

1. Agriculture

The department of Agriculture was established in the year 1952. In early years, the department was supposed to cater to the needs both of research and extension in respect of Agriculture and Horticulture crops. In 1970, the Horticulture wing of the department was separated and a separate Horticulture department was established to look after the needs of horticulturists in the State. In 1971, Government entrusted the work of research to Agriculture University, Palampur.

Main functions

1. To provide farm advisory services and extension support for adoption of new farm technology for increasing agriculture production to improve economy of the farmers.
2. To provide logistic support to the farmers in the form of supply of inputs like seeds, fertilizers, plant protection material, implements etc.
3. To harness the agro-ecological potential through diversification of crops and to encourage adoption of cash crops.
4. Soil & Water conservation of Agriculture lands.
5. To provide Agriculture marketing Services to the farmers.

The department of Agriculture is headed by the Director of Agriculture with headquarter at Shimla. The Director of Agriculture is assisted by one Additional Director and two Joint Directors. One Additional Director of Agriculture has been posted for North Zone at Dharamsala, District Kangra, who is monitoring all the activities in Kangra, Chamba, Una, Hamirpur and Mandi districts.

In each district (except Lahaul & Spiti and Kinnaur) the Deputy Director of Agriculture is responsible for implementation of all Agriculture Development Programmes in the districts. In Lahaul, District Agricultural Officer at Keylong and in Spiti Division, Assistant Project Officer (Agr.) at Kaza and in Kinnaur district, District Agricultural Officer at Reckong Peo are responsible for implementation of Agriculture Development Programmes. The Deputy Director of Agriculture in the district is assisted by the District Agricultural Officer, Regional Potato Development Officer and Subject Matter Specialists. With a view to strengthen the extension network at grass root level, one SMS, two ADOs and 5 to 8 AEOs have been provided in each block. For Soil & Water Conservation activities, 20 Sub-Divisions are in existence and each Sub-Division is headed by a Sub-Divisional Soil Conservation Officer. These Sub-divisions are under the control of three Divisions with Divisional Headquarter at Shimla, Bhangrotu and Palampur.

One Agriculture Extension Training Centre upgraded as State Agriculture Management Extension & Training Institute (SAMETI) at Mashobra & one Farmers Training Centre at Sundernagar headed by the Principal are in operation in the State and a number of training courses for the grass root level functionaries viz. Agriculture Development Officers, Agriculture Extension Officers and farmers are being organized at these centres. Soil Testing laboratories headed by Soil Testing Officers in each district (except Lahaul-Spiti) are also functioning.

Achievements

Agriculture dominate the economy of the State though only a little over 10 percent of the total land area is cultivated. Population pressure on cultivated land is high and holdings of most of the cultivators are small and scattered. There are 86.4 % small and marginal farmers in the State. Most of the holdings are self-cultivated. About 18.5 % of the cultivated area is under irrigation and remaining 81.5 % is rainfed. The cultivation is carried out right from 300 to 3000 meters above sea level. Agro-climatically the region is more suitable for growing off-season vegetables and temperate fruits.

During the last 58 years of planning era, foodgrain production has increased from 2 lakh MT to 16 lakh MT, Vegetable production from 0.25 lakh MT to 6.27 lakh MT during the 9th Five Year Plan Period. During the 10th Five Year Plan period, the Department has achieved foodgrain production level of 15 lakh MT and Vegetable production 10 lakh MT against the target of 18.75 lakh MT and 10 lakh MT respectively due to variety of reasons such as climatic change, biotic pressure on land and monkey menace. The level of achievement of foodgrains, Vegetables and other items at the end of 10th Five year plan and targets for 11th Five year plan are given as under :-

Sr. No.	Item/Unit	Level of Achievements at the end of 10 th FYP	Target for 11 th Five Year Plan (2007-2012)
A.	Production(000MT)		
i)	Foodgrains	1487.645	1700.00
ii)	Vegetables	991.44	1300.00
iii)	Potato	163.21	180.00
B.	Distribution of Inputs (MT)		
i)	Fertilizer(NPK)	48980	50000
ii)	Seeds(Cereals, Pulses & Oilseeds)	45940	45000
iii)	Plant Protection Material	163.20	140
C.	Area under High Yielding Varieties(000 Hectare)		
i)	Maize	273.14	280.00
ii)	Rice	79.52	75.00
iii)	Wheat	367.77	358.00
D.	Additional Area brought under Soil & Water Conservation measures. (in Hectare)	22325	18000

Although significant achievements have been made in this sector of economy as a result of previous Ten Five Year Plans and annual plans, yet there is a scope for achieving higher growth by value addition and diversification.

Agriculture has also faced a relatively unfavourable price regime and low value addition, causing abandoning of farming and increasing migration from rural areas. The situation is likely to be exaggerated further in the wake of integration of agricultural trade in the global system, unless immediate corrective measures are taken. In the present era of economy transition and globalization in the development approach, there is a need to foster the development approach to mitigate present day needs of the State, the agro climatic conditions and other congenialities attributable to economy generation are available in the State as a nature's asset.

Holdings

Agriculture being main occupation of the people of Himachal Pradesh has an important role in the economy of the state. It provides direct employment to about 57% of the main work force. Income from the Agriculture and Allied Sector account for nearly 20 % of the total state domestic product. Out of the total geographical area of 55.67 lakh hectare area of operational holding is about 9.79 lakh hectare owned by 9.14 lakh farmers. The average holding size is about 1.1 hectare. Distribution of land holding according to 2000-01 Agriculture Census is tabulated below:-

Size of Holdings (Hect)	Category (Farmers)	No. of Holdings (Lakh)	Area (Lakh Hect.)	Av. Size (Hect.)
1	2	3	4	5
Below 1.0	Marginal	6.15 (67.3%)	2.52 (25.8%)	0.4
1.0 – 2.0	Small	1.74 (19.1%)	2.45 (25.0%)	1.4
2.0 – 4.0	Semi Medium	0.90 (9.8%)	2.43 (24.8%)	2.7
4.0 – 10.0	Medium	0.31 (3.4%)	1.76 (18.0%)	5.7
10.0 – Above	Large	0.04 (0.4%)	0.63 (6.4%)	15.7
Total		9.14	9.79	1.1

It would be seen from the above table that marginal and small farmers constitute 86.4 % of total land holding. The semi-medium and medium holding together constitute 13.2 % and the large holding cover only 0.4 %. Thus in Himachal Pradesh bulk of holdings constitute small and marginal holdings. About 50.8 % of the operational area belong to the category of small and marginal farmers. Out of total number of holdings in the state, 22.36 % holding are with the scheduled castes and 4.1 % with the scheduled tribes. About 13.64 % of the operational area is with scheduled castes and 3.9 % with the scheduled tribes. The average size of holding with scheduled caste and scheduled tribes is 0.73 and 1.16 hect. respectively against

state average of 1.1 hect. The cropping intensity is about 173.6 %. The cultivated area in the state is about 5.45 lakh.

