829	187	2,813	265	2,548
1983-84	765	1,950	136	2,851	314	2,537

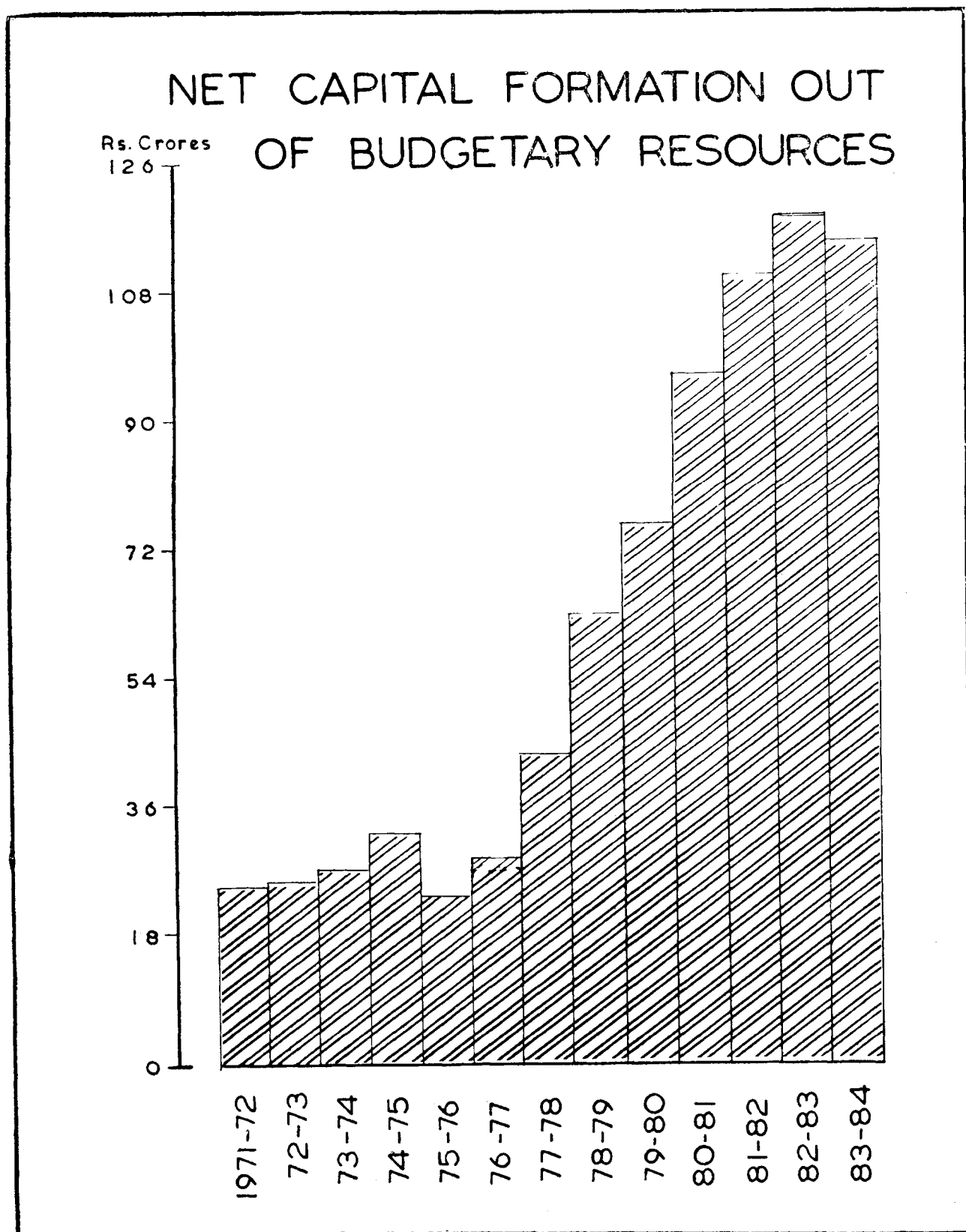
*Net Capital Formation out of Budgetary Resources of the State Govt.*—The net capital formation out of budgetary resources of the State Govt. comprises of 'net capital formation' directly undertaken and 'capital transfers' given in table No. 5 and 'loans and advances for capital formation' and 'Investment in Shares' given in Table No. 7. Table No. 8 below gives the net capital formation out of budgetary resources.

The table shows that the net capital formation has increased from 2,488 lakhs in 1971-72 to Rs. 11,425 lakhs in 1983-84, thereby showing an increase of about 360 per cent in 12 years. This sharp increase is noticeable after 1977-78 and is due to the emphasis being laid by the Govt. on construction activities like drinking water supply, irrigation schemes and roads etc.

TABLE NO. 8 :—*Net Capital Formation Out of Budgetary Resources.*

(Rs. in Lakhs)

Year	Capital Expenditure	Grants for Capital Formation	Loans & Advances for Capital Formation	Investment in shares	Total
1	2	3	4	5	6
1971-72 . . . . .	2,086	59	222	121	2,488
1972-73 . . . . .	2,000	29	460	91	2,580
1973-74 . . . . .	2,166	3	387	58	2,614
1974-75 . . . . .	2,447	9	522	192	3,170
1975-76 . . . . .	1,566	39	522	288	2,415
1976-77 . . . . .	1,991	67	584	307	2,949
1977-78 . . . . .	2,547	210	1,083	479	4,319
1978-79 . . . . .	3,984	306	1,476	549	6,315
1979-80 . . . . .	5,053	379	1,299	818	7,549
1980-81 . . . . .	6,825	497	1,683	694	9,699
1981-82 . . . . .	7,653	853	1,619	931	11,056
1982-83 . . . . .	7,901	1,417	1,829	797	11,944
1983-84 . . . . .	7,161	1,549	1,950	765	11,425



**Total Requirement of Finances**—The aggregate of balancing items given in table No. 6 and 7 denotes the total requirement of finance for the State Government. This deficit is given in table No. 9.

TABLE No. 9:—Deficit denoting total requirements of Finances of the State Govt.

(Rs. in lakhs)			
Year	Deficit in all transaction in Commodities and Services and Transfers.	Net increase in financial assets	Total Deficit
1	2	3	4
1971-72	2,161	313	2,474
1972-73	1,944	574	2,518
1973-74	2,031	446	2,477
1974-75	1,666	621	2,287
1975-76	1,014	746	1,760
1976-77	(-) 2,355	844	(-) 1,511
1977-78	(-) 1,036	1,527	491
1978-79	(-) 694	1,989	1,295
1979-80	(-) 371	2,227	1,856
1980-81	1,645	2,347	3,992
1981-82	3,181	2,477	5,658
1982-83	2,481	2,548	5,029
1983-84	2,446	2,537	4,983

**Sources of Finance**—Table No. 10 below sets out the financing of deficit indicated in table No.9.

TABLE No. 10 :—Sources of finance for deficit indicated in table No. 9.

(Rs. in lakhs)

Year	Net borrowings	Deficit financing (Increase in floating debt and withdrawals from cash balances)	Total
1971-72	1,885	589	2,474
1972-73	(-) 232	2,750	2,518
1973-74	2,627	(-) 150	2,477
1974-75	1,039	1,248	2,287
1975-76	(-) 558	2,318	1,760
1976-77	(-) 2,934	1,423	(-) 1,511
1977-78	(-) 2,939	3,430	491
1978-79	1,752	(-) 457	1,295
1979-80	2,056	(-) 200	1,856
1980-81	3,247	745	3,992
1981-82	(-) 9,763	15,421	5,658
1982-83	(-) 12,212	17,241	5,029
1983-84	(-) 202	5,185	4,983

#### Other Interesting Results

Some other important findings from the economic classification of the Pradesh Budget are given in following paragraphs :—

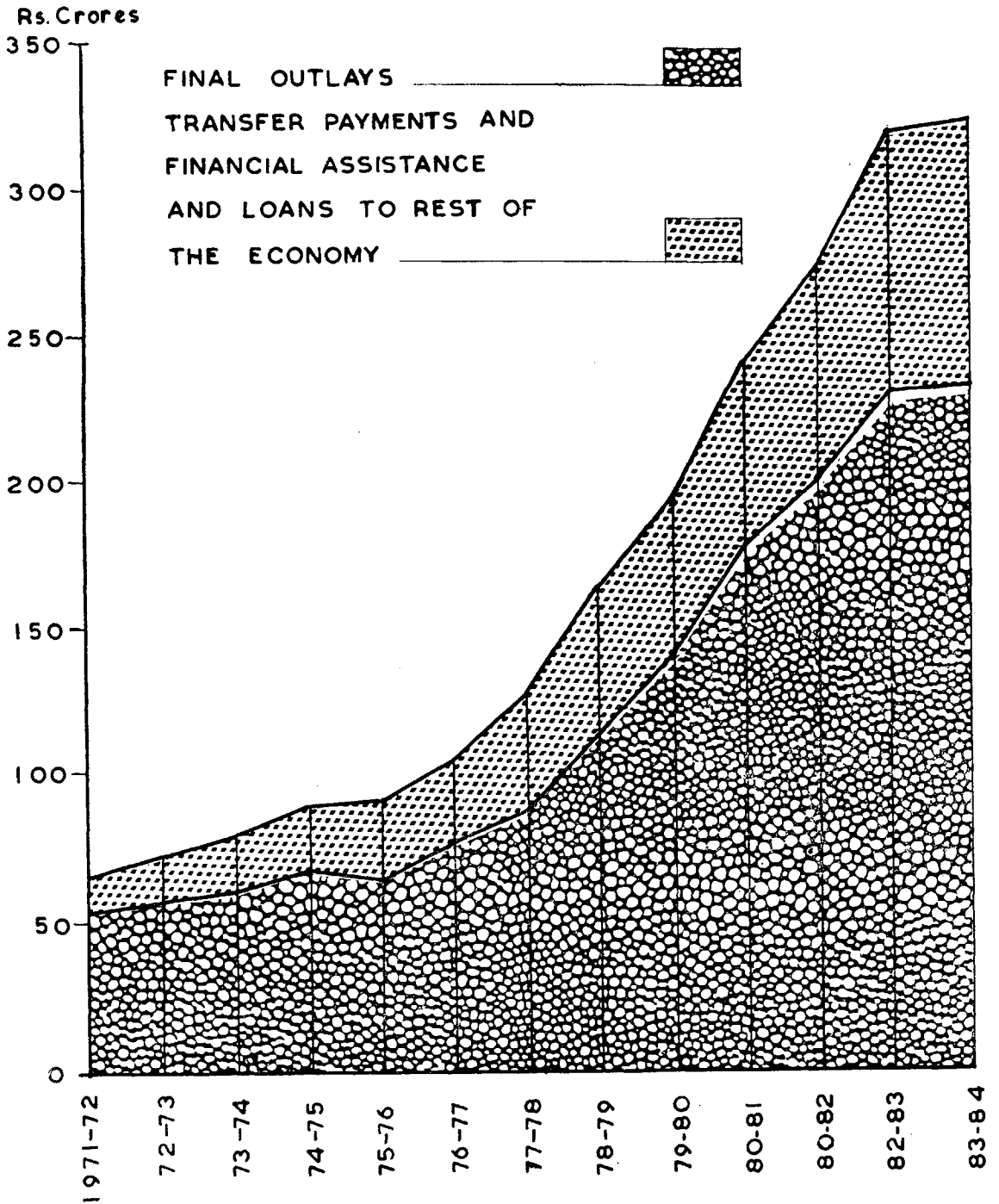
**Total expenditure**—The State Government's total expenditure (excluding departmental commercial undertakings) comprises (i) final outlays i.e. consumption expenditure and gross capital formation (ii) transfer payments to the rest of the economy and (iii) financial assistance and loans to the rest of the economy. This total expenditure is given in table 11. The table reveals that whereas the consumption expenditure has increased by 352 per cent over a period of 12 years, the increase in the outlay for gross capital formation directly undertaken by the Government is only 243%. The overall increase in the final outlays is however, 312 per cent over this period.

TABLE No. 11 :—Total expenditure (excluding operating expenses of departmental commercial undertakings)

(Rs. in lakhs)

Year	Final Outlays		Transfer payment		Financial assistance & loans to rest to the economy (net)	Total Exp.
	Consumption Expenditure	Gross Capital formation	Current Transfers	Capital Transfers		
1	2	3	4	5	6	7
1971-72	3,529	2,086	887	59	313	6,874
1972-73	3,814	2,000	1,017	29	574	7,434
1973-74	4,146	2,166	1,176	3	446	7,937
1974-75	4,692	2,447	1,518	9	621	9,287
1975-76	5,222	1,566	1,745	39	746	9,318
1976-77	5,891	1,991	1,877	67	844	10,670
1977-78	6,404	2,547	1,998	210	1,527	12,686
1978-79	7,696	3,984	2,706	306	1,989	16,681
1979-80	9,132	5,053	2,812	379	2,227	19,603
1980-81	11,494	6,825	3,160	497	2,347	24,323
1981-82	12,512	7,653	3,815	853	2,477	27,310
1982-83	14,974	7,901	5,161	1,417	2,548	32,001
1983-84	15,958	7,161	5,115	1,549	2,537	32,320

# TOTAL EXPENDITURE





Out of the total expenditure, provided in the budget, the percentage of 'final outlays' and Transfer payments alongwith financial investment and loans (net) is given in table 12. The table shows that the share of final outlays (representing State Government's direct demand for goods and services for consumption and for capital formation) in the total expenditure has decreased from 81.7 per cent in 1971-72 to 71.5 per cent in 1983-84 while share of rest of the expenditure representing transfer payments, financial investment, loans etc. has increased from 18.3 to 28.5 per cent.

TABLE NO.12 :—Percentage of 'final outlay' and 'transfer payments, financial investment and loans (net)' to total Expenditure.