Constraints:

- Problem of erosion due to serious topographical and climate factors and biotic pressure on the land.
- 81.5 % area is rainfed, there of, the adoption rate of improved technologies and inputs by the farmers is less as compared to irrigated areas.
- Small & Scattered Land holdings (86.4% of farmers are small/marginal).
- Occurance of natural calamities like drought, cloud bursts, hailstorm, heavy rains, storms, unusual rise in temperature are quite frequent causing losses to crops.
- Squeezing of agricultural lands because of diversion to non-agricultural purposes.
- Inadequate infrastructure and information of marketing like rural roads, irrigation, marketing grading and packing of agricultural produce.
- Low risk bearing capacity and poor purchasing power of the farmers.
- Low productivity of crops.
- Erratic behaviour of rainfall.
- Limited mechanization.
- Increasing population of stray cattle and monkey menace.

Location and Extent:

Himachal Pradesh lies between 31 22'40" and 33 12'40" N latitude and 75 45'55" and 79 04'20" E longitude, bounded by J&K in North, Punjab and Haryana in the south, Uttranchal in the South East and Tibet in the East. It has been divided into four agro climatic zones.

1. Shiwalik Hill Zone (Sub Tropical Mountain and Low Hills):

Comprising of upland of part of Chamba, Kangra, Hamirpur, Solan, Sirmour and Bilaspur District.

Climate Sun Tropical consists of foothills and valley area having elevation from 350 to 650 meters above sea level. It occupies about 35% of the geographical area and about 33% of the cultivated area of the State. The major crops grown in this Zone are Wheat, Maize, Paddy, Black Gram, Sugarcane, Mustard, Patato, Vegetables, Pulses and Barley.

2. Mid Hill Zone (Sub Humid Mid Hills) :

Comprising of part of Chamba, Kangra, Mandi, Solan, Shimla and Sirmour District. This Zone extends from 651 meters to 1800 meters above the sea level having mild temperature climate. It occupies about 32 % of the total geographical

area and about 53 % of the cultivated area of the State. The major crops are Wheat, Maize, Paddy, Black Gram, Barley and Beans, Pulses and Forages etc. This Zone has very good potential for the cultivation of cash crops like off season Vegetables, Ginger and production of quality seeds of temperature vegetables like cauliflower and root crops.

3. High Hill Zone (Wet Temperature High Hills):

Comprising of parts of Chamba, Kangra, Mandi, Sirmour district and inner most of Shimla and Kullu district.

This zone lies from 1801 to 2200 meters above sea level with humid temperature climate and alpine pastures. The commonly grown crops are Wheat, Barley, Lesser Millets, Pseudo-cereals (Buckwheat and Amaranthus), Maize, Rice and Potato etc. The area is ideally suited to the production of quality seed potato and temperature vegetables.

4. Cold Dry Zone (Dry Temperate High Hills):

Comprising of major parts of Chamba and Kinnaur, entire Lahaul Spiti and northern parts of Kullu District.

This zone lies above 2200 meters above sea level. It occupies about 8% of the geographical area and 3% of the total cultivated area of the State. The major crops grown are Wheat, Barley, Rajmash, Pseudo cereals like Buckwheat, Amaranthus. It is ideally suited to the production of quality seed potato, temperate and European type of vegetables and their seeds, seed potato and peas seed.

Priority Areas of 11th Plan (2007-2012)

1. Diversification from traditional crops to commercial crops in area where irrigation facilities have been created. The farmers shall be motivated to produce organic vegetables without the use of pesticides and chemical fertilizers.
2. Development of rainfed areas through watershed approach on a large scale for efficient use of natural resources. Increased funding shall be arranged under RIDF.
3. Rainwater harvesting is another area, which will not only provide life saving irrigation to the crops but shall also recharge the ground water and check erosion. The department shall seek financial assistance from Govt. of India for small irrigation tanks/shallow wells and pumping sets.
4. Increase in maize productivity through high yielding hybrids.
5. Organic farming shall be the thrust area.
6. Post harvesting and efficient marketing system.

7. Farm mechanisation with special reference to hill agriculture shall be given major thrust in the years to come. This is necessary to reduce cost of cultivation in view of high cost of labour. The Department has already constituted a Technical Working Group to identify new farm implements and machinery, which can be introduced in the State.
8. A strong research extension interface directed towards problems oriented research programmes. Research projects to be identified and funded in problem areas.
9. Extension reforms through public-private partnership.
10. Agro processing and value addition.
11. Increase in productivity and quality.

Description of Programmes and Schemes

(I) State Plan Schemes

The details cover only the objective of the programmes.

1. Direction and Administration

It is a continuing scheme and is only meant for salary of staff in the districts and at the state headquarters.

2. Quality Seed Multiplication and Distribution

Department owns 25 Seed Multiplication Farms where foundation seeds of Kharif and Rabi crops are produced. Annually about 3500 to 4000 quintals seed of cereals, pulses and vegetables are produced in these farms. Further about 90,000 quintals of certified seeds of various crops are distributed to the farmers in the state. Under this scheme, expenditure on seed multiplication farms, seed stores, seed testing and certification, subsidy on transportation of cereals, subsidy on cost of seeds and cost on demonstrations etc. is met.

3. Manure and Fertilizers

i) Distribution of Fertilizers

With a view to provide fertilizers to the farmers at reasonable rates throughout the State, 100% subsidy on transportation of all kinds of fertilizers to retail sale points is being given thereby bringing the uniform sale rates of fertilizer in the State. The State Govt. has also allowed subsidy on cost of CAN, Urea and Ammonium Sulphate @ Rs.200/- per MT, and on complex fertilizers NPK 12:32:16 and NPK 15:15: @ Rs. 500/-per MT. These subsidies are provided under Plan and Non-Plan. Outlay proposed is to meet expenditure of cost and transport subsidy on fertilizers besides expenditure on staff.

In order to ensure adequate supply of fertilizers, the Govt. has entrusted this responsibility to HIMFED/Cooperative Societies. The farmers are educated about the balanced use of fertilizers.

ii) Soil Testing Centres

Department has 12 Soil Testing Laboratories besides two mobile soil testing labs to provide free soil testing facilities to the farmers. About 1 lakh samples are analysed annually. Besides, Soil Health Cards are being provided to the farmers. About one lakh farmers are being covered every year. Outlay proposed is to meet expenditure on these labs and salaries and wages of staff appointed under this scheme.

4. High Yielding Varieties

The Intensive Agriculture Programme content of the programmes has been merged with the scheme of Extension and Training. Now under this programme only one scheme of Crop Insurance i.e. National Agricultural Insurance Scheme is covered. The outlay is towards meeting State share of subsidy and loss claims. This scheme has been introduced in the State from Rabi, 1999-2000. Presently, wheat & barley crops during Rabi season and Maize, Paddy and Potato during Kharif season are being covered under this scheme. Ginger crop has also been included from Kharif, 2008.

5. Plant Protection

The Department exercises vigil on pest situation. To overcome this, about 600MT of pesticides through 991 sale centres are supplied to the farmers. Besides this, pesticide testing laboratory at Shimla has been set up with a capacity of 150 to 250 samples per year. One Bio- Control laboratory has been set up at Palampur where conservation pest situation augmentation, rearing and multiplication of bio-agents and training to extension staff and farmers is being imparted.

This is a continued scheme and the provision is made for meeting the expenditure on transportation and subsidy on the cost of plant protection material. The protection material including equipments are supplied to the SCs/STs/IRDP families and farmers of the backward areas at 50% cost. The outlay proposed is to meet expenditure on subsidies and staff.

6. Commercial Crops

Under diversification approach, major emphasis is being laid on the production of Off-season vegetables, quality vegetable seeds, Potato and Ginger besides Soyabean, Oilseeds and Pulses.

a) Development of Seed Potato

The Department owns 14 Potato Development Stations where foundation seed potato is produced. Due to “Seed Plot Technique” in the plains, potato of plains is causing tough competition in marketing of seed potato from H.P. Therefore, a policy has been devised to diversify the area under potato towards cash crops, market maximum potato as table produce and produce only that much seed potato which can easily be marketed outside the State.

b) Development of Vegetables including Farms

Himachal Pradesh gained reputation for the cultivation of off-season vegetables and production of quality vegetable seeds. There is a great demand of off-season vegetables in the plains. The ongoing programme i.e. cultivation of off-season vegetables and production of vegetable seeds is proposed to be strengthened and organized on an extensive scale during 11th Plan for providing higher income and employment.

The suitable areas in the State for the purpose of vegetable cultivation would be intensively surveyed and identified and the farmers in the newly identified areas would be encouraged to take up these programmes by demonstration of vegetables cultivation. Subsidy on agricultural inputs will be provided to the small and marginal farmers especially to the scheduled caste farmers in these areas so that the farm income of these rural poor could be improved and vegetables are supplied to the market during the off-season. The cropping pattern shifts from cereals to vegetables would be specially monitored in all such areas as are being brought under the culturable command area of the new irrigation schemes.

c) Ginger Development

For production of diseases free ginger, the Department is providing training, demonstration and quality seed. About 35,000 tonnes of green ginger is produced annually which is marketed within the State and in the neighbouring States.

d) Tea Development

Presently, area under tea is 2300 hectares with a production level of 15 lakh Kgs. Small & marginal tea planters are provided agriculture inputs on 50% subsidy. In the last few years, slump in the market has affected the tea industry badly. Three of the four factories are out of production.

The outlay proposed under above (a) to (d) is towards meeting subsidies on cost of inputs, training, demonstration and maintenance of nurseries.

7. Extension and Farmers Training

Main function of the Department is to disseminate the technology to farmers. The Department runs two training centres, one at Mashobra and other at Sundernagar. Besides this, farmers training camps are organised at village, block and district level. The outlay proposed is for meeting salaries of the extension staff, expenditure on training and demonstrations.

8. Agricultural Economics & Statistics

Under this programme, three centrally sponsored schemes viz. (i) Timely Reporting Scheme (TRS) for estimation of area and production of crops (ii) Improvement of Crop Statistics (ICS) for bringing quality in the land record data at grass root level and (iii) Estimation of Production of Commercial crops like Potato and Ginger. The estimation is done according to statistical techniques. Production estimates on principal crops like Wheat, Barley of Rabi season and Maize, Paddy, Potato and Ginger crops of Kharif are released on the basis of results of crop cutting experiments conducted according to Random Sampling Method. The Director of Land Records is the agency in the State responsible for collection and release of area estimates, forecast report etc.

This is a continued scheme for meeting salaries of the staff under Timely Reporting Scheme and the Scheme of Improvement of Crop Statistics. These schemes have converted into 100% CSS from the year 2008-09.

9. Agricultural Engineering

Under this scheme, new farm implements/machines are popularized among the farmers. Testing of new machines is also done under this programme. The Department is also having implement workshop at Bhangrotu. The outlay proposed is towards subsidies and salaries of the staff.

10. Quality Control

Under this scheme, implementation of various acts on seeds, fertilizer and pesticides is ensured. Quality control functionaries have been notified. The department has two fertilizer labs, one State pesticides testing lab and two seed testing labs.

II. Centrally Sponsored Schemes

1. Integrated Scheme of Oilseeds, Pulses, Oil palm and Maize (ISOPOM)

This scheme has been launched during the year 2004-05. In this new scheme, all the ongoing schemes of OPP, NPDP and AMDP have been merged. Only maize

crop has been considered for Himachal Pradesh. The scheme is being implemented on 75:25 basis except for the component of publicity where central Government share is 100 percent. The main component under the scheme are distribution of improved seeds, block and IPM demonstrations, distribution of plant protection materials and equipments, distribution of sprinkler sets, providing pipes to carry water from water sources to the fields and publicity etc.

2. Biogas Development Programme

This is a 100% Centrally Sponsored Scheme under which subsidy @ Rs.3500 per biogas plant of one cubic meter and Rs.4500/- per biogas plant of above one cubic meter capacity is being provided. So far, 42711, biogas plants have been installed in the State upto 31.3.2008.

3. Supplementation/Complementation of State Efforts Through Work Plan (Macro management of Agriculture {90:10})

Government of India has launched this programme during 2000-2001 on 90% Centre share and 10% State share basis. In this, states have to identify constraints and propose schemes for funding through Work Plan. Flexibility has also been given to State Level Coordination Committee to make changes in allocation, if required, from one scheme to other. For the year 2008-09 Government of India has approved work plan of Rs. 22.12 crores.

4. Farm Women Empowerment

The Department of Agriculture has taken up Farm Women Empowerment Programme in a big way in 73 blocks of the State covering 11800 women farmers. Eight women groups have been constituted in each block. The objectives of the programme are: assessment of the needs of the women farmers, prioritization of activities, providing package of technical training to women farmers in agriculture and allied areas, to provide organisation and functional support to women groups to make them Self Help Thrift Groups, to develop their managerial, organizational, entrepreneurial and decision making skills so as to enable them to develop them into a viable unit to start their own economic activities. These women groups are also being exposed to various parts of the State and Country.

Now the Govt. has closed this scheme in December, 2005 and a new concept of Gender Budgeting has been introduced from the financial year 2006-07 under which 30% of the budget is to be spent on women specific programmes.

5. Support to State Extension Programmes for Extension Reforms (90:10)

This programme is a major initiative towards revitalizing agricultural extension to make the extension system decentralized and demand driven. The

scheme has been conceptualized on the basis of the policy framework for agricultural extension and experiences with the innovations in the technology dissemination component of the National Technology Project implemented in the 7 States including H.P.

Following key reforms are being promoted under the scheme:

Providing **innovative restructured autonomous bodies** at the district level (Agriculture Technology Management Agency) and at block level (Farmers Advisory Committee, Block Technology Team), which are flexible, promote bottom up and participatory approaches, are farmer driven and facilitate public-private partnership.

Convergence of line departments' programmes and operating on gap filling mode by formulating Strategic Research and Extension Plan(SREP) and Annual Work Plans.

Encouraging **Multi-agency Extension Strategies** involving inter-alia public/private extension service providers.

Moving towards integrated, broad-based extension delivery in the line with farming systems approach.

Adopting Group approach to extension (Operating through Farmer interest Groups (FIGs) & Self Help Groups(SHG)).