Year	Final Outlays		Transfer Payments		Total
	Total (Rs. lakhs)	Percentage	financial investment and loans (net)		
			Total (Rs. lakhs).	Percentage	
1	2	3	4	5	6
1971-72	5,615	81.7	1,259	18.3	100.00
1972-73	5,814	78.2	1,620	21.8	100.00
1973-74	6,312	79.5	1,625	20.5	100.00
1974-75	7,139	76.9	2,148	23.1	100.00
1975-76	6,788	72.8	2,530	27.2	100.00
1976-77	7,882	73.9	2,788	26.1	100.00
1977-78	8,951	70.6	3,735	29.4	100.00
1978-79	11,680	70.0	5,001	30.0	100.00
1979-80	14,185	72.4	5,418	27.6	100.00
1980-81	18,319	75.3	6,004	24.7	100.00
1981-82	20,165	73.8	7,145	26.2	100.00
1982-83	22,875	71.5	9,126	28.5	100.00
1983-84	23,119	71.5	9,201	28.5	100.00

The percentage of gross capital formation and consumption expenditure in the final outlays have remained more or less the same. These have been given in table No. 13.

TABLE NO. 13 :—Percentage of consumption expenditure and gross capital formation to final outlays.

Year	Consumption expenditure (Percentage)	Gross capital formation (Percentage)	Total
1	2	3	4
1971-72	62.8	37.2	100.0
1972-73	65.6	34.4	100.0
1973-74	65.7	34.3	100.0
1974-75	65.7	34.3	100.0
1975-76	76.9	23.1	100.0
1976-77	74.7	25.3	100.0
1977-78	71.5	28.5	100.0
1978-79	65.9	34.1	100.0
1979-80	64.4	35.6	100.0
1980-81	62.7	37.3	100.0
1981-82	62.0	38.0	100.0
1982-83	65.5	34.5	100.0
1983-84	69.0	31.0	100.0

*State Income Generation*—The total income generated by the budgetary operations comprise (i) wages and salaries (including pension) income generated by Government administration and wages and salaries component of repairs and maintenance (ii) Net output of departmental commercial undertakings i.e. wages and salaries, interest and operating surplus and wages and salaries component of repairs and maintenance and (iii) value added (wages and salaries) component of Government outlays on building and others construction. Table No. 14 gives the total income generated by the budgetary operations of the State Government alongwith the total state income of the Pradesh. The table reveals that whereas the share of the income generated by the State Government administration was about 15 per cent in 1971-72, it rose to 20 per cent in 1983-84. The reasons for the same are (i) sharp increase in the wages and salaries of Govt. employees and (ii) greater outlay on construction works provided by the State Government.

TABLE NO. 14 :—Total Income generation by the State Govt budgetary operations and total State Income of the Pradesh.

Year	Income generation by the budgetary operation (Rs. in lakhs)	Total State Income of the Pradesh (at current by the operation prices) (Rs. in lakhs)	Percentage generated by the budgetary operations to total income of the Pradesh.
1	2	3	4
1971-72	3,742	25,052	14.9
1972-73	4,510	27,478	16.4
1973-74	5,120	34,165	15.0
1974-75	5,555	39,079	14.2
1975-76	5,922	41,047	14.4
1976-77	6,048	39,954	15.1
1977-78	7,119	46,656	15.3
1978-79	8,588	52,313	16.4
1979-80	9,949	53,010	18.8
1980-81	13,021	64,496	20.2
1981-82	14,523	71,768	20.2
1982-83	16,494	82,533 (E)	20.0
1983-84	17,225	..	..

E: Estimated.

*Total wages and salaries*—Total Wages and salaries paid to the employees of the State Government can be obtained by adding the wages and salaries shown in table-1, wages and salaries paid to the employees of Departmental Commercial Undertakings and wages and salaries capitalised. Thus Table No. 15 shows the total wages and salaries appearing in both revenue and capital expenditure.

# FINAL OUTLAYS

Rs Crores  
280

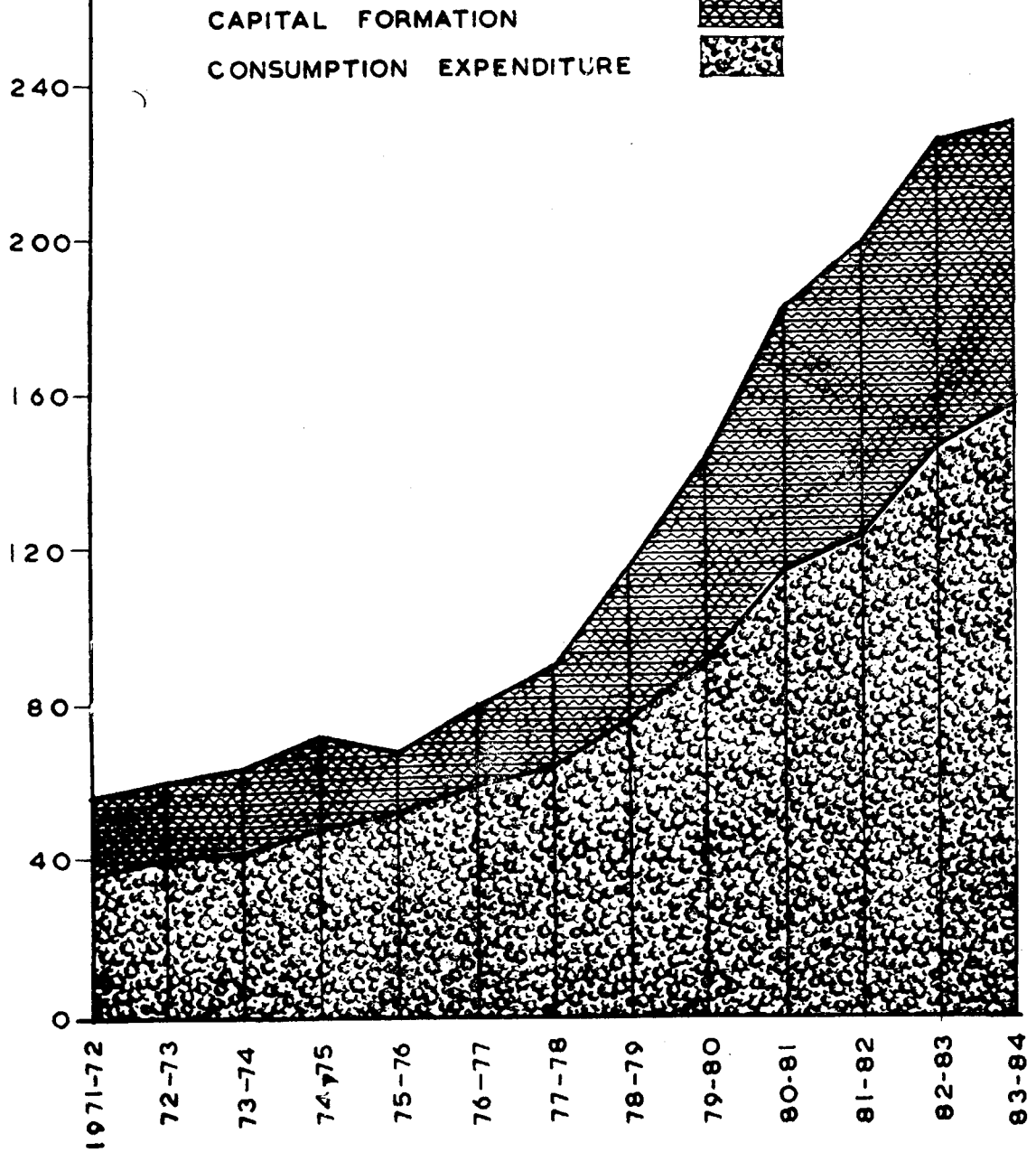


TABLE NO.15 :—Total wages and salaries appearing in revenue and capital expenditure.

(Rs. in lakhs)

Year	Wages and Salaries to employees of Government Administration	Wages & Salaries to employees of Departmental commercial Undertakings.	Wages and Salaries treated as capital expenditure	Total
1	2	3	4	5
1971-72	2,429	380	83	2,892
1972-73	2,806	581	51	3,438
1973-74	3,005	637	39	3,681
1974-75	3,599	598	184	4,381
1975-76	4,022	524	262	4,808
1976-77	4,260	586	103	4,949
1977-78	4,740	627	274	5,641
1978-79	5,265	619	405	6,289
1979-80	6,157	790	354	7,301
1980-81	8,251	705	569	9,525
1981-82	9,188	806	763	10,757
1982-83	10,498	924	760	12,182
1983-84	11,930	1,057	877	13,864

It will be of interest to study the index of wages and salaries per employee alongwith the index of consumer prices for industrial workers in Himachal Pradesh, given in Table No. 16 below. It may be mentioned that the wages and salaries per employee has been calculated by taking all the wages and salaries appearing as such in the various demands (including all types of allowances as also medical reimbursement allowance but excluding travelling allowance) and the total regular and contingent paid employees. The table shows that the consumer price index numbers for industrial workers in Himachal Pradesh has risen from 100 in 1971-72 to 229 in 1982-83. Correspondingly the index of per employee wages and salaries has gone up to 316 in 1982-83. Relatively sharp increase in the latter index is attributed to the following main reasons :

- (i) Revision of pay scale of H.P. Govt. employees with effect from 1-2-1978 due to which the pay of all the employees was stepped up by at least 25 Rupees. The benefit in certain cases was much more.
- (ii) Grant of annual increments.
- (iii) Increase in the grant of house rent allowance in different slabs to employees posted in Shimla.
- (iv) Increase in the upper limit of compensatory allowance in all the areas except Shimla town.

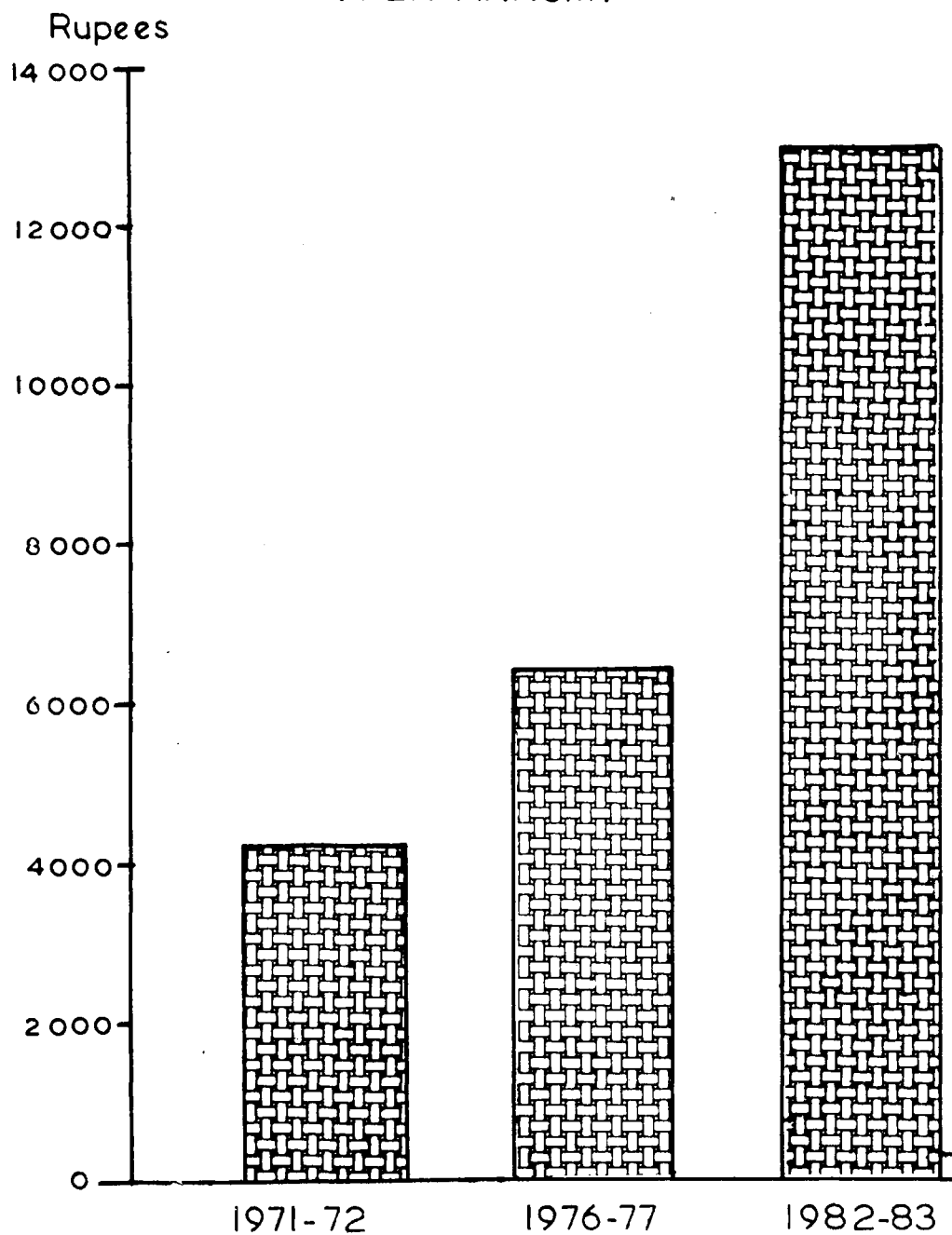
TABLE NO. 16 :—Index of per employee Wages and Salaries and consumer price index numbers for Industrial worker in Himachal Pradesh.

Year	Total wages & salaries (Rs. lakhs)	No. of employees regular contingency paid	Per employee wages and salaries per annum (Rs.)	Index of wages and salaries per employee 1971-72=100	Consumer Price index number for industrial worker in H.P. 1971-72* =100
1	2	3	4	5	6
1971-72	2,892	69,814	4,142	100	100
1972-73	3,438	71,833	4,786	116	105
1973-74	3,681	76,403	4,818	116	120
1974-75	4,381	75,316	5,817	140	151
1975-76	4,808	76,896	6,253	151	149
1976-77	4,949	78,322	6,319	153	143
1977-78	5,641	79,768	7,072	171	153
1978-79	6,289	81,732	7,695	186	156
1979-80	7,301	84,257	8,665	209	169
1980-81	9,525	88,593	10,751	260	192
1981-82	10,757	90,808 (E)	11,846	286	213
1982-83	12,182	93,078 (E)	13,088	316	229

E : Estimated on the basis of 2.5 percent increase per annum

\*Index obtained by shifting the base 1965=100 to 1971-72=100

# PER EMPLOYEE WAGES & SALARIES ( PER ANNUM )



## RURAL INDEBTEDNESS IN HIMACHAL PRADESH

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To ensure an equitable distribution of income and wealth and for all its economic development, past, present and future, Himachal Pradesh is bound to depend essentially upon its rural background. Himachal Pradesh is overwhelmingly a rural state and destinies of the State are intimately linked with the lot of rural population. The total population of Himachal Pradesh which has swelled upto 4.28 million in 1981 from 3.46 million in 1971 consisted of 3.95 million as rural population accounting for 92.39 percent of the total population. More than 70 percent of the working population in the Pradesh is engaged in agricultural pursuits but their contribution to state income is very poor. During 1981-82 Agriculture & Animal Husbandry sectors contributed only 41.7% of state income at current prices and 47.4% only at constant prices (1970-71).

The varying agro-climatic conditions, different nature of soil and rainfall, etc. result in different agro-climatic practices, cropping pattern and operation time. Also the State being handicapped in irrigation facilities, the success of agriculture is dependent upon rains which is erratic and not well spread. This hinders the adoption of new technology and results in lower yield rates. Moreover, Himachal Pradesh is a State of small land holdings. According to recent Agricultural Census (1976-77) out of 1,007 thousand hectares, about 34 percent accounted for by holdings of less than 2 hectares in size. The average size of holdings in the State is 1.6 hectares which can not be considered economical by any standards particularly when fields are so small and scattered. The modern practices and techniques cannot be adopted in small fields and these all again result in low yields. Excepting fruits and vegetables, Himachal farmers have very little to sell which limits his capacity to use improved for increasing production. Thus born in poverty he has to live in poverty throughout his life time. With his meagre income he is able hardly to feed his family. His savings are almost negligible and moreover he is generally confronted with multifarious socio-economic problems. Besides, unemployment & under-employment and low incomes, a high incidence of indebtedness which is often the direct consequence of these has been a chronic problem facing rural popu-

lation. The problem of indebtedness among the rural households exists and has resulted from the rising cost of living as compared to meagre income, illiteracy and ignorance peculiar situations such as natural calamities and crop failure, etc. and fuilling of social and religious obligations in the society in a lavish manner at the time of births, deaths and marriages, etc. Rural person has to borrow loans thus both for productive and non-productive purposes. Though now many government and co-operative institutions are there to help him but in the past, he was dependent largely upon village money lenders, and the interest rate these money lenders charged was so high that a petty loan once borrowed usually remained unpaid during one's life time. It was true that an Indian villager if born in debt, lived in debt and died in debt.

Several remedial measures have been taken by the Government during post independence period but the malady does not appear to have lost the grip.

The indebtedness survey conducted during the 31st round of N.S.S. in 1976 throws some light on the incidence and extent of indebtedness and the nature of debt as also the sources and purposes of debt in rural areas of Himachal Pradesh. A sample of 4,351 households was studied in the non-tribal districts of Himachal Pradesh and it was revealed that not a single case of kind loan was there. As many as 920 i.e. 21.4 percent of households reported cash loans outstanding on 30-6-76. During 1975-76 (from 1-7-75 to 30-6-76) 443 households i.e. 10.18% of the total households borrowed cash loans. The loan was either utilised for productive purposes or used exclusively for satisfying the immediate economic needs. The total number of cash loans reported by the indebted households was 1,272 and the amount of loans was Rs. 10,34,749. It was found that 3.45% of the households reported inherited loans. The prominent source of inherited loans were reported to be the agricultural money lender accounting for 30.9% of the total reporting households.

The district-wise picture of loans outstanding as on 30-6-76 and those borrowed loans between 1-7-75 to 30-6-76 is shown in the following table.

TABLE No. 1 :—Percentage of households reporting cash loans as on 30-6-76 and during 31-7-75 to 30-6-76 and the value of loan.

District	Percentage of borrowing households (31-7-75 to 30-6-76)	Amount of original loan for per indebted household (Rs. 0.00)	Percentage of borrowing households as on 30-6-76	Amount of loan per indebted household (Rs. 0.00)
1	2	3	4	5
1. Mandi . . . . .	17.40	1,126.33	27.98	1,494.75

	1	2	3	4	5
2. Hamirpur . . . . .		18.87	1,070.68	42.69	1,352.48
3. Kangra . . . . .		6.42	954.86	13.65	1,160.58
4. Solan . . . . .		4.00	508.33	13.33	597.90
5. Kullu . . . . .		9.03	642.31	17.71	964.90
6. Bilaspur . . . . .		10.36	803.45	14.29	983.10
7. Una . . . . .		12.85	1,045.41	32.64	1,275.94
8. Shimla . . . . .		6.45	1,054.69	18.15	1,183.54
9. Sirmaur . . . . .		4.48	664.69	13.45	1,059.85
Total . . . . .		10.18	993.52	21.14	1,245.08

The purpose and the source of loans and amount involved is given in the table below :

TABLE No. 2 Amount of loans borrowed by Credit Agency & Purpose (Rs.)

Credit Agency	Purpose of Loan									
	Capital Exp. in farm business	Current Exp. in farm business	Capital Exp. in non-farm business	Current Exp. in non-farm business	Household exp.	Litigation Exp.	Debt repayment	Financial investment	Others	Total
1	2	3	4	5	6	7	8	9	10	11
1. Government . . . . .	35,700	5,600	5,000	1,000	10,500	—	—	—	4,880	62,680
2. Cooperative society/Bank . . . . .	35,950	11,600	5,780	600	64,775	—	5,700	1,500	1,34,525	2,60,430
3. Commercial Bank . . . . .	1,200	6,000	—	—	7,000	—	—	—	3,000	17,200
4. Insurance . . . . .	3,000	600	—	—	—	—	—	—	—	3,600
5. Provident Fund . . . . .	250	1,000	—	—	—	—	—	—	2,000	3,250
6. Land Lord . . . . .	—	—	—	—	3,600	4,000	—	—	—	7,600
7. Agricultural money lender . . . . .	5,000	14,600	8,000	—	2,42,365	—	4,100	—	75,280	3,49,345
8. Professional money lender . . . . .	—	—	1,100	—	1,800	—	—	—	2,600	5,500
9. Trader . . . . .	—	—	7,700	600	57,375	—	300	2,000	18,525	86,500
10. Relatives & Friends . . . . .	10,820	14,000	14,040	2,900	97,134	—	3,900	—	95,850	2,38,644
11. Others . . . . .	—	—	—	—	—	—	—	—	—	—
Total . . . . .	91,920	53,400	41,620	5,100	4,84,549	4,000	14,000	3,500	3,36,660	10,34,749

The above table reveals that the major source of lending money is agricultural money lender followed by cooperatives, and relatives and friends. The money lenders in lieu of lending money exploit the poor people considerably leading to more and more economic inequalities. Besides, it is observed that the loan so borrowed is mostly used for unproductive purposes further aggravating the condition of rural

masses. To overcome all this, it is essential to popularise more & more Government cooperative credit agencies and banks and educate our rural population to get out of the clutches of indebtedness. The role of cooperatives, Land Development Banks & Commercial Banks in this context and that of Rural Development Department in improving the lot of poor masses is discussed in the coming paragraphs.

## Cooperatives

Historically, in India, Co-operatives were conceived of merely as instruments for dealing with the problem of rural indebtedness. Cooperative Credit Societies were organised after the enactment of the Cooperative Credit Societies Act 1904. For a long time since its implementation, the impact of cooperative movement on rural economy was insignificant in the absence of a comprehensive plan for rural development. With the launching of five years plans, cooperative movement occupied an important place in national economic policy. Now there are two separate cooperative agencies for provision of Agriculture Credit one for short and medium term credit and the other for long term credit. The former has three-tier structure consisting of a State Cooperative Bank at State-level, Central Cooperative Bank at district level and Primary Agricultural Credit Societies or Service Cooperatives at village level. For providing long term credit for the development of agriculture there exist Cooperatives Land Development Banks.

Cooperative movement in Himachal Pradesh remained a great success. At present it is catering to the needs of more than 85% of rural population. In 1981-82 there were in all 3,368 cooperative societies with a membership of 7.21 lakhs. The following figure reflects the rapid expansion of cooperative credit during the receipt years :—

TABLE No. 3 Loans advanced

(Rs. in lakhs)

Year	No. of societies	Short term loans	Long term loans
1	2	3	4
1979-80 . . . . .	3,487	615.95	29.17
1980-81 . . . . .	3,368	782.25	29.90
1981-82 . . . . .	3,500	850.00	89.00

(Provisional)

## Land Development Bank

In order to meet long-term requirements, the Land Development Banks are financing rural development

schemes to augment the income of rural people. Loans are granted to farmers for development of minor irrigation, land levelling, planting of orchards and mechanisation of agriculture. At present, these Banks are functioning in Shimla, Solan, Bilaspur, Mandi, Kulu, Chamba, Sirmaur, Kangra and Kinnaur districts. The Bank advanced long term loans to the tune of Rs. 28.88 lakh through the net work of its various offices in the state for various purposes in 1979-80 showing an increase of about 136 per cent during 1966-67 to 1979-80. With the establishment of National Bank of Agriculture & Rural Development in July, 1982, now we have one multipurpose integrated agency to fulfil the credit needs for the development of agriculture and rural areas. This Bank not only will provide easy loans but also formulate the credit and development plans and policies for the development of rural areas.

## Commercial Banks

By the end of March, 1983, 402 branches of various Commercial Banks were functioning in the Pradesh. These Banks were having deposits worth Rs. 308.54 crores and loans provided were worth Rs. 137.57 crores giving a credit deposit ratio of 44.6 per cent. These Banks still have an ample scope of providing loans as this ratio is much below the National average of 62%. Primary sector owns a significant position i.e. 64.9% of these loans amounting to Rs. 89.29 crores. Commercial Banks have shown keen interest in disbursing Agricultural loans in Pradesh. Agricultural loans were 17.45 per cent of the total loans whereas the target fixed by Reserve Bank upto March, 1985 is 15% only. Against Reserve Bank target of 10 per cent, the Commercial Banks in Himachal Pradesh have made 10.29 per cent of the total loans available to the weaker sections of societies which amount to Rs. 14.29 crores. Under Integrated Rural Development Programme and 20-Point Economic Programme also, these banks have remarkable achievements by providing loans worth Rs. 10.51 crores and Rs. 29.94 crores by the end of March, 1983.

The details of loans & deposits of various Commercial Banks upto March, 1983 in Himachal Pradesh is revealed below :—

TABLE No. 4 Deposits & Loans of Commercial Banks in Himachal Pradesh upto March, 1983.

Sl. No.	Name of Bank	Deposits		Loans		Loan as percentage to deposit.
		No. of accounts.	Amount (Rs. in lakhs)	No. of Accounts	Amount (Rs. in lakhs)	
1	2	3	4	5	6	7
1.	United Commercial Bank . . . . .	1,66,829	4,677.87	41,081	3,430.61	73.33
2.	State Bank of India . . . . .	3,69,455	8,945.26	624	3,690.53	41.26
3.	State Bank of Patiala. . . . .	..	2,740.00	..	1,144.00	41.75
4.	Punjab National Bank . . . . .	..	8,130.00	..	3,461.00	42.57
5.	Bank of Allahbad . . . . .	2,499	55.39	310	15.01	27.10
6.	Bank of Baroda . . . . .	5,553	172.32	451	174.70	101.38
7.	Bank of India . . . . .	..	448.11	995	209.49	46.75
8.	Canara Bank. . . . .	..	59.64	—	54.99	92.13

1	2	3	4	5	6	7
9	Central Bank . . . . .	76,162	1,956.59	8,709	164.80	23.75
10	Indian Bank . . . . .	..	216.80	..	127.00	58.57
11	Indian Overseas Bank . . . . .	11,504	363.41	911	70.09	19.29
12	New Bank of India . . . . .	..	1,386.93	..	330.86	23.86
13	Oriental Bank of Commerce. . . . .	..	222.60	777	77.75	34.93
14	Punjab and Sind Bank** . . . . .	15,171	453.00	1,395	130.00	28.70
15	Sindicate Bank** . . . . .	3,325	101.30	549	46.09	45.50
16	Union Bank of India . . . . .	..	572.68	..	215.80	37.68
17	Jammu & Kashmir Bank* . . . . .	..	60.23	..	75.78	125.82
18	Laxmi Commercial Bank . . . . .	9,649	291.66	864	37.81	19.96
19	Himachal Gramin Bank. . . . .	1,08,379	801.78	16,718	424.84	52.99
20	H.P. Land Development Bank. . . . .	..	..	619	130.36	..
21	H.P. Cooperative Bank . . . . .	..	2,112.47	810	1,414.58	66.96
22	Jogindra Central Coop. Bank . . . . .	9,812	163.37	318	126.80	77.62
23	Kangra Central Coop. Bank. . . . .	90,230	2,586.67	2,015	584.66	22.60
24	Shimla Urban Central Coop. Bank . . . . .	..	17.05	..	20.19	118.41

.. Not available

\*Figures upto December, 1982.

\*\*Figures for one district is not available.

### Rural Development

To ameliorate the rural poverty, rural development programme provides substantial assistance to the poorest among the poor through creation of productive assets and skills and by way of loans and subsidies so as to raise the income level of the beneficiaries above the poverty line and also help in monitoring the additional income thus generated. The main objectives of this programme is to raise 600 families out of identified rural target families (persons living below the poverty line) to cross the poverty line and create substantial additional opportunities of employment in a year per block. The programme is shared on 50 : 50 basis with the Central Government. An amount of Rs. 161.10 lakh was incurred during 1981-82 under this programme. 34,877 families were covered under this programme during 1981-82. Training of rural youth for self employment is a part of this programme under which "Learning by doing" sort of training is imparted to the interested youths free of cost. 2,760 such youths were trained during the year 1981-82 and by the end of March, 1982, 2,056 youths have established themselves in the trade.