Addressing gender concerns (mobilizing farm women into groups, capacity building etc.)

Moving towards sustainability of extension services (e.g. through beneficiary contribution).

One of the first tasks of the district level institutions is to facilitate the preparation of a Strategic Research and Extension Plan (SREP) of the district through participatory methodologies involving all the stakeholders and farmers. Block/District level plans shall be developed at the State level which shall contain a consolidated activity-wise plan incorporating all the District Action Plans (DAPs) in the State and the State Level activities. This scheme has been extended to all the 12 districts of the state.

6. Mass Media Support to Agriculture Extension

The primary objective of the scheme is to use television and radio with their massive penetration, as a vehicle for agricultural extension. Basically, the scheme is focusing on two initiatives:

i) Doordarshan

The first is use of Doordarshan for infrastructure for providing agricultural related information and knowledge to farming community. It has two components (i) narrowcasting using high/low transmitters of Doordarshan

(ii) regional and national agricultural programmes in terrestrial mode of transmission. Presently, Doordarshan Shimla is telecasting Krishi Darshan programme between 6.00 PM to 6.30 PM five days in a week.

ii) All India Radio

This component of scheme envisages use of FM transmitters of AIR to broadcast area specific agricultural programmes with 30 minutes radio transmission six days a week. Presently, half an hour, Kisanvani programme is being broadcasted, six days a week from FM Dharamsala and Hamirpur.

7. National Project on Organic Farming

Organic agriculture on one hand, is expected to provide sustainability, while on other hand, it will help in increasing the income of the farmers under this 100% CSS. Government of India has launched a National Project on Agriculture in order to promote organic farming. Under this project, financial assistance is being provided for setting up of Model Farms, training of farmers and demonstration units. For promoting organic farming further a project has been taken up in Shimla district in collaboration with Morarka Foundation and District Rural Dev. Agency, Shimla. Under the Scheme, 41 clusters consisting of 5800 farmers have been registered. The Department of Agriculture is providing assistance @ Rs.1500/- per farmer. This assistance would be provided in three years for documentation, data base management, training and capacity building, organic certification, linkage and value addition. Besides this, training of farmers regarding organic farming is also organised. One Cert Asia Agri. Certification Pvt. Ltd., Jaipur has been engaged for the certification of organic produce. After the certification, this company will explore the market for this produce by making agreement with the interested companies. The programme of organic farming promotion has been extended to other districts by involving local NGOs/KVKS for promotion of farming & registration of farmers.

8. Seed Village Programme (100% CSS)

Major constraint in increasing production and productivity of crops noted is the lack of sufficient quantities of quality seed of improved varieties to be made available to the farmers in time. To overcome this constraint, Govt. of India under 100 % CSS has started a novel programme known as “Seed Village Programme”, by which sufficient seed multiplication can be achieved in order to meet local seed requirements besides facilitating supply of seeds at reasonable cost and ensuring quick multiplication of new varieties in a shorter time.

Under this programme, areas of better seed production will be identified and a compact area approach will be followed. It has been targeted to identify 50 to 150 suitable, responding/willing farmers for the same crop preferably in compact

area/cluster approach. Foundation/certified seed at 50% cost will be made available to these identified farmers. The seeds for half an acre per farmer will be allowed. Training on seed production and seed technology will be imparted to the identified farmers for the seed crops grown in the seed villages. Besides this, assistance @ 33% on seed storage bins of 2.1 Quintal capacity is also available.

9. Promotion and Strengthening of Agriculture Mechanisation through Training, Testing and Demonstration (100% CSS).

Government of India has launched this 100 CSS to improve testing efficiency and to popularize the improved/newly developed agricultural/ horticultural equipments at farmers' fields under the actual field conditions and to improve the performance and acceptability assessment of the agricultural implements. For 2007-08, the Government of India has released Rs. 10 lakh for conducting/organizing 858 demonstration of newly developed agricultural equipments like rotavator, multicrop planter, zero till seed-cum-fertilizer drill, power tiller operated till plant machine, self propelled reaper, vegetable transplanter, manual seed drill and grain cleaner etc.

10. Rashtriya Krishi Bima Yojna (R.K.B.Y.)

The State Govt. has introduced this scheme from Rabi, 1999-2000 season and the crops covered are Wheat, Barley, Maize, Paddy and Potato. Under this scheme 50% subsidy in premium was allowed to small & marginal farmers on sunset basis. The scheme is compulsory for loanee farmers and optional for non-loanee farmers. The scheme provides comprehensive risks insurance against yield losses viz. drought, hailstorm, floods and pests disease etc. The Agriculture Insurance Co. of India (AICI) is implementing the scheme. The farmers of the State can get benefit out of this scheme. State and Government of India share the losses equally. From Rabi, 2007-08 the subsidy on premium has been raised from 10% to 50% to small and marginal farmers. From Kharif, 2008 season, ginger crop of District Sirmour has also been taken up on Pilot basis for coverage under the Crop Insurance Scheme.

11. Kisan Call Centre

Under this 100 CSS farmers can get any information on agriculture by dialing toll free number 1551. The service is available from 6.00 AM to 10.00 PM on all working days.

12. Rashtriya krishi Vikas Yojana (RKVY) (100% CSS)

Concerned by the slow growth in the Agriculture and Allied Sectors, the National Development Councils (NDC), in the meeting held on 29th May, 2007 resolved that a special Additional Central Assistance Schemes (RKVY) be launched. The National Development Council (NDC) resolved that agricultural; development strategies must be re-oriented to meet the needs of farmers and called upon the

central and state governments to evolve a strategy to rejuvenate agriculture. The NDC reaffirmed its commitment to achieve 4 percent annual growth in the agriculture sector during the 11th Plan. The resolution with respect to the additional Central Assistance Scheme reads as below:-

“Introduce a new Additional Central Assistance Scheme to incentivise States to draw up plans for their agriculture sector more comprehensively, taking agro-climatic conditions, natural resource issues and technology into account, and integrating livestock, poultry and fisheries more fully. This will involve a new scheme for Additional Central Assistance to State Plans, administered by the Union Ministry of Agriculture over and above its existing centrally sponsored schemes, to supplement the State specific strategies including special schemes for beneficiaries of land reforms. The newly created national Rainfed Area Authority will on request assist States in planning for rainfed areas”

This Schemes has been comensed during the year 2007-08 and an amount of Rs. 8.82 crores has been spent by Agriculutre Department against the outlay of Rs. 8.85 crores. At the end of the financial year 2008-09 an expenditure of Rs. 14.06 crores has been anticipated.