Besides, National Rural Employment Programme has also been launched in the Pradesh to eliminate unemployment and under employment. The main objective of this programme is to give employment to the rural youth when he stays off farm and to create durable community assets such as construction of school buildings, rural roads, Panchayat Ghars, etc. During 1981-82 Social Forestry was also taken up. Under this programme only those schemes were covered which directly help in strengthening rural infrastructure and result in creation of durable community

assets and those works which improve the rural economy and quality of life. During the year 1981-82, employment worth Rs. 12.38 lakh mandays was generated.

Besides above, to improve the economic conditions of rural people many other steps also have been taken during the recent years. Persons having an annual income below Rs. 6,000 will be provided free legal aid and 90% of jobs will preferably be given to the families having income upto Rs. 7,500 per annum. All primary school children below the income level of Rs. 6,000 per year are being given scholarship @ Rs. 5 per month and necessary aid to purchase copies and books are being given. Out of total 20,455 identified landless families, land to 20,363 families was already allotted upto September, 1982. All kind of subsidies to purchase necessary fertilizers, implements, cattle & Biogas plants etc. are being given. An agency under the chairmanship of Deputy Commissioner has been formed in every district to run these programmes which is called 'RUDA' (Rural Development Agency).

In the wake of new economic programmes, the State Govt. have enacted special legislation for the emancipation of the lot of weaker sections of the State. The Himachal Pradesh Relief of Agricultural Indebtedness Act, 1976 provides relief from indebtedness to marginal farmers, landless agricultural labourers and rural artisans. Every debt outstanding on the appointed day including amount of interest, if any, payable by the marginal farmers, a landless agricultural labour or a rural artisan whose annual income does not exceed Rs. 2,400 has been deemed to be wholly discharged.



### Conclusion

Himachal Pradesh is dominated by rural masses dependent largely upon agricultural sector for its livelihood. The physical topography, hilly terrain and peculiar agro-climatic conditions mingled with small size of holdings and inadequate irrigation facilities in the State results in lower yield and thus poor income of the people. This poverty confronted with multifarious socio-economic problems leads to rural indebtedness. With the passage of time the primitive source of loans, the village money lender, is being replaced

by credit societies and banking institutions. To remove this rural indebtedness two way approach is required : (i) To provide him easy-term loans by strengthening Banking & Credit institutions (ii) To augment rural income by way of rural development programmes, and above these two, is needed the social & mental enlightenment of poor masses to use the loans for productive purposes, more. The Credit agencies need not only to provide easy credit to the poor but should also educate him to make its best use.

## SOCIO—ECONOMIC CHANGE IN HIMACHAL PRADESH

—Shri R. P. Sud,  
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Economics & Statistics Department,  
Himachal Pradesh.



Himachal Pradesh has a chequered history of its creation. It appeared on the map of India on April, 15, 1948 with the amalgamation of 30 and odd princely hill States. The territory saw its expansion through integration of erstwhile Bilaspur State in 1954. In 1960, the then Mahasu district was bifurcated into Mahasu and Kinnaur districts. Subsequently, on the eye of bifurcation of the erstwhile Punjab State some hilly areas were merged with Himachal Pradesh on November 1, 1966. Reorganisation of the districts was affected on September 1, 1972 and two more new districts namely Una and Hamirpur were carved out of the then Kangra district. Also from the then existing districts of Mahasu and Shimla, two new districts of Shimla and Solan were created by reorganising the boundaries of the old districts.

On the political arena the State started as a Part C State of the Indian constitution, became centrally administered territory and ultimately attained the status of a full fledged State on January 25, 1971. The system of political governance of the State also saw apex down in terms of popular government being formed in the early fifties, becoming the Union Territory with a Territorial Council in midfifties and again reverting back to the system of popular government in 1963.

As of today, Himachal Pradesh has a geographical area of 55,673 square Kms. and is bigger than Punjab, Haryana, Kerala, Manipur, Tripura, Meghalaya and Nagaland. The population of this State according to 1981 Census was 42.81 lakh with a density of 77 persons per square Km. It has 12 administrative districts and 69 blocks.

Before we go on to the history of socio-economic development, it may be appropriate to have an idea about the levels of development in 1948 when this State was created.

The concept economic development was non-existent in the princely hill States, Solitary efforts were made by some of the bigger rulers to open a school, a dispensary or a sarai in their states. The entire terrain was not easily approachable. The inhabited areas were separated by rivers and rivalets, without any bridges, and culverts. Beside, basic amenities of life such as hygienic drinking water, electricity, medical and health care facility and education facility were either absent or negligible. Thus the entire State had certain peculiar

features. Many of the problems faced with regard to socio-economic development were exclusive to this State as distinct from plains. The State was endowed with natural resources but means to exploit these were not available.

In this background, the development process was started in Himachal Pradesh with the implementation of the First Five Year Plan. This plan was very modest. Its size was of Rs. 5.27 crore. Per capita plan investment was Rs. 9 only. State was having very limited means of transportation and communications. Thus the highest priority was accorded to transport and communications sector in the First Five Year Plan. Gradually the developmental process picked up and the plan outlays continued to increase through successive Five Year Plans. The size of the sixth Five Year Plan has been raised to Rs. 659 crore. This year Rs. 168.17 crore are to be utilised under annual plan. Special efforts are afloat to ensure evenly spread development activity so that every area of the Pradesh receives equal treatment. Preferential treatment would be given to identified backward areas for whom 10 percent budgetary provisions for a dozen selected departments have been earmarked. This part of the plan outlay is non-divertible. The sheetanchor of the new development policy is uniform development of the entire State. Today the per capita plan investment in Himachal Pradesh is Rs. 1,523 as against the national average of Rs. 839.

Twenty Point Programme has been the main theme of the States' socio-economic policy. Last Year Himachal Pradesh was adjudged as the top performer for 14 out of the 17 items pertaining to us. This year Rs. 125 crore have been provided for the programme.

Himachal Pradesh has a preponderous agro-pastoral economy. About 44 percent of the State Domestic Product is contributed by agriculture and animal husbandry sectors. About 71 percent of the workers are engaged in agricultural pursuits. Agriculture is beset with the disadvantage of small holdings, extremities of climate, which range from hot in plains to freezing cold in the higher altitudes. At high altitude only one

crop can be grown during a year. Scope of irrigation is limited which further inhibits the progressive use of improved inputs such as chemical, fertilizers, H.Y.V. seeds etc. Against all these odds, the hard working and tenacious farmers of the State responded fully to the efforts made by the government in increasing agricultural production and diversification of agricultural activities. They have been constantly endeavouring all these years to increase food production and also to supplement their incomes by producing quality cash crops and off-season vegetables and disease free quality seed potato. The total food grains production in the State in the beginning of the first plan was about 2 lakh tonne which has now increased to over 12.80 lakh tonne. Per capita daily availability of foodgrains has increased from 490 gms in 1950-51 to 785 gms in 1982-83. Potato production has gone up from 31,600 M.T. to 1,20,000 M.T. Ginger and off-season vegetables are also exported now in a sizeable quantity. In the upper reaches and mid hills horticulture is flourishing rapidly. The tiny terraced fields which grew coarse grains hardly enough for the farmers family, are today blossoming with fruit orchards. In 1950-51 the total fruit production was only about 1200 M.T. Today it has multiplied to a staggering figure of 4,10,000 M.T. About 80 percent of the apple is exported to other States as also to some of the foreign countries. Under the aegis of the Himachal Pradesh Agro-Industries Corporation, a modern fruit processing plant has been established at Parwanoo. Products of this plant as also of those established at Jarol (Mandi) and Nagrota-Bagwan (Kangra) are very popular and these have created a niche for themselves in the competitive market of the country. Processing of apple locally has also reduced the burden on the already depleting forest wealth of the Pradesh.

Himachal Pradesh has also made a good head way in the field of production of off season vegetables, vegetable seeds, cash crops namely ginger, potato, mushrooms and hops. Himachal Pradesh Agricultural University has been providing much needed guidance and support to the farmers by way of package farm practices and material inputs. Agricultural tools and equipment which are suitable for use in the conditions obtaining in Himachal Pradesh, are manufactured in the Himachal Pradesh Agricultural Tools factory run by Himachal Pradesh Agro-Industries Corporation at Jachh (Nurpur) in Kangra district. Himachal seed potato is healthy and disease free. Before export, it is graded into different qualities as per norms and standards laid by Department of Agriculture, checked and sealed into the bags by the departmental inspectorate staff. These measure adopted for quality control have helped it in capturing markets in the other States. Potato cultivation in Himachal Pradesh has boosted the economy of the farmers. Potato cultivation and marketing is generating employment in the rural areas for the agricultural labourers at their doors.

There were two major impediments in the course of agricultural development. These were the existence of Zamindari system and tenancy system. Some of the persons were in possession of land much more than what they could manage or cultivate while there were others who had no land of their own. In majority of the cases the land owners were only crop sharers. The

tenants as such were not interested in the development of land nor had they any resources for the purpose. On the other hand interest of the landlords remained limited to their share of crops. In the circumstances the full potential of the land was not exploited. Land must go to the tiller if a revolutionary change is to be done in the field of agriculture. It was in this background that the Himachal Pradesh Government enacted and implemented the H.P. Govt. on Land Holdings Act, 1972 and Himachal Pradesh Tenancy and Land Reforms Act, 1972. Under the provisions of these acts the surplus land has been distributed among the eligible persons and proprietary rights have been conferred upon the non occupancy tenant. These radical steps have eliminated the age-old evil of exploitation of tenants and landless labourers. Various forms of land lordism have been abolished. Ways have now been cleared for penetration of capital in agriculture. The expansion of cheap credit through banks (after their nationalisation) cooperatives and other institutions and price support by the government have helped farmers increase their production.

The revolution in agriculture has transformed the socio-economic conditions of the agriculturists. Today their children are getting education in public schools, colleges and universities within and outside the State. Their standards of living have substantially gone up. Farm houses are now better built, equipped with amenities and facilities which in early fifties were considered luxuries. Watches, radios, taperecorders, washing machines, mixis and televisions can now also be seen in rural areas. Cycles, scooters, motor-cycles, trucks and even cars are owned by the farmers. They live a relatively comfortable life, eat better food and put on fine clothes. This advancement has helped them in discarding the age-old superstitions and retrograding social customs.

The forests, at one time were considered as major source of revenue. But now this approach to exploit forest wealth of the Pradesh has undergone vital change. Now the forests are raised and used to conserve the environments and maintain the ecological balance. Besides, legitimate needs of timber, fuel and fruit packing cases are also met from the forest by exploiting the forests in a limited manner and on scientific basis. In this way the wastage in timber extraction is minimum and different parts of a tree are used for different purposes. Simultaneously, concerted efforts are also being made to increase the green cover. Today about 38 per cent of the area is under forests. Our aim is to raise this level to 50 percent by 2000 A.D. Henceforth, emphasis will be on quick growing species so that timber needs could be met and valuable conifers and other species with longer regeneration cycles saved for posterity.

Animal Husbandry play a vital role in the rural economy. It is closely connected with agriculture and existence of the people in Himachal Pradesh. It provides draught animals, dung and manure to the farmers and milk, meat, wool, hair, hides and skins to the people. In the earlier years there were only local breeds of cattle which were hardly productive in terms of work, milk and wool yields. People mostly reared cows for milk production. Buffaloes were not commonly kept by individuals. Average yield of milk of

cows was very low. The government was seized of the situation. It imported bulls and sheep of improved breeds and revolutionised animal husbandry through its cattle development programmes. According to 1982 livestock Census, there are 6 percent cross-breed cows and 5 percent sheep of improved breed in Himachal Pradesh. Jersey cows are very popular among the farmers. Efforts are going on to improve the existing breed of buffaloes by cross-breeding with Holstein Friesian breed. Soviet Marino and Rambouillets have established their popularity in the Pradesh. These breeds of sheep are yielding quality long staple wool in a much higher quantity. Presently 6 sheep Breeding Farms with a flock strength of 2,025 sheep are functioning in the Pradesh. Daily average yield of milk per cow has gone up to 1,161 gms. and that of a buffalo to 2,962 gms. Government has now started milk supply schemes in urban areas. There are about 19 milk chilling plants in the Pradesh. Consumers in the urban areas are now getting milk in polythene packs at reasonable rates. Himachal Pradesh Milk Federation has taken over the milk supply schemes functioning at Mandi, Nahan, Shimla and Bilaspur w.e.f. 2nd October, 1983.

In the field of fisheries Himachal Pradesh has taken long strides. Vast resources in the shape of reservoirs and rivers are available for exploitation. Presently, reservoirs have an area of about 40,000 hectare and the rivers a length of approximately 3,000 km. In 1950-51 there were only 501 licenced fishermen and the total fish catch was of the order of 101 M.T. Now the licenced fishermen have increased to 11,040 and the total annual fish catch to 2,870 M.T. The government is earning annually revenue of Rs. 11 lakh approximately from fisheries.

In early fifties, the educational standards were dangerously low. Only about 5 percent of the population was literate. Facilities of schools, equipment and teachers were also limited. State has shown marked progress in the field of education. Literacy has gone upto 43 percent. The number of schools has also increased manifold. All the schools are manned by trained staff. Today we have 27 colleges while there was only one in 1950-51. In addition, there are two Universities, one Medical College, an Ayurvedic College, and two Polytechnics. The day is not far off when a Regional Engineering College shall start functioning in our State.

In the beginning, the State lacked medical and public health facilities. The hospitals and dispensaries were badly designed, poorly equipped and ill-staffed. The State is now providing excellent medical care and health services through a net work of hospitals and dispensaries. In 1950-51, there were only 8 hospitals and dispensaries per lakh of population which number is now more than double. There is almost one hundred percent increase in the medical staff per hospital and dispensary over the past 33 years. Number of beds per lakh of population has increased from 41 in 1950-51 to 131 in 1982-83. Now the facilities of specialised treatment are available in the State level Snowdon hospital attached to the Medical College. Besides

allopathic, system of treatment, facilities of ayurvedic homoeopathic and Unani systems are also available to the people.

In the field of communications, the motorable road length has risen from just 228 km. in 1950-51 to 13,433 km. in 1982-83. Density of roads per 100 sq. km. of area has risen from one km. in 1950-51 to 24 km. in 1982-83. Condition of motorable roads is comparatively much improved. Buses and trucks of even much higher capacity can now be plied in the interior regions of the State. Nationalised transport is mainly catering to the needs of passenger transport with a fleet strength of 1,066 buses on about 750 inter-State and intra-State routes. Passenger transport on about 82 percent routes is nationalised. Deluxe and luxury buses fitted with videos have also been put on road. All the district headquarters are connected with other States through inter-State bus services.

Power generation reached the level of 592 M.U. during 1983-84 as compared to only 358 thousand Units in 1950-51. During 1984-85, 631 M.U. of electricity are expected to be generated. As soon as the work on the four on going projects is complete, the Pradesh would start getting a revenue Rs. 20 crore per annum from these alone. The number of electrified villages which was only six in the beginning has now increased to 13,664 which implies a coverage of about 81 percent of the villages.

Himachal Pradesh had only 3 registered industrial units in 1950-51. Primitive cottage industries had practically died out due to competition with machine made goods. The only cottage industries in existence were spinning and hand weaving, but methods were crude, out dated and uneconomic. The Pradesh was far away from the consuming centres, means of communications were limited, power was not available. In such adverse circumstances, rapid industrialisation was not feasible. The State government through its sagacious policy steered through the difficult situation and has today come to the stage when we have about 600 registered industrial units with an average daily employment of 15,444 persons. Industrial estates and areas have been established on the periphery of the State. Two cement plants are in production stage. Himachal Pradesh Handicrafts and Handloom Corporation has helped in reviving the near extinct arts, provision of new design adaptations to the field artisans, provision of work to master craftsmen at the door steps, door to door supply of raw materials and collection of finished goods from the craftsmen. The pace of industrialisation is expected to further pick up with the declaration by the Government of India of the entire State as an industrially backward area.

Provision of safe drinking water to the people is also a pre-requisite for good living. Spectacular progress has been made in this field. In the beginning facilities of drinking water were available only in 228 villages. As on 31-3-74, there were 11,137 problem villages in Himachal Pradesh. Out of these 8,018 problem villages are likely to be covered by 31-3-85. Total number of problem and easy villages

which are expected to be provided with safe drinking water supply by the end of March, 1985 is likely to be about 12,470, which implies a coverage of about 74 percent of the total villages.

Per Capita income at current prices was only Rs. 240 in 1950-51. It has increased to Rs. 1865 in the year 1982-83 according to quick estimates. The total receipts are likely to rise to Rs. 506 crore in 1984-85 as against only Rs. 1.96 crore in 1950-51. The expenditure is expected to go up to Rs. 506 in

1984-85 from Rs. 1.78 crore in 1950-51. This year Rs. 168.17 crore are to be utilised under annual plan alone as the size of the Sixth Five Year Plan has been raised to Rs. 659 crore. Total expenditure on development would be Rs. 228.30 crore in 1984-85 while it was only Rs. 132 crore in 1950-51.

With such a change in the social and economic infrastructure, Himachal Pradesh today ranks fifth among all the States on the per capita income basis.

## AGRARIAN MOVEMENT IN HIMACHAL PRADESH



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Before the formation of Himachal Pradesh on 15th April, 1948, there were in all 31 Princely States. At the time of integration, 30 Princely States were clubbed together to form a separate 'C' State known as 'Himachal Pradesh' under the Union Government of India, with four districts (i) Mahasu comprising of 26 States, (ii) Mandi comprising of two States (iii) Sirmaur & (iv) Chamba comprising of one State each. The 31st State of 'Kehlur' (present Bilaspur district) however, remained independent till 1954. The 30 Princely States, which formed the above four districts, were :—

(i) *Mahasu District :*

1. Bushehr.
2. Keonthal.
3. Baghal.
4. Baghat.
5. Jubbal.
6. Kumarsain.
7. Bhajji.
8. Mehlog
9. Balsan.
10. Dhami.
11. Kuthar.
12. Kunihar

13. Mangal.
14. Bija.
15. Darkoti.
16. Tharoch.
17. Sangri.
18. Kyarkoti.
19. Delath.
20. Kot (Ratesh).
21. Ghund.
22. Theog.
23. Madhan.
24. Ravin.
25. Dhaddi.
26. Khaneti.

(ii) *Mandi District :*

1. Mandi.
2. Suket.

(iii) *Sirmaur District:*

1. Sirmaur State.

(iv) *Chamba District :*

1. Chamba State.

While 11 States enjoyed their independent regimes, 20 States known as 'Simla Hill States' were controlled by the Superintendent of Hill States (Deputy Commissioner Simla used to be an ex-officio Supdt.) in subordination to the Commissioner of Delhi. In these 20 States, *Bushehr State* was the biggest with an area of 3257 sq. miles and '*Bija*' and '*Darkoti*' were the smallest with an area of 4 sq. miles each. Most of these Hill States were not economically viable as would be judged from the figures relating to the total area under each State :—

Simla Hill States	Area in sq. miles
1. Sirmaur (Nahan)	1,045
2. Kehlur (Bilaspur)	448
3. Bushehr	3,257
4. Hindur (Nalagarh)	249
5. Keonthal	112
6. Baghal	124
7. Baghat	60
8. Jubbal	257
9. Kumarsain	94
10. Bhajji	94
11. Mehlog	53
12. Balsan	50
13. Dhami	29
14. Kuthar	19
15. Kunihar	9
16. Mangal	13
17. Bija	4
18. Darkoti	4
19. Tharoch	75
20. Sangri	16

In these 20 aforesaid States, cultivation used to be carried on in all the lower valleys. The only classification of soil recognised by the people was that depending on irrigation and on the application or absence of manure. The following unimproved varieties of crops used to be grown in these States :—

#### Rabi—

- Wheat (Gihun).
- Opium (Afim).
- Methum (Fenugreek).
- Jharga.
- Barley (Jau).
- Barley (Howejau).
- Chale Kalao (Field Peas).
- Bhugla or Dhania (coriander).
- Massar (Ervum lens, lentil).

#### Kharif

- China (*Panicum miliaceum*).
- Makki or Kukri or Chhali (Maize).
- Kauni or Kangni (*Pennisetum*).
- Bathu (*Amaranthus*, *Anardana* and *Spinesa*).

- Kala Bathu (*Amaranthus*).
- Koda or Mandwa (*Eleusine Corrocana*).
- Dhan Jira (white), Dhan Kallu (white) Rewra (red).
- Dhan Basmati (white), Dhan Jhinjri (red).
- Mash (*Phaseolus radiatus*) Reri (red).
- Kulat or Kulath (*Delichos uniflorus*).
- Bharat (*cajanus bicolor*).
- Rangan (*Delichos sinensis*, the rawn of the plains).
- Ogla (*Fagopyrum peligonum*).
- Phapra (*Fagopyrum esulentum*).
- Dhanpri (*Fagopyrum*).
- Tornaku (tobacco).
- Kachalu (*Arum celecasia*).
- Potatoes (Faring alu).
- Bhang (*cannabis sativa*).
- Ginger (*Adrak* or *Adra*).

#### Vegetables—

- Kakri (cucumber).
- Kaddu (Pumpkin).
- Tori.
- Shangotri or Baingan or Bhatte.
- Garlic (Lahasun).
- Pipli (Red pepper).
- Balri (Beans).
- Muli (Radishes).
- Gajar (carrots).
- Tumba (Gourds).
- Kharbaja (Melons).
- Dunun (wasan).
- Tamatar (tomatoes).
- Gobi (cabbages).
- Palak (Greens).

The size of fields used to be small and so were the land holdings. Traditional organic manure of cowdung mixed with the leaves and other refuse used to be used. The fields used to be manured as far as possible for every crop. The manure used to be scattered in the field and thereafter ploughing used to mix it with soil.

The seed used to be sown broadcast. The ploughing, howing and harvesting used to be done with the help of traditional methods. As a result of these old unscientific methods, the average yield of crops used to be very low, giving the return even less than the 'cost of cultivation' in the cases of some crops.

#### Sirmaur State

Comparatively Sirmur State was better organised in so far as the agricultural activities in the State are concerned. Prior to the formation of Himachal Pradesh, Dr. Harbans Singh, B Sc. Ph. D. (Edin.) Director of Agriculture continued to be incharge of the Agriculture Department in Sirmur State. The Cooperative Section

was separated from this Deptt. and placed under the Registrar Co-operative Societies. A demonstration Farm was established at Dhaula Kuan during 1945-46. A nursery for the supply of fruit-trees was also established and over 25,000 plants were raised during the year 1945-46. The Sirmur Land Produce Syndicate Limited, Nahan, was registered and the Amar Memorial Farm, the Bela alongwith the State Dairy and five hundred bighas of virgin land at Dhaula Kuan were transferred to it from the Agriculture and Forest Departments. The headquarters of the Agriculture Department were moved to Paonta for four months during 1945-46. The Director of Agriculture remained on tour for nearly 150 days during 1945-46 and carried out propaganda work amongst the cultivators. Five acres of virgin land were cleared by bullock power at Dhaula Kuan. The clearing cost was extremely high and the work was beyond the strength of normal working bullocks. The trees were cleared off by manual labour, but the clearing off of deep-rooted grasses and shrubs was to be carried out by the tractors. Improved varieties of wheat, oats, gram and sarson were sown at the Farm and proved successful. The building work was also undertaken. A nursery was also established at the Khaddar Garden and fruit-plants raised under the direct supervision of the Director of Agriculture. Papaya, Kagzi Lime, Sangtra, orange, grape fruits and plants were raised. The seedlings were raised for the Sirmur Land Produce Syndicate Limited only and other plants offered to public at nominal prices. The Amar Memorial Farm and State Dairy were transferred to the Sirmur Land Produce Syndicate at the beginning of 1945-46. The State Gardens also were transferred to the charge of the Comptroller, of Household and Municipal Committee at the time the headquarters of Agriculture Department moved down to Paonta. The barani cultivation of lime at Pardani was also very successful, although cultivation of Pyrrhithum and baladona failed because of water logging due to heavy monsoons. Barseem was sown late due to late monsoon and was a limited success. The Sirmur Land Produce Syndicate started work before monsoons and concentrated its activities on land clearing, nursery production and vegetable cultivation on commercial scale at Kowalgarh. The progress was slow due to shortage of labour. The inter-provincial control of commodities also interfered with the progress of the implements, seeds and livestock. With the cessation of the hostilities and the improved supply position, it had been possible to purchase some implements and orders for heavy Agricultural Machinery including tractors were placed in America. The main difficulty of the Agriculture Department had been the distribution of improved seeds of field crops and free distribution of vegetable seeds to the peasants. The Director of Agriculture, who used to be continuously on tour for most part of the year, established close contact with the cultivators and impressed upon them the need for compost making, sowing of improved seeds and reduction of cattle. It was explained to the Zamindars that they could get more manure of superior quality by composting the refuse and cow-dung from half the number of cattle that they maintain, utilise the sweeping in compost-making, gather all the dung lying about in the village and feed the cattle in stalls by cutting grass from the forests. The result was encouraging in so far as it had set the cultivators thinking about their

agricultural problems, and many of them sought advice from the Agriculture Deptt. As a result of the propaganda of Agriculture Department, for fruit-culture, a large demand for trained Malies was felt and to meet that demand, it was decided to open a Mali Training Class in the State. Accordingly, a scheme was submitted to the Govt. of India for financial assistance, which was sanctioned with an agreement to contribute 50 per cent of the expenditure. To encourage increased production of food-stuffs, the Agriculture Department distributed improved crop seeds and vegetable seeds to the public. From Sambat 1999 to 2002, the income and expenditure of Agriculture Department in Sirmaur State was as under :—

Year (Sambat)	Receipts	Expenditure
1999 . . . .	2,534-1-9	12,802-7-0
2000 . . . .	11,197-5-6	33,916-8-3
2001* . . . .	9,171-6-3	35,261-15-6
2002 . . . .	2,564-6-3	34,076-0-0

\*Agr. including Co-operative.

During 1943-44, Agr. Deptt. in Sirmaur State continued to try various experiments for the growth of improved qualities of wheat namely C 581 and 590 and pulses on the Amar Memorial Farm when Shri H. C. Sharma, M. A. (Pb.) B. A. (Oxen.) was the Director of Agriculture in Sirmaur.