13. Rural Infrastructure Development Fund (R.I.D.F.)

The Department of Agriculture is participating in RIDF for creation of irrigation potential through minor irrigation/WHs. The Department got funds under RIDF-V during 1999-2000 where NABARD sanctioned 157 FIS amounting to Rs. 14.85 crore which has created irrigation potential of 3,560 hect. These schemes are being executed through Water Users Associations who will also maintain them after their completion. Under RIDF-VI, 140 flow irrigation schemes were posed to NABARD which have been sanctioned for Rs. 11.37 crore covering an area of 3,031 hect. Under RIDF_VII, 126 schemes worth Rs. 7.84 crores have been sanctioned, which will create CCA of 2,395 hect. Besides, 90 water harvesting projects have been sanctioned for Hamirpur, under RIDF-VII with cost of Rs. 6.78 crores. Under RIDF-IX, 200 minor irrigation schemes amounting to RS. 8.32 crore have been executed creating CCA 7,161 hect. Under RIDF XII, 150 minor irrigation schemes amounting to Rs. 9.01 crore have been executed creating CCA 1333.62 hect. during 2006-07. During the year 2007-08, an amount of Rs. 9.57 crore has been incurred creating CCA 1418.00 hectare. At the end of the financial year 2008-09, an amount of Rs. 10.50 crores shall be incurred creating CCA 1300 hectare.

In order to achieve faster growth in agriculture sector during the 11th Five Year Plan and to fulfill the Budget Assurances/promises made in Election Manifesto, the Department of Agriculture has prepared a project on Production of cash crops by Adoption of Precision Farming Practices through Poly House Cultivation. The objectives of the project are higher productivity and income per unit area, judicious use of natural resources like land and water, year round availability of vegetables,

assured production of quality produce and increased efficiency of monitory inputs. The NABARD has sanctioned this project under RIDF XIV amounting to Rs. 154.92 crores which shall be implemented in 4 years starting from financial year 2008-09.

The Project components include construction of poly houses providing micro irrigation in the poly houses through sprinkler and drip, For both these programmes, the farmers shall be provided 80% subsidy and 20% would be beneficiaries contribution. Besides this the farmers shall also be provided 50% assistance for creation of water sources for these poly houses like farm tanks, shallow wells, pumping sets, small lifts etc. In all, 28820 poly houses/micro irrigation systems shall be constructed during the project period covering an area of 147 hect. Depending upon the area and site, different modles of poly houses ranging from low cost tunnel, low cost poly houses made up of local material, medium cost poly houses with local material and medium cost poly houses with standard material shall be constructed. Besides this, 2650 No. water sources like tanks, shallow well, pumping sets shall also be constructed on the basis of actual need. During 2009-10, an amount of Rs. 32.00 crores have been proposed under RIDF for implementing on-going new schemes, Adoption of precision farming practices (Poly Houses & Micro Irrigation).

14. Special Project on Diversification of Agriculture through Micro-Irrigation and other related Infra-Structure in Himachal Pradesh:

Although water is a renewable resource, it's availability in appropriate quality and quantity is under severe stress due to increasing demand from various sectors. Agriculture is the largest user of water, which consumes more than 80% of the country's exploitable water resources. The over all development of the agriculture sector and the intended growth rate of GDP is largely dependant on the judicious use of the available water resources. While the irrigation projects (major & medium) have contributed to the development of water resources, the conventional methods of water conveyance and irrigation, being highly inefficient, has led not only to wastage of water but also to several ecological problems like water logging, salinization and soil degradation making productive agriculture lands unproductive. It has been recognized that use of modern irrigation methods like dip and sprinkler irrigation is the only alternative for efficient use of surface as well as ground water resources. Hence, this project on diversification of agriculture through micro-irrigation and other related infrastructural aims at increasing the area under efficient methods of irrigation viz drip and sprinkler irrigation. The NABARD has sanctioned this project under RIDF-XIV amounting to Rs. 198.09 crores which shall be implemented in 4 years starting from 2008-09. The project components are as under:-

1. Micro Irrigation :

- a) Sprinkler System
- b) Drip System

2. Other Related Infra-Structures :

- a) Farm Tank
- b) Shallow well
- c) Shallow Tube well
- d) Deep Tube well
- e) Small & Medium Lifts
- f) Pumping Machinery

In all, 17312 sprinkler/drip irrigation systems shall be installed during the project period. Beside this, 16020 Nos. water sources like tanks, shallowwells, shallow tube wells, deep tube wells, small and medium lifts and pumping sets shall also be constructed on the basis of actual need.

Pattern of Assistance under this project:-

For Sprinkler and Drip systems, the farmers shall be provided 80% subsidy and 20% would be beneficiaries contribution. Besides this the farmers shall also be provided 50% assistance for creation of water sources like farm tanks, shallow wells, pumping sets, small and medium lifts etc. A farmer can install sprinkler system up to 4 hectares of land whereas for drip up to one hectare.

2. Horticulture

The planned development of Horticulture in Himachal Pradesh is only of the recent origin and more so a post independence phenomenon. During the pre-independence period, there had been practically no or very little development of Horticulture. Pioneering efforts were, however, made by a few European and American Missionaries by way of introduction of the different varieties of temperate fruits, particularly apples. Similarly, some princely states also made efforts for the introduction of fruit cultivation in the area ruled by them and particular mention in this regard may be made of the Maharaja of Patiala State who made commendable efforts in introducing stone fruits cultivation in the Mid Hill region of the present Solan District. However, due to lack of communication facilities and also due to lack of interaction between the people, rulers and the ruled in different princely states, the people knew nothing about the transformation that can be brought about in the economy of the rural people if they took to horticulture. Whatever, efforts were made by the then British Government were only limited to the development of resorts as summer escapes from the summer heat of the plains, but in them too, horticulture did not find any significant place.

It was only after the launching of five-year plans in 1951-52 that the development of horticulture started receiving any attention. This is particularly so in the hilly areas of Himachal Pradesh where the horticultural development gained momentum with the establishment of the Regional Fruit Research Station at Mashobra in the year 1953. During the year 1950-51, the total area under all kinds of fruits was 792 hectare, with an annual production of 1200 tonnes. In the initial years of development, stress was laid on the variable trials, development of technologies and plant propagation with the main aim of initiating fruit plantation activities. However, the programme was in one way lop-sided since it did not take account of the integrated development of all sectors of Horticulture. However, the programme was quite successful in so far as the plantation activity is concerned and the area under fruit increased to 2.02 lakh hectares in the year 2007-2008. With fruit production reaching the figure of 7.15 lakh MT during the year, 2007-08. The figures given in the table below provide plan-wise comparative position on area and production of fruits during previous plans.

I. Area and Production under Fruits

Year/Plan	Area Under Fruit (Hect.)	Production (MT)
1.	2.	3.
1950-51 (before the advent of plans)	792	1200
1955-56(End of 1st plan)	2030	7000
1960-61 (End of 2nd plan)	6004	18710
1965-66 (End of 3rd Plan)	22358	36910
1968-69 (End of 3 cons. Annual .Plans.)	34572	81081

1.	2.	3.
1973-74 (End of 4th Plan)	55539	186186
1978-79 (End of 5th Plan)	80301	137227
1984-85 (End of 6th plan)	120580	215920
1989-90 (End of 7th plan)	156469	459990
1996-97 (End of 8th Plan)	196212	351625
2001-02 (End of 9th Plan)	170457*	263446
2005-06 (End of 4th year of 10th Plan)	191668	695517
2006-07(End of 10th Five year Plan)	197445	369103
2007-08 (Annual Plan)	202502	712843

*The area has been reduced on the basis of a survey conducted during 2001-02 by the Departmental committee, because the plants, which had completed their economic life, were uprooted.