#### Bilaspur State

Regarding Bilaspur State, it has been observed that the State was equally good (while comparing it with the Sirmaur State) in organisation relating to agricultural activities in the State. Agriculture and cattle husbandry formed the basis of all economy in the hills generally and in Bilaspur State particularly. But the peculiar topography and the nature of the soil had set limitations to the development of agriculture. Bilaspur State was a compact block of hills and valleys. The valleys are formed by the hills and the tributaries of the river Satluj. Passing through the heights and draining down the hills, these tributaries are both seasonal and torrential. The perennial streams follow hilly courses, cut deep channels and are difficult to be treated or trained for irrigational purposes. The undulatory formation of valleys did not permit well irrigation either. In spite of these discouraging factors, it had been possible to do much to relieve poverty and distress. The success of agriculture depended upon certain essential conditions most important of which are (i) efficiency of the person engaged, (ii) quality of soil, irrigation-facilities and provision for suitable seed and manure, (iii) economic size of holdings and (iv) availability of cheap credit. This was realised and from the very beginning of the decade ending Sambat 2000, steps were directed toward their fulfilment. On the 3rd of Magh, 1991, His Highness was pleased to order that, to begin with, a hundred bighas of land should be set apart for developing it into a seed farm wherein experiments might be conducted for improvement of



agriculture and where from suitable seed produced or procured might be distributed to the cultivators. The work was entrusted to the Revenue Department and they made a number of reports regarding the selection of land for seed-farms in different parts of the State. But the matter required closer consideration and expert advice. To pursue it further, an Improvement Committee was formed under the Chairmanship of Revenue Secretary. The Committee suggested a number of sites for the location of a model farm, and submitted that the State Government would be well advised to invite an Agricultural Expert who could make a survey of the prevailing conditions and suggest methods and schemes for their speedy amelioration. Accepting these recommendations, the State in the month of Maghar 1992, borrowed the services of Chaudhri Abdul Wahid, Extra-Assistant Director, Punjab and invited him from Jullandhar, to carry out the survey and lay down a programme. The Chaudhri came, went round the State and submitted a report. In one of his recommendations he proposed that two model-farms at Kalar and at Auhar should be started. He also suggested that the State could get its own personnel trained at the Lyallpur Agricultural College before it adopted any further programme of work. The State stipendiaries were accordingly deputed to the Agricultural College, Lyallpur, to undergo a course of one year's training in the mukkadam's class there. They were very successful and on return they carried on demonstration work at the Agricultural Farm and propaganda work in the villages. On the 11th of Chet, 1992, at a Darbar held to celebrate the auspicious birthday of Shri Tikka Sahib, Shree Rajendra Chandra Bahadur, His Gracious Highness was pleased to constitute the Shri Rajindra Agricultural Fund with an initial donation of Rs. 20,000. This not only tended to bring the importance of agriculture development home to the people, but declared it to be the considered policy of the State that no efforts should be spared to develop agriculture to the utmost extent permitted by our natural conditions. To manage the Fund as well as the Agriculture Establishment, an official committee was appointed with the Revenue Secretary as Chairman. It began functioning with effect from 1st Chet, 1995. It framed its own rules of work for its guidance. For its recurring expenditure it was allowed a yearly budget grant of Rs. 5,000. The first work of considerable importance that it undertook was the organisation of a model farm at Auhar. At the recommendation of the Committee, a duly qualified Agriculture Officer was appointed on the 12th of Maghar, 1995. He began with intensive and extensive propaganda with a view to popularise the cultivation of sugarcane in the villages. As a result in the year 1942-43, very first year, 250 maunds of sugarcane seedlings were distributed to the people and their interest in this direction grew. He also attended to the development of the Farm at Auhar and introduced new experiments e.g. cultivation of groundnuts in the Sandy soil. Propaganda on various aspects of agriculture was carried out especially about preparation and presentation of manure, consolidation of holdings, exploring possible means and methods of irrigation and cultivation of commercial crops, rotational cultivation etc. In a number of villages the system of manure pits was started. With the outbreak of War, the Agriculture Officer resigned from the service and left the State.

Shri Rajindra Agricultural Committee carried on the work for three years. The functions of Agriculture Establishment were in the meanwhile expanding. It required close supervision and constant vigilance. This was not possible for the Committee to do. As a deliberative body, it had worked well but for daily control it required time and concentrated responsibility. War was in full swing and War efforts was making exacting incursions on the time of officials. The Committee, therefore, ceased working at the beginning of the year 1998-B, and the Agriculture Establishment was transferred back to the control of the Revenue Department.

To supply cheap credit to the cultivators, for effecting permanent improvement in his holding, the system of tacavi loan was introduced in the year 1996 (Sambat). A number of people benefitted from this amenity during the 2nd quinquennium of 1942-43. Land holders had been enlightened continuously about the benefit of consolidated holdings. But inspite of an encouraging start, the movement did not make substantial progress because of high incidence of population on the cultivated area. The Model Farm at Auhar covered an area of 129.4 bighas. Various crops used to be raised on it and the resultant seed after its due examination for purity, immunity from disease and abundance of productivity was distributed to the Zamindars. The soil had been not exhibited a preference for any of the three varieties of wheat C. 591, C. 518 and 8-A sown on the Farm. In the last year of the decade (1999-B) Pussa 80-5, a late growing variety of wheat had been introduced. Out of a number of varieties of Farm sugarcane e.g. Coimbtore Nos. 285, 206, 313, 312 and 13 experiments upon C. O. 285 had given best results and was becoming increasingly popular amongst the Zamindars. From among the improved varieties of cotton, M. S. 39 only had given the best yield and had been selected for cultivation leaving the rest aside. Gram No. 7 had proved to be the best amidst the local varieties and was becoming more and more acceptable. Groundnut crop succeeded very well in the beginning but crows and jackals had become ruinous to it. Common diseases of crops had also been studied. Regular and frequent instructions by the Agriculture department had been issued to the agriculturists about these agents of destruction.

Total expenditure on the Agriculture Department for the last five years (with the year ended 1942-43) had been about Rs. 7,806 and income about Rs. 1,987. This excludes capital expenditure on survey etc. The most significant work of the department had been in the field of education of the agriculturists. Best and most productive varieties of various crops had been suggested to the cultivators. At the annual exhibition held at the time of the Nalwari Fair, the department used to organise an Agricultural section wherein by means of suitable charts and models "Grow More & Better Food" was intensively carried on. People used to get prizes and certificates of merit for having produced commendable varieties of crops. As a community, dependent almost entirely on agriculture, the State had fully realised the importance of gardening and horticulture as strengthening factors of its economy. The Agriculture Department had seven gardens under its control. Upto the end of 1995-B, the department

remained under the direct charge of Home Secretary with the reorganisation of departments in 1996, gardens formed one of the responsibilities of the Under Secretary General. In 1998 (Sambat) Agriculture having been transferred to the charge of the Revenue Secretary, the Department of Garden was also placed under his care. In addition to the capital lay outs in the form of laying water pipes for irrigation etc., Rs. 11,992-9-0 were spent on this department during the decade 1991 to 2000, and Rs. 9,930 on the pay of establishment. Income for the same period was Rs. 1,505.

In 1947, the State brought out a plan namely 'Bilaspur Marches on'—a 10 year plan, in which the special care was taken of the agricultural situation in the State by including in the plan the provisions for developing new lands, providing irrigational facilities, building up seed stores, providing manure, distribution of scientific implements, taking soil conservation measures. Fragmentation, co-operation, rotation of crops, cultivation of fruit-plants floriculture and agriculture, prevention of pests and diseases, terracing and bunding, sericulture and marketing etc. were also the main items which were given special attention in the 10 year plan, under the head 'Agriculture'.

### **Chamba State**

In very ancient times, a period of history of which no regular records are available, what is now called the Chamba District, was not a unified, much less a single administratively unit, there being several petty rulers, mostly called 'Ranas', occupying under their rule bits and parts of the present territory in more or less independent political and administrative entities. The next phase in the administrative history came when a ruler, powerful enough to subjugate the others, emerged and founded an integrated territorial administrative unit under the supreme control of one ruler. This existence of Chamba as a distinct princely State continued for numerous generations before the merger of the Indian States in the Union Republic of India. It was at that universal turning point in the history of what were known in the British days as the native States, that on 15th April, 1948, the erstwhile Chamba State got merged into Himachal Pradesh.

Before merger, there were five administrative Divisions, called 'Wazarats' namely Chamba, Pangi, Bharmour, Churah and Bhattiyat. More than ninety per cent of the population is dependent upon agriculture as the principal source of living. This is not because the district is so well suited for specialisation in agriculture as to induce such an overwhelming majority of the population to take to this occupation. The reason, rather, is that next to hunting and raising livestock for food, the tillage of the soil has, the world over, been the most ancient mode of getting livelihood for man. As may well be expected in a mountainous tract like that of Chamba district, the percentage of the area under the plough is quite low. There are some valleys, some more numerous but smaller sub-valleys, quite a number of small plateaus, quite a number of rivulets and streams and quite a few hill-tops and ridge-tops, where the land lies more or less flat and level. Barring these exceptions, the pattern of cultivation is that the chief characteristic of which lies in

terraces. Whole hill sides are to be found dotted over with villages and their respective surrounding clusters of terraced fields.

During the past, the area comprising Chamba district, was not open to any extensive foreign trade because of the lack of good enough means of communication and therefore, the people were reluctant to take to horticulture on any commercial scale. Although most of the area in Chamba district is endowed by nature with an excellent climate and soil for the production of a variety of fruits, yet the people did not find it worth while to lay out gardens and grow fruit owing to the absence of markets and assured return. However, sporadic efforts made by the Forest Department to lay out orchards proved that various kinds of fruits could be successfully cultivated. Moreover, nature has not remained idle in the matter and a large number of fruit trees of certain kinds have grown wild. Now guided and aided by the Agriculture department and the Community Development Blocks, the villages too, have been, slowly and gradually following this lead by cultivating certain kinds of fruits. The pace of this development is increasing every year. The results of these combined efforts of human beings and nature has been that the Chamba district produces hazal nut, chilgoza, apricot, walnut, peach, apple, pear, plum, quince and mango etc.

What has been said above, will show that horticulture in its true sense has not been, in the past, a remarkable feature of the agriculture in Chamba district. Towns like Dalhousie and Bakloh have for a number of years inspired and attracted cultivation of vegetable in some villages and there have been a few orchards raised by the Rajas. In many villages, especially in the Churah tehsil, the cultivation of quince for its marketable seed has been practised for long years. This is about all that could be said about horticulture over the years before the impetus given consciously by the government in its planned drive for systematic development after the formation of Himachal Pradesh, especially since the advent of Five Years Plan,

Before the formation of Himachal Pradesh, there was no properly organised Agriculture Department. At the time of integration, only three Agriculture Assistants were working, but the work was being done without any definite plan. In Mahasu district, an Agriculture Assistant, on deputation from the East Punjab, was working in an advisory capacity to the late Rulers of Simla Hill States. The few farms that were in existence mainly catered for the supply of vegetables to the Rulers' households or government-officials. Apart from the proper re-organisation of the department, the following were immediate main achievements of the Deptt.

### **Immediate Work Done by the Agriculture Department After the Formation of Himachal Pradesh in 1948**

The yield of potatoes in Himachal Pradesh was estimated very low. That low yield of potato per acre was attributed to the use of diseased or otherwise low-producing varieties. With a view to increase production, a scheme was in operation in the beginning of 1949.

A Regional Station at Shillaroo in the then Mahasu District for trials and multiplication in the different varieties of potato seed was established in March, 1949 and requisite quantity of disease-free stock was obtained from abroad. This station was developed and another station started at Ahla in Chamba district. A yield of over 100 maunds per acre was obtained and some seed was distributed to the registered growers. Within a few years, the then existing varieties were replaced by the improved varieties which enabled the cultivators to have high yield from disease resistant stocks. Four Cereal Multiplication Farms were established. The main work of these farms was multiplication of rust resistance and high-yielding wheat. The farms were in their infancy, but the multiplication of wheat was possible with the aim of replacing the then existing wheat by the improved varieties. Distribution of vegetable seeds on small scale from the vegetables grown in various small nurseries, was also done. Compost production-work was given start in Nahan, Solan and Chamba which was extended during the subsequent years. The schemes which had been included in the Five Year Plan, were the potato schemes, Cereal Multiplication schemes, Fruit Development, Bee-keeping, Vegetable Seed Multiplication Farms, Associated Farm, Poultry Development, Compost scheme, Schemes of Control of Weeds, Schemes for the improvement of local agricultural implements and Farms and Extension Service Project. It had to be admitted that the achievements of the Agriculture Department in the past were not spectacular, but the department was faced with a number of difficulties not the least of which was inadequate allotment of funds in the beginning.

#### Agrarian Reforms Immediately After the Formation of H. P.

Before the coming into being of the Himachal Pradesh, the different States now merged with Himachal Pradesh had different Land Administrative Acts and these laws were most primitive and un-progressive. Laws of inheritance and succession to real property recognised only limited collateral and agnate succession. The law of escheat was based on the acquisitive instinct of the Rulers. The progressive laws in force in the adjoining province of Punjab with certain modifications or restrictions to suit local conditions had then been applied. The adoption of those modified laws proved to be a great landmark in the history of amelioration of the ignorant masses of this Pradesh. The uniformity in the law, procedure and practice relating to land

revenue administration was attained by the application of the Punjab Land Laws and Manuals to this Pradesh. The following further reforms under this head had been effected—

(i) *Abolition of Taxes etc*—The following taxes which had been levied by the erstwhile Punjab Hill States were abolished from the dates mentioned against them unless they were levied by a local body under an Act in force at that time:—

1. Professional Tax	}	1-9-1948
2. Oil Mill Tax		
3. Shop Tax		
4. Tax on Hawkers		
5. Bishu Licence or tax on shops in fairs		
6. Potatoes License Fees		
7. Tax on Mules and other pack-animals		
8. Sweatmeat Tax		
9. Cloth License Fee		
10. Tea stalls License		
11. Hotels License		
12. Tax on sale of animals by or to outsiders		
13. Tax on tanning of leather		
14. Kachor tax		
15. Cattle Tax from Gowalas		
16. Dhobihaat License Fee		
17. Tax on wet Nurse (Ayah)		
18. Duty on Rice Huskers		
19. Duty on Gurr		
20. Dhal		
21. Chhari Gugaa		
22. Sahukara Tax		
23. Sheel Ujrel Tax		
24. Udaipan ceremony Tax		
25. Arhat Tax	15-4-1949	
26. Bridge tolls on Tata-pani Bridge in Bhajji and Suket states	1-4-1949	
27. Octroi on silken and Banarsi cloth and Gota-tilla etc., imported through post office into Chamba	1-4-1949	

The levy of the following customary dues had also been abolished :—

- (a) Nazranas in connection with the marriages and deaths of the Ruler, and the members or his family installation of the Ruler, Karanbandh and other similar ceremonies.
- (b) Nazranas on the appointment of officers including village officers.
- (c) Nazrana on the alienation of land.
- (d) Nazrana in the event of succession passing beyond the fifth degree.

(ii) *Revision of cesses*—The cesses levied in the different States bore traces of feudalism in as much as in many of the units they also included such charges as 'Begar' Commutation and 'Bethu'. These cesses were abolished and instead of them uniform cesses at 20 per cent of the Land Revenue as local rate and 5 per cent as panchotra (total 25 per cent) were levied throughout Himachal Pradesh except a few areas where settlement operations were either in progress or was proposed to be undertaken shortly in Sirmour and

Mandi districts (excluding Suket sub-division) where the then existing rates of 17½ per cent and 20 per cent respectively, were allowed to continue till such time as the District Boards concerned recommended any increase.