II. Area under fruits

Most of the orchards in the state, which were planted during 1950s and 1960s have outlived their economic life and have become old and senile. Therefore, a survey was conducted by the Departmental Committee and on the basis of the survey report, the area of 50000 hectare, which was under the old plantations was reduced out of the total area under fruit plantations during the year 2001-02, i.e. the end of the 9th Five Year Plan. Consequently, total area under fruit crops was reduced and 170457 hectare was taken as the base figure of total area under fruit plantation in the beginning of the 10th Five Year Plan which continued to rise in subsequent plans.

The hops industry in the state has received a great set back due to liberal trade policy of Govt. of India under which import duty on hops products has been reduced from 120% to 30% during last 10 years as a result of which the prices of domestic hops crashed down considerably. Moreover, the brewing industries in the country are using hops pellets and hops extracts instead of dried hops. As a result, hops growers in the state are facing difficulties in marketing of hops product and area under cultivation of hops has gone down considerably. Targets under the production and area of olive could not be achieved due to the reasons that considerable reduction in olive production has been noticed in the recent years. The growers have cultivated olive on the marginal lands and they could not fetch satisfactory yield/income, with the result the other farmers could not come forward for adopting the cultivation of olive crop. The targets under leaf analysis could not be achieved due to shortage of staff under the scheme.

III. Horticulture Technology Mission

Realizing the importance of Horticulture in the economic development of Himachal Pradesh, the Government of India has sanctioned Rs 80 Crore for implementing Horticulture Technology Mission for the state for the 10th Five Year Plan. The mission was launched during October, 2003, funded 100% by the Central Government through designated agencies. Before coming up of this Mission into

operation, the Centrally sponsored scheme was implemented under the programme 'Macro management of Horticulture' in the ratio of 90:10 Centre and State share.

The main objective of the mission is to establish convergence and synergy among numerous ongoing governmental programmes; achieve horizontal and vertical integration of these programmes; ensure adequate, appropriate, timely and concurrent attention to all the links in the production, post harvest and processing chain; maximize economic, ecological and social benefits from the existing investment and infrastructure created for horticulture development; promote ecological sustainable intensification, economically desirable diversification and skill development and generate value addition, promote the development and dissemination of low cost versatile technologies.

Under Horticulture Technology Mission, four mini missions are being implemented for the integrated development of horticulture industry. Main emphasis is being given for the cluster approach so that the farmers get well-developed infrastructure right from production till marketing and processing. Under mini mission-I, research and development activities are being carried out. Under mini mission-II, activities for improving production and productivity of horticulture crops are being undertaken. Mini mission-III is being implemented for carrying out post harvest management, marketing and export activities and under mini mission-IV, the farmers are being promoted to undertake processing activities and marketing of processed products. The list of various programmes being implemented under mini mission-II of HTM is being given as under:

- Area Expansion
- Rejuvenation of senile plantations
- Model floriculture centres
- Creation of water sources
- On farm water management
- Protected cultivation
- Centres of excellence for Horticulture Mission Programmes
- Production of planting material
- Transfer of technology
- Popularization of organic farming and use of bio-fertilizers
- Promotion and popularization of horticultural equipments
- Promotion of integrated pest management
- Promotion of integrated nutrient management
- Establishment of plant health clinic
- Establishment of tissue/leaf analysis laboratory
- Development of bee keeping
- Establishment of integrated mushroom unit
- Entrepreneurial development of women farmers
- Development of information base through remote sensing
- Strengthening of horticulture infrastructure

Eleventh Five Year Plan 2007-2012

Priority Areas

1. Implementation of the programmes for the improvement of productivity and quality of fruits and to double the production of fruits by the end of the plan period.
2. Intensification of horticulture development in the presently less developed areas and diversification of horticulture in the already developed areas with emphasis on nut fruits and other new fruits having promise for commercial cultivation.
3. Utilization of the environmental friendly practices for horticulture production and marketing.
4. Development of modern post harvest management facilities for reducing post harvest losses, increasing shelf life, standardization of grading and packing and regulation of the flow of fruits to the market.
5. Development of fruits exclusively for processing industry.
6. Increase in use of the frontier technologies like Remote Sensing, Information Technology and Bio-Technology in the field of horticulture.

A. Production Related

1. Development of modern facilities for the propagation of the plant material to the farmers through (i) introduction of the improved germplasm from abroad and identification of the plant material of outstanding merit from within and outside the State and its multiplication (ii) creation of facilities for the commercial production of the virus free plant material (iii) Utilization of the micro-propagation of the plant material for increasing the supply of the improved plant material to the growers (iv) shift towards the use of clonal rootstocks in place of existing practice of seedling rootstocks (v) creation of the bud-wood banks of elite fruit varieties and rootstocks in the public sector for further supply to the private nurserymen for multiplication and (vi) development of a scientific system for the supply of certified plant material of fruits to the farmers.
2. Increased use of bio- technology for the fast multiplication of the plant material as and where the cost effective protocols are available.
3. Utilization of the Integrated Pest Management Technologies for decreasing the use of chemicals for pest control both for reducing the plant protection costs and also for checking environment pollution. Emphasis shall be given on biological control of the pests and diseases.
4. Implementation of the programmes for the pest forecasting and weather forecasting.

5. Integrated Nutrition Management with emphasis on need based application of the chemical fertilizers and increased use of the biological fertilizers for the maintenance of soil productivity.
6. Improved water management through scientific methods for farm water harvesting, conservations and application for making best use of the scarce water resource for the improvement of the horticulture productivity.
7. Diversification of horticulture with emphasis on nut crops, olive, cherry, pear, small fruits etc. and cultivation of Medicinal and Aromatic Plants in the farmer's fields.
8. Utilization of protected cultivation of flowers and other high value horticulture crops like strawberries for which project area approach shall be adopted and region specific schemes will be prepared.
9. Utilization of information technology as an important tool for horticulture extension, dissemination of the technical know how and market information and e- Governance.
10. Development of horticulture crops specially for fruit processing like the wine varieties of grapes, cider varieties of apples, apple varieties for juice making etc.

B. Post Harvest Management Related

1. Development of infrastructure for the scientific post harvest management and marketing of extremely perishable horticulture commodities like flower crops and mushroom in the private, cooperative and public sector. Demonstration units will be established in the public sector.
2. Development of farmer's organization for the implementation of the programmes of the post harvest management of the horticulture produce.

C. Research and Development

1. Project approach shall be utilized for the solution of the various problems of horticulture industry through the research institutions.

D. Post Harvest Processing

1. Emphasis on on-farm conservation/preservation of the unmarketable fruits.
2. Establishment of fruit preservation training and community fruit processing centre at the block level and in areas of concentrated fruit production.

Area expansion and replantation programme

Most of the apple orchards in the state have become quite old and the plants have outlived their economic life. Therefore, during 11th Five Year Plan, besides bringing more and more area under fruit plantation due attention shall be given on the re-plantation of such fruit plantation which are very old and have become uneconomical. It is, therefore, proposed to bring 20,000 hectare area under new fruit plantation and to replant about 10000 hectare orchard area with new improved varieties during 11th Five Year Plan.