(iii) *Abolition of Begar*—Begar (forced-labour) paid or unpaid was prohibited within the territory of Himachal Pradesh with effect from May, 1948.

(iv) *Improvement in the status of Bethus*—There had been a special class of tenants called 'Bethus' in Himachal Pradesh for a long time past. Steps were off and on taken by the late Political Department to improve the lot of these tenants who owed an obligation to render personal service to the land owners in return for certain cultivating rights. Occupying rights as specified in the Punjab Tenancy Act, 1889 was conferred on all the Bethus who had been in cultivatory possession of State lands for three generations on payment of rent equal to 1½ times the Land Revenue and cesses for the time being chargeable on the land. Such Bethus as acquired occupying rights under the said orders were further given the rights to acquire full proprietary rights in such lands on payment of a sum equal to ten times the Land Revenue and cesses assessed on such lands.

(v) *Deletion of Ala Malik entry*—In many of the States, the Durbar or the Ruler used to be recorded as Ala Malik in the Revenue Records in respect of the whole area of the State. Such entry limited the right of the inferior. Maliks, who were the actual owners to alienate their property.

(vi) *Nautor Rules*—New and uniform rules were promulgated throughout Himachal Pradesh governing the grant of 'Nautor' land. The said rules were subsequently revised with a view to giving preference to those who were economically and socially backward in comparison with the rest of the population and to encourage and help this backward class in acquiring land for cultivation.

(vii) *Speedy Justice*—It is a truism that justice delayed is justice denied. Prior to merger in most of the integrating units, long delays in the disposal of cases and suits was the rule than an exception. There are cases on record where for 30 long years cases were still undecided. The parties for generations on ends were thus oppressed, harassed and spend their all on fighting the cases. This aspect of the matter was given top priority by the Himachal Pradesh Administration and rules for submission of quarterly business returns were approved. In order to scrutinise the outturn of Revenue and Judicial Officers serving in this Pradesh, periodical returns of their work continued to be maintained. Much of the laxity therefore prevalent amongst the officials in the districts was then a thing of the past providing much relief to the litigant public.

(viii) *Commutation of land revenue from kind to cash*—The partly cash and partly kind demands were most oppressive in Chamba and certain parts of Mahasu districts. To afford summary relief to the cultivators, land revenue was commuted from kind to cash on the basis of average money value of the demand for a short term of years. This saved the people much peculation at the hands of minor village officials,

(ix) *Settlement*—Settlement operations were in progress at the time of merger in Keonthal and Koti States (Mahasu district). The settlement of Balsan State which had been left half completed, was taken up afresh and finished. The settlement of certain other areas e.g. areas formerly comprising Dhadhi, Mangal, Sangri and Throch States which had never been settled before was also taken in hand and completed.

(x) *Introduction of the Punjab Tenants (Security of Tenure Act)*—In order to put the tenants right on a sounder footing and with a view to safeguard against ejections; the above mentioned Act was made applicable to Himachal Pradesh with effect from 16th June, 1951. According to this Act, a tenant at will cannot be ejected from his tenancy beyond the permissible limit of 250 bighas, for a period of 4 years with effect from 16th June, 1950.

(xi) *Land Records*—With a view to consolidating Land Records in this Pradesh, one office of the Director of Land Records in the Pradesh was set up with effect from 5th July, 1948.

(xii) *Agricultural Statistics*—Collection of agricultural statistics in the past was only treated as incidental to the collection of land revenue. The preparation of forecast reports at a later stage was taken up at the instance of persons interested in trade. It was never realised that accurate statistics are the very foundation on which development plans can be based. Collection of statistical data, as will be readily agreed, is not an end itself but only a means for enabling the formation of government policies and the adoption of appropriate administrative measures whether in day-to-day administration or in meeting emergencies. Such data throw light on the gaps that exist, the dark spots that call for remedial measures and the lines on which action should be directed in the form of supply of materials and technical advice. Maintenance and supply of statistics is ultimately for the good of the cultivators. At the time of merger, the statistical side was practically nil in this State. The then Chief Commissioner showed a keen interest in bringing improvement in maintaining statistical information in a co-ordinated and scientific manner. There is no doubt that accurate statistics of agriculture are of basic and vital importance in this part of the country. All programmes of development in the social and economic sphere can only be planned on the basis of adequate and correct information relating to the different sectors of national life of which agriculture-sector is of prime importance.

(xiii) *Fixation of minimum wages of Agricultural labour*—The Director of Land Records conducted agriculture labour enquiry on behalf of the Government of India, Ministry of Labour. In order to implement the minimum Wages Act in this State, An Advisory Committee was set up by the Administration to advise the Government, to fix the minimum wages in agricultural sector. Director of Land Records was the Convener and Chairman of that Committee.

(xiv) *Registration*—Laws of Registrations were non-existent in many integrating units of this State prior to merger. After merger the registration work in this Pradesh has been standardised by the application of the Indian Registration Act, 1908. Tehsildars and

Naiib-Tehsildars were vested with powers of Sub-Registrars to be exercised by them within the local limits of Tehsils. This made the accessibility to the Registration Authorities most easy. Registration saved people from large number of fraudulent transactions in property dealing which were so common prior to merger in many parts of the integrating units.

People really appreciated these changes which came to them as soon after a rule of centuries of oppression and speculation of feudalism.

### Import Position of Foodgrains During Early Years of Newly Born Himachal

Himachal Pradesh was deficit so far as foodgrains were concerned, particularly in Mahasu and Chamba districts. Since the integration of State, the following quantities of foodgrains were received from the Govt. of India :—

1948	Wheat	. . .	1,500 tons
1949	Wheat	. . .	4,500 tons
1950	Wheat	. . .	4,000 tons
	Rice	. . .	1,000 tons
1951	Wheat	. . .	3,800 tons
	Rice	. . .	500 tons

During 1950, about 100 tons of rice and 200 tons of wheat were locally produced.

There was no shortage of foodgrains during 1948 and 1949, but in the months of March and April, 1951, there was a shortage throughout the State due to late arrival of foodgrains from the Centre. Further, the Punjab Government suddenly banned the free-movement of grain and the previous kharif crop had been very poor. During the year 1951, the food position was quite satisfactory. There were some complaints of some shortages in Pangi in Chamba district and Chimi tehsil in Mahasu district. Immediate arrangements were made for the transportation of an aggregate of 4,000 maunds to these places, and in order to give foodgrains to these areas at reasonably low prices within their purchasing power, the Chief Commissioner had authorised subsidising to the extent of mule charges which would make available foodgrains in those places at rates prevailing at the last motor-head.

### Advent of Five Year Plan in Himachal Pradesh

When Independence came, India had a slender industrial base. Millions of her rural people suffered under the weight of a traditional agrarian structure. A long period of economic stagnation, against the background of increasing pressure of population, followed by the burdens of the Second World War, had weakened the Indian economy. There was wide spread poverty, and want. The partition of the country had uprooted millions of people and dislocated economic life. Productivity in agriculture and industry stood at a low level. In relation to needs, the available domestic savings were altogether meagre. The promise of freedom could only be redeemed if the economic foundations were greatly strengthened. The Constitution established equal rights of citizenship, and these had now to be expressed through rising levels of living and greater

opportunities for the bulk of the people. It was essential to rebuild the rural economy, to lay the foundation of industrial and scientific progress, and to expand education and other social services. These called for planning on a national scale, encompassing all aspects of economic and social life for efforts to mobilise resources to determine priorities and goals and to create a widespread outlook of change and technological progress. Thus, planned, development was the means for securing with the utmost speed possible, a high rate of growth, reconstructing the institutions of economic and social life and harnessing the energies of the people to the tasks of national development. Keeping in view these objectives, the Himachal Pradesh Government also took up the planning work and decided to implement all works relating to economic and social development through Five Year Plans, which was started with the 1st Five Year Plan 1951—56 and then 1956—61, 1961—66, 1966—69, 1969—74, 1974—78, 1978—79, 1979—80 and 1980—85 (the years underlined did not complete full five year tenures of five year plans because of govt. policy and change of govt. in the case of 1978-79 and 1979-80). During these plans, agriculture continued to receive priority as a result of which the Pradesh is to-day self-sufficient in foodgrains. Now to keep this tempo up, the Himachal Pradesh Government through its concerned departments is determined to accelerate its efforts for making Himachal Pradesh a surplus State in food-grains through the following measures :—

- (i) Intensive development of Horticulture for transforming the orchards into the main industry of the State, establishment of large size commercial Progeny Orchards, establishment of Peach and Olive belts in the State, popularisation and establishment of fruit and vegetable canning processing units;
- (ii) To have Research Complexes;
- (iii) To introduce new techniques for increasing the quality and production of the potato so as to take lead in the market (as hitherto) as the States like J & K and U. P. are working hard to produce a quality-seed potato to push Himachal Pradesh in the background;
- (iv) Intensification of production-programme of foreign-exchange earner items like ginger and zira, intensification of off-season vegetables;
- (v) Taking up of valley areas, Crash Agricultural Production Programme and establishment of large seed multiplication farm;
- (vi) Strengthening of the Agricultural Research Programmes;
- (vii) Provision of better facilities in Agricultural education, research and training applicable to hill-regions;
- (viii) Intensification of tempo of soil conservation;
- (ix) Improvement of pastures, grasses & fodder development in the Pradesh to support the dairy and sheep industries, etc. etc.

On November 1, 1966, the hill areas of the erstwhile Punjab have also been integrated with the Pradesh as a result of re-organisation of the Punjab. With the merger of four new districts (i.e. Shimla, Kullu, Kangra & Lahaul-Spiti), the total number of districts in the Pradesh rose to 10 (now 12 districts with the formation of Una & Hamirpur as new districts). In these four merged districts, some parts of Hoshiarpur, Ambala and Gurdaspur districts of the Punjab, were also merged, the brief details of which are given as under :—

- (i) Development Blocks Gagret, Amb and Una (excluding the villages Kherabagh, Samipur, Bhabhaur and Kalseh and village Kosari from Tehsil Una—District Hoshiarpur);
- (ii) Tehsil Nalagarh—District Ambala;
- (iii) Enclaves Dalhousie, Balun and Bukloh in Gurdaspur district and which are hill areas having cultural affinity with the people of Himachal Pradesh.

Now administratively, the enlarged (vishal) Himachal Pradesh has 12 districts namely Chamba, Kangra, Kullu, Lahaul & Spiti, Mandi, Bilaspur, Shimla, Solan, Kinnaur, Sirmaur, Una and Hamirpur, having 69 Community Development Blocks in these 12 districts. The Pradesh is highly ruralized and economy predominantly agriculture in character. The average annual rainfall in the Pradesh is 1413.4 mm (1982). Steep cliffs rise here and there and considerable parts of the Pradesh remain snow-bound during the winter months. The Kinnaur and Lahaul-Spiti districts and Pangi Tehsil of Chamba district are dry zones with negligible rainfall though heavy snow-fall is experienced there. In view of a very high percentage of rural population, occupational distribution of the people is markedly different from many parts of the country. About 72.64 per cent of people depend on agriculture

for their livelihood and the remaining 27.36 per cent are engaged in non-agricultural occupations. The farming conditions in the Pradesh are, however, altogether different from those in the plains. The farmer has to fight against very heavy odds. He has to put in persistent efforts to survive the vagaries of nature and to tap all the available sources to make a living out of his often shallow and stony holding. For the economic betterment of the cultivators, a change in the cropping pattern and practices has been initiated and cultivators are encouraged to put more land under horticulture which is more paying than growing of cereals and for which the soil and the climate of the Pradesh is most suited. Cash crops, such as seed-potatoes, ginger and other vegetables are also proving important factors in bringing prosperity to the people. Intensive cultivation of food-crops has also yielded good results. The principal cereals grown in the Pradesh are rice, maize and small millets during kharif season and wheat and barley during Rabi season.

Kuhls are the main source of irrigation although in certain low lying areas, wells also provide a fairly good proportion on irrigation. Only a very small percentage of the net area sown is irrigated and major part of cultivated area is dependent on rains and relatively more subject to vagaries of nature than in the plains. In order to increase the irrigated area, a number of minor irrigation schemes have been implemented in the Pradesh. The following indicators will show the land-utilization-trend in the Pradesh :—

(i) Per capita net area Hect 1980-81(P) sown . . . . .	0.13
(ii) Per capita cultivated area Hect. 1980-81(P) . . . . .	0.22
(iii) Percentage of area sown more than once to net area sown Percentage 1980-81(P) . . . . .	65.38
(iv) Percentage of gross irrigated area to gross cropped area Percentage 1980-81(P) . . . . .	16.47
(v) Percentage of net irrigated area to net area sown Percentage 1980-81(P) . . . . .	16.05

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**APPENDIX**  
**Important Statistics of Himachal Pradesh**

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## I - IMPORTANT STATISTICS OF HIMACHAL PRADESH—contd.