Objectives:

As per priorities at the national level, special emphasis will be given in the next Annual Plan for increasing the horticulture production so as to provide nutrition food for the population. For that matter effective steps shall be initiated towards more efficient use of available resources like soil, water and manpower for affecting significant increase in the horticulture production in the State. Strategies and policies differentiated by agro-climatic regions shall be adopted for boosting the horticulture production. Modern technologies shall be harvested for increasing the quality and productivity of fruit crops and bringing diversification of horticulture industry. Being labour intensive, horticulture industry and its activities will be promoted during the annual plan 2008-09 for generating more employment opportunities and income to the rural population in the State. Therefore, the main objectives for the development of horticulture in the State during the annual plan 2009-10 shall be as under:-

1. Increasing horticulture production and productivity in the state to achieve 4% growth rate.
2. Generating more and more self employment opportunities in the rural areas by promoting horticulture and its ancillary activities like beekeeping, mushroom, flower production, medicinal and aromatic plant cultivation.
3. Removing regional imbalance in horticulture industry through optimum exploitation of local agro-climatic, Soil and water resources.
4. Modernization of nursery production work for the multiplication of clonal root stocks and improved varieties of various food crops.
5. Ensuring remunerative prices for horticulture produce through better post harvest management practices, value addition and price support.
6. Diversification in horticulture crops i.e. species, varieties, activities and technologies.
7. Strengthening extension and advisory services by improving contact linkage, training and demonstration aspects of modern horticulture technology.

Schematic Details

1. Direction and Administration

This scheme aims at providing effective administration through technical and non-technical personnel of the Department. The functions of the Directorate of Horticulture are Planning, Technical and Financial Management, Monitoring of progress under various schemes/programmes/projects and providing necessary feedback to the State Govt. about implementation of various policies and programmes. After 55 years of horticulture development process in the hilly state of Himachal Pradesh, we have reached a stage when higher input technology in various aspects of horticultural production and post harvest management is required so as to sustain the economic viability of this important industry of the state which has been playing an important role in economic upliftment of rural masses. For this maintenance and strengthening of specialized divisions viz. crop production, crop protection, training and extension, floriculture and landscape, beekeeping, mushroom, fruit utilization and post harvest management is very essentially required. Besides, the subject concerning cultivation of medicinal and aromatic plants has also been transferred to the state department of horticulture, which requires a separate division to be carved in the Department of Horticulture.

Therefore, during 11th Five Year Plan 2007-12 emphasis will be given on restructuring of technical services of the department on principle of specialization so as to give more thrust in technology induction in various aspects of horticulture for modernization of this industry.

Steps shall also be taken for creating efficiency and improvement in the quality of work at the directorate level by providing and establishing a network of computers at various branches and divisions of the directorate.

2. Plant Protection

The pest and disease infestations in the orchards result in the loss of fruit produce, thereby causing serious economic losses to the fruit growers. The damage to fruit crops both in quantity and value due to pests and diseases has been estimated at 15% to 20% even in the normal years, which is gross national wastage especially when our country is facing nutritional problems. Therefore, it is a matter of prime concern to adopt modern plant protection measures at all stages of development of horticultural crops so that they do not act as limiting factor in fruit production programme. The objectives of the scheme are as under:

1. To make timely arrangement for the supply of various pesticides, insecticides and plant protection equipments etc. to the fruit growers for the control of pests and diseases in their orchards at reasonable rates.

2. To prepare spray schedule for the control of pests and diseases for guidance of fruit growers.
3. To organize campaigns for conducting spray operations for the control of pests and diseases of economic importance in important fruit crops like apple, mango, citrus peach, plum etc. and to provide fungicides/insecticides subsidized rates to the fruit growers.
4. To introduce modern technology for the surveillance and development of computer based pest and disease warning system in the fruit growing areas.
5. Enforcement of various acts relating to nursery inspection and certification plant quarantine, plant protection and control of obnoxious weeds etc.
6. To promote integrated pest management for fruit crop protection through use of technologies like use of bio-chemicals, biological control of insect pests and diseases etc. which may reduce the use of chemicals harmful for human health and environment.

3. Horticulture Development

This scheme is the major programme of horticultural development aiming at the creation and maintenance of infrastructural facilities in the rural areas for ensuring equitable access to the resources and inputs required for the promotion of all fruit crops, hops and medicinal and aromatic plants. The horticulture development scheme is partly having subsidized nature and inputs and other related material is provided on subsidy to the fruit growers under this scheme to implement all the programmes effectively. Since financial year 2003-04, the scheme has been restructured and the subsidy component, considered as the committed liability, has been transferred to Non-Plan. Therefore, during 11th Five Year Plan 2007-12, the programmes like development of fruit production, area expansion, demonstration of new technologies and improved package of practices on the orchards of fruit growers, major works for the development of infrastructures, development of Walnut/Hazelnut/Pecan nut, development of Olive, development of Mango/Litchi in lower hill areas, development of Strawberry and other small fruits, development of medicinal and aromatic plants, Horticulture information services, development of Hops scheme, Micro irrigation for private orchards, short term research projects for solving the field problems of emergent nature and externally aided projects will be carried out under this scheme.

(a) Development of Fruit Production

The scheme provides infrastructural and mobility facilities at Regional/ District/Block/Field level for the distribution of inputs required for the maintenance of existing orchards and for the expansion of area under fruit crops in rural areas. The objectives of the scheme are under:

1. Bringing more and more area under all fruit crops in the potential areas of different agro-climatic regions.
2. Introduction of new improved varieties of different fruit crops for increasing the quality production of fruits and productivity per unit area.
3. To replace the old and uneconomic fruit plant with new improved varieties.
4. To ensure the availability of certified planting material of standard quality to the fruit growers.
5. Strengthening and maintenance of input supply services in the fruit growing areas for easy and timely availability of production inputs.
6. Identification of fruit trees of outstanding merit for the selection of state mother trees for the supply of bud wood to the nursery growers.
7. Introduction of new improved varieties and rootstocks of different fruits from advanced countries.
8. Demonstration of recommended package of practices and new technologies on the farmers' field.

(i) Area Expansion Programme

Under the area expansion programme, it is proposed to bring 20,000 hectare area under fruit plantation additionally in the state during 11th Five Year Plan by distribution of 20.00 lakh fruit plants annually. Besides this, 10000 hectare area of old and uneconomic orchard is also proposed to be planted during the 11th Five Year Plan. A target of achieving 906 thousand MT fruit production is proposed for the 11 Five Year Plan. A target of 815 thousand MT fruit production is proposed for the Annual Plan 2009-10. A target of covering 211 thousand hectare area under fruits is proposed for the Annual Plan 2009-10.

For increasing the productivity of fruit crops in the state, it is proposed to introduce new improved varieties from advanced countries for evaluation and multiplication on the departmental demonstration orchards, for supply to fruit growers.