Item	Unit	1970-71	1975-76	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7	8	9
Area (Survey General)	Sq. Kms	55,673	55,673	55,673	55,673	..	..	..
Population :		1971 Census	..	..	1981 Census	..	..	..
(i) Persons	No.	34,60,434	..	..	42,80,818	..	..	..
(ii) Male	"	17,66,957	..	..	21,69,931	..	..	..
(iii) Female	"	16,93,477	..	..	21,10,887	..	..	..
(iv) Rural	"	32,18,544	..	..	39,54,847	..	..	..
(v) Urban	"	2,41,890	..	..	3,25,971	..	..	..
(vi) Sch. Caste	"	7,69,572	..	..	10,53,958	..	..	..
(vii) Sch. Tribe	"	1,41,610	..	..	1,97,263	..	..	..
(viii) labour Force (15—59 years)	"	17,86,360	..	..	..	..	..	..
(ix) Workers	"	12,78,632	..	..	14,71,025*	..	..	..
(x) Cultivators	"	9,03,273	..	..	10,01,529*	..	..	..
(xi) Agriculture labourers	"	53,344	..	..	40,072*	..	..	..
(xii) Projected population	'000' No.	34,543	38,378	41,498	43,042	..	..	..
Villages :								
(i) Inhabited	No.	16,916	16,916	16,916	16,807	16,807	16,807	..
(ii) Unhabited	"	2,013	2,013	2,013	1,914	1,914	1,914	..
(iii) Total	"	18,929	18,929	18,929	18,721	18,721	18,721	..
Agriculture :								
Area according to :								
(i) Survey General	'000 Hect	5,567.3	5,567.3	5,567.3	5,567.3	5,567.3	5,567.3	..
(ii) Village papers	"	2,932.5	2,936.3	2,986.9	2,985.2	3,089.4	..	..
2.. Cultivated area								
(i) Net area Sown	"	604.6	612.4	616.5	613.5	616.7	..	..
(ii) Current follows	"	546.3	557.8	572.1	572.1	572.8	..	..
3. Forests	"	58.3	54.6	44.4	41.4	43.9	..	..
4.. Total cropped area :								
5. Net irrigated area	"	638.1	637.5	835.8	806.8	810.8	..	..
6. Gross irrigated area	"	911.7	923.6	924.9	946.4	949.1	..	..
	"	89.21	90.2	90.6	91.8	92.3	..	..
7.. Area under :	"	155.21	152.5	156.8	155.9	161.0	..	..
(i) Cereals and Millets	"	764.4	773.0	794.7	801.1	804.8	..	..
(ii) Pulses	"	71.7	71.4	64.4	55.5	54.7	..	..
(iii) Food grains	"	836.1	844.4	859.1	856.6	859.5	..	..
8. Production of								
(i) Rice	'000' M.T.	122.5	124.1	80.3	104.4	93.4	—	..
(ii) Maize	"	476.3	486.0	448.7	518.0	447.1	..	..
(iii) Wheat	"	260.8	402.8	273.2	442.6	446.9	..	..

\*Main workers only.

NOTE :—The number of inhabited villages has been revised from 16,916 to 16,807 in 1981 Census.

## IMPORTANT STATISTICS OF HIMACHAL PRADESH—contd.

Item	Unit	1970-71	1975-76	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7	8	9
(iv) Barely . . . . .	000' M.T.	36.8	56.4	33.0	52.4	41.0	..	..
(v) Cereals and millets . . . . .	..	925.6	1,097.5	858.3	1,118.6	1046.4	..	..
(vi) Pulses . . . . .	..	28.9	31.5	24.0	18.8	16.8	..	..
(vii) Foodgrains . . . . .	..	954.6	1,129.0	882.3	1,157.4	1063.2	..	..
(viii) Potato* . . . . .	..	68.8	77.2	100.0	115.0	110.0	..	..
<b>Horticulture :</b>								
(i) Area under Fruits . . . . .	Hect.	44,329	63,385	85,933	92,467	1,00,084	1,08,676	1,14,051
(ii) Production of fruits . . . . .	000' M.T.	148.6	245.9	160.1	139.8	341.9	177.9	304.3
(iii) Production of Apples . . . . .	..	103.1	200.0	135.5	118.0	306.8	139.1	257.9
(iv) Export of Apples . . . . .	..	82.5	160.0	108.4	94.4	245.4	111.3	167.8
(v) Fruit Processing units . . . . .	No	3	3	5	6	7	..	..
<b>Forests :</b>								
(i) Area under Forests . . . . .	'000 Hect	2,143.5	2,176.3	2,118.9	2,116.9	2,114.2	2,132.2	..
(ii) Production of timber . . . . .	'000 cu. M.T.	524.7	477.5	463.7	560.0	672.0	487.3	..
(iii) Value of major forest produce . . . . .	'000 Rs.	1,33,927	1,27,151	2,31,042	2,83,999	2,48,349	2,95,043	..
(iv) Value of minor Forest produce . . . . .	..	13,323	14,790	27,395	26,445	19,930	20,100	..
<b>Live Stock Census :</b>								
			1972 Live- stock Census	1977 Live- stock Census		1982 Live- stock Census		
(i) Cattle . . . . .	'000 No.	..	2,176	2,106	..	2,174	..	..
(ii) Buffaloes . . . . .	..	..	544	560	..	616	..	..
(iii) Sheep . . . . .	..	..	1,040	1,055	..	1,090	..	..
(iv) Goats . . . . .	..	..	906	1,035	..	1,060	..	..
(v) Horses and Ponies . . . . .	..	..	16	15	..	17	..	..
(vi) Total Livestock . . . . .	..	..	4,702	4,795	..	5,124	..	..
(vii) Total poultry . . . . .	..	..	189	330	..	461	..	..
<b>Animal Husbandry :</b>								
(i) Hospital and Dispensaries including Mobile . . . . .	No.	275	397	488	513	568	602	619
(ii) Animals treated incl. in other insti- tutions . . . . .	'000 No.	462.0	988.7	1,304.7	1,592.9	1,881.4	1,687.1	1,794.9
(iii) Castrations performed incl. in other institutions . . . . .	No.	74,374	81,238	1,46,961	1,69,414	1,69,121	1,81,193	1,89,524
(iv) Improved Cattle distributed . . . . .	..	69	131	194	206	261	67	95
(v) Imp. sheep distributed sold and culled ..	..	1,111	531	460	713	779	348	564
(vi) Poultry birds sold, distributed for breeding (Farms) . . . . .	..	34,641	60,966	58,691	64,112	75,433	97,950	91,673
(vii) Milk Chilling Plants . . . . .	..	1	18	19	19	19	19	19**
(viii) Milk collected under milk Supply scheme . . . . .	000' Lts.	1,019	4,147	5,349	4,712	4,723	..	3,222**
<b>(ix) Estimated major livestock products</b>								
(a) Milk . . . . .	'000 Lts.	..	..	303.635	314.556	338.761	357.751	375.881
(b) Wool . . . . .	M.T.	..	1,056	1,164	1,185	1,237	1,263	1,206
(c) Eggs . . . . .	Lakh No	..	..	208.2	233.4	247.9	252.9	294.4
(d) Meat . . . . .	M.T.	..	..	2,914	3,119	3,162	3,263	3,383

\*Production figures of Agriculture Deptt. only.

\*\*Four milk supply schemes transferred to H.P. Milk Federation in Oct. 1983.

IMPORTANT STATISTICS OF HIMACHAL PRADESH—*contd.*

Item	Unit	1970-71	1975-76	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7	8	9
<b>Fisheries :</b>								
(i) Licensed fishermen . . . .	No.	6,100	6,560	7,660	8,956	8,901	11,040	9,720
(ii) Production of fish . . . .	M.T.	600	950	2,250	2,300	2,583	2,870	2,630
<b>Industries and Mining :</b>								
(i) Registered factories . . . .	No.	174	319	528	549	598	804	992
(ii) Average daily Emp. . . . .	No.	11,214	16,220	15,471	15,700	15,444	17,495	19,982
(iii) Production of :								
(a) Cast iron . . . . .	M.T.	1,927	1,665	1,100	1,210	..	..	..
(b) Rosin . . . . .	"	8,085	10,384	5,795	6,840	..	..	..
(c) Turpentine . . . . .	'000 Lt.	2,011	2,447	1,484	1,676	..	..	..
(d) Gums . . . . .	No.	2,359	2,490	2,470	2,500	..	..	..
(e) Salt . . . . .	Qlts	38,450	33,300	43,630	46,830	43,260	..	..
<b>Power :</b>								
(i) Installed capacity . . . . .	M.W.	51,288	52,482	113,533	128,224	128,024	128,024	1,28,07
(ii) Electricity generated . . . .	'000 K.W.	52,841	1,82,242	3,54,910	2,45,066	4,31,688	5,40,457	5,86,739
(iii) Electricity consumed . . . .	"	1,11,964	2,20,543	2,16,267	2,64,734	2,85,962	3,24,518	3,94,972
(iv) Villages electrified . . . . .	No.	4,085	6,721	8,921	10,050	11,217	12,794	13,664
<b>Medical :</b>								
(i) Hospitals . . . . .	No.	39	44	53	58	58	63	65
(ii) Primary Health centres . . . .	"	73	76	77	77	77	77	101
(iii) Allopathic dispensaries . . . .	"	126	172	194	196	200	236	235
(iv) Ayurvedic dispensaries . . . .	"	349	400	404	404	404	427	427
(v) Doctors/Vaids . . . . .	"	639	731	954	1,074	1,163	1,232	..
(vi) Bed available . . . . .	"	4,531	5,228	5,524	5,588	5,614	5,715	5,974
(vii) Patients treated . . . . .	'000 No.	4,067	5,410	7,917	8,858	10,436	9,464	9,573
<b>Education :</b>								
(a) Primary/Junior basic . . . . .	No.	3,768	4,276	4,503	6,093*	6,229	6,441	..
(b) Middle /Senior Basic . . . . .	"	742	968	1,005	1,032	1,047	1,047	..
(c) High/Higher Secondary . . . .	"	435	559	632	665	690	730	..
(d) Colleges :—								
General Education† . . . . .	"	15	24	27	27	27	27	..
College Education . . . . .	"	3	3	3	3	3	3	..
College of Arts . . . . .	"	1	1	—	—	—	—	—
Sanskrit college . . . . .	"	7	9	11	11	10	10	..
(e) Teacher's Training School . . . .	"	7	5	5	5	5	5	..
<b>Teachers :</b>								
(a) Primary /Junior Basic . . . . .	No.	7828	8450	8646	14,743	15,060	15,308	..
(b) Middle /Senior Basic . . . . .	"	6230	8218	8378	5,315	5,499	5,535	..
(c) High /Higher Secondary . . . .	"	8010	10,071	10,885	8,595	9,091	9,124	..
(d) Colleges of General Education . .	"	435	581	643	692	736	755	..

†S.I.E, Solan, G.C.E. Dharamsala School, of Education, H.P.U.

\*The increase in number is due to separation of primary schools.

## IMPORTANT STATISTICS OF HIMACHAL PRADESH—concl'd.

Item	Unit	1970-71	1975-76	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7	8	9
<b>(iii) Students :</b>								
(a) Primary/Junior Basic	'000 No.	370.7	447.9	512.4	543.3	565.7	595.6(P)	..
(b) Middle /Senior Basic	"	118.0	141.7	176.1	200.3	218.5	234.9(p)	..
(c) High/Higher Secondary	"	54.3	69.4	62.6	63.1	73.8	87.8(p)	..
(d) Colleges of General Education	"	10.8	12.9	14.5	16.5	18.6	20.9(p)	..
<b>Co-operation :</b>								
(i) Number of Co-operative Societies	No.	3,756	3,691	3,487	3,368	3,376	..	..
(ii) Membership	'000 No.	592	633	710	712	753	..	..
(iii) Loans advanced	Rs. lakhs	492.47	581.39	615.95	782.25	851.10	..	..
(iv) Working Capital	Rs. lakhs	2,311.94	5,370.76	8,925.98	10,642.95	11,898.23	..	..
<b>Employment :</b>								
(i) Employment Exchanges	No.	10	14	14	14	14	14	14
(ii) Applicants on the live-register at the end of the year	"	44,344	71,408	1,19,624	1,41,920	1,59,985	1,68,713	1,86,161
(iii) Candidates placed	"	8,291	8,070	6,610	6,080	7,875	8,415	6,893
(iv) Industrial Training Institutes (ITI)	"	7	7	7	7	7	..	..
(v) Seating Capacity in ITI's	"	1,864	1,864	1,864	1,864	1,880	..	..
<b>Communications :</b>								
(i) Motorable double-lane roads	Kms.	1,765	1,994	1,994	1,994	1,994	1,994	1,994
(ii) Motorable Single-lane roads	"	5,844	8,196	9,999	10,611	11,129	11,606	12,031
(iii) Jeepable	"	608	691	594	633	713	696	647
(iv) Less than Jeepable	"	2,400	3,464	4,002	4,195	4,49	4,439	4,448
Total (i) to (iv)	"	10,617	14,345	16,589	17,433	18,335	18,735	19,120
<b>Nationalised Transport :</b>								
(i) Fleet position at the end of the year	No.	525	773	815	839	940	1,020	1,141
(a) Buses	"	254	243	36	31	20	20	15
(b) Trucks	"	61	53	38	42	37	41	41
Other Vehicles	"	..	..	..	..	..	..	..
Total	"	840	1,069	889	912	997	1,081	1,197
(ii) Distance covered	"	..	..	..	..	..	..	..
(a) By buses	'000 Km.	17,680	32,537	50,829	55,224	61,666	65,000	..
(b) By fleet	"	..	34,564	51,925	56,027	62,281	64,947	69,924
(iii) Occupation ratio of Buses	Percent	..	71	78	78	79	..	..
(iv) Routes under operation at the end of the year	No.	214	414	627	662	743	794	978
(v) Route Kilometerage	'000 Kms.	18.47	42.75	68.93	73.14	81.96	..	..
(vi) Estimated Number of passengers carried	In lakhs	90	250	410	455	500	527	555
<b>Drinking water Supply :</b>								
(i) Villages having drinking water supply	No.	1,285£	2,967	6,425	7,887	9,487	10,78	11,807
(ii) Population covered	In lakhs	..	7.92	15.80	18.85	21.85	..	..
<b>STATE INCOME :</b>								
<b>(i) State domestic Products :</b>								
(a) At Current prices	Rs. crores.	232.40	410.47	530.66	641.62	782.52	846.18	1006.48(Q)
(b) At 1970-71 prices	"	232.40	280.98	262.11	284.12	309.82	291.99	310.43(Q)
<b>(ii) Per Capita Income :—</b>								
(a) At Current prices	Rs.	678.1	1078.5	1289.0	1514.7	1806.0	1914.0	2229.7(Q)
(b) At 1970-71 prices	Rs.	678.1	738.3	636.7	670.7	715.0	660.5	687.7(Q)

£—In addition 678 Villages had been served under the C.D. works upto March 1971.

Q : Quick.