(ii) Demonstration of New Technologies & Improved Package of Practices

In the field of development, it is recognized that technical break through has necessarily to be supported with the efforts of transfer of technology to the farmers field. Demonstrations are the most effective tools for convincing the fruit growers of the effectiveness of modern technologies in improving the productivity of fruit crops. This programme is also of great importance in the transfer of technology to the fruit growers in increasing the productivity and quality of fruit crops. The programme of work under this programme would be demonstration of the new technology or

improved package of practices developed by the State Horticulture University or any other research institutions and industries on the field of farmers. The incentives to the fruit growers for implementing this scheme shall be given as per the approved procedure of the State Govt. The objectives of the programme are given below:-

1. To effect improvement in the level of management in the existing plantations through the demonstration of new technologies, primarily with a view to maximize production per unit area.
2. To provide opportunities to the fruit growers specially small and marginal farmers and other weaker sections of farming community to acquire skills to augment their knowledge and understanding by learning through doing.
3. To provide forum for the farmers to exchange ideas and experience operating under various agro-climatic conditions.
4. To collect data on the impact of the package of practices and the new technologies demonstrated on the yield and quality of fruit crops.

B. Special Subsidy Scheme

The horticulture production units require huge investment for the installation at initial stages and further maintenance. It is therefore, proposed to provide assistance in the form of subsidy to the fruit growers to encourage them to take to horticulture and its ancillary activities for their self employment and to generate income. The objectives of this scheme are as under:-

- a) To provide assistance to small and marginal farmers so as to encourage them to take to horticulture avocation for their economic upliftment.
- b) To incentivize the unemployed educated rural youth to set up horticultural custom hiring-cum-service centres for self-employment.
- c) To provide incentives to the fruit growers to adopt new technology like drip irrigation for increasing the productivity in their orchards.

The details of the subsidy schemes are given below:-

Under this scheme, subsidy on the cost of various inputs required for the establishment for new orchards is available to the small and marginal farmers, scheduled Castes and scheduled tribes farmers and IRDP families. The details of the sub-schemes are given below:-

(a) Subsidy for the development of individual orchards

Under this scheme, subsidy on various inputs for the establishment and maintenance of orchards like fruit plants, fencing, irrigation material, horticultural tools and implements, micro-nutrients etc. are available to an individual fruit grower belonging to small and marginal and other weaker section of farmers community at the following rates subject to the maximum of Rs. 3000 per farmer.

Sr. No.	Category of farmer	Rate of subsidy.
1.	Small farmers	25%
2.	Marginal farmers	33%
3.	Scheduled Castes/Scheduled Tribe / Backward area farmers.	50%

(b) Subsidy for the development of garden colonies

The garden colony is the concept of developing fruit plantation by more than six farmers in a compact area under a common fencing and common infrastructural facilities like farm machinery and irrigation facilities. Such a programme will help in the reduction of cost on the management of orchards. The total area of the garden colony should not be less than 5 acres. The following incentives are available to the small and marginal and weaker section of farmers' community for the establishment of garden colony:

Sr. No.	Item of Subsidy	Rate of Subsidy Admissible
1.	Common facilities like fencing, irrigation and plant protection equipments.	50% to Small & marginal farmers and 75% to SC/ST & IRDP farmers
2.	Consumable inputs like plant material, pesticides, micro-nutrients, horticultural tools, implements etc. for the maintenance of orchards.	25% to Small farmers, 33% to marginal farmers and 50% to SC/ST & IRDP farmers

The maximum amount subsidy for a five acres garden colony will be Rs. 18,000/-.

(c) Transportation subsidy on various horticultural inputs up to village extension circle level

Under this scheme, it is proposed to provide 100% subsidy on transportation of horticultural inputs up to village extension circle level so as to ensure timely supply of such inputs to the fruit growers on reasonable rates for the scientific management of their orchards.

(d) Interest subsidy on bank loans for the establishment of horticultural custom-cum-service centers

This scheme aims at providing assistance in the form of interest subsidy on bank credits to the un-employed educated rural youth as required to establish horticultural custom-hiring-cum-service centres for their self employment. It is

proposed to set up 5 such centres in the state for providing custom-hiring-service to the fruit growers in their orchards. Under this scheme, it is proposed to provide 100% subsidy on the rate of interest for first three years on the bank loans to be obtained by the entrepreneurs for setting up of such centres in rural areas.

The SOE 'subsidies' have since been declared as committed liability, the requirement of funds for subsidies are now being funded from Non-Plan.

C. Development of Walnut/ Hazelnut/Pecan/Pistachio Nut

Although, agro climatic conditions in mid and higher hill regions of the state are quite suitable for the cultivation of walnut (*Juglans regia*) yet its cultivation has not been commercially exploited. According to the horticultural census conducted by the state in 1989, there were about 1, 63,750 walnut trees (about 935 hectare area) in the state. According to the latest estimates, an area of 4785 hectare is existing under walnut plantations, which are generally in scattered form planted at higher lands. So far no regular walnut orchard has been planted in the state by any fruit grower. The reasons for slow expansion of walnut cultivation in the state are:

1. The non-availability of grafted plants of superior cultivars due to lack of effective propagation techniques.
2. The walnut plants raised by seed show high variability and trees assume very large size where as the farmers have very limited land holdings.

The department of Horticulture, H.P. posed the problem of grafting in walnut to APEDA in 1998 and requested the said organization to fund a project for the standardization of grafting techniques in walnut. The state Horticulture University had standardized a technique of 'Side Veneer grafting of walnut' in the months of July-August. Chip budding during May to first week of June has also been recommended under mid hill conditions. Technologies have been developed with in the country as well as in foreign countries, which have helped in grafting techniques, semi dwarfing rootstocks and hedgerow planting system of walnut etc. Therefore, by the adoption of these technologies it will be possible to popularize the commercial cultivation of walnut in the State.

There is a great potential for the development of Pecan nut in the low and mid hills of the state. The efforts are being made to propagate improved varieties of Pecan for distribution to the growers. Every year a demand of around 20000 Pecan plants is being received which is being met with from the Government and private registered nurseries. The growers who have got pecan plantations are fetching good returns for their produce.

The objectives of the scheme are as under:-

1. To survey, identify and earmark the waste lands for the development of walnut/pecan/pistachio nut plantation.
2. Training of field staff and registered nursery growers in the techniques of veneer grafting of walnut.
3. Selection of walnut trees in the state having outstanding merits for obtaining budwood for grafting of walnut seedlings
4. Propagation and multiplication of walnut grafted planting material for distribution to the farmers on reasonable rates.
5. Development of demonstration plantation of walnut on state Govt. owned or private waste lands through the technology of " In Situ and " Hedge Row Planting".

During 11th Five Year Plan 2007-12 efforts will be made to develop 1-2 nut crop development stations in the state for the collection of improved germplasm of walnut /hazelnut/pecan nut and propagation of grafted plants of these nut crops for supply to the fruit growers. It is also proposed to introduce improved walnut and Pecan varieties (Specially with lateral bearing habit) from advanced countries for evaluation and propagation at walnut development stations and distribute 1.0 lakh plants to the growers during the 11th Five Year Plan.

D. Development of Olive

The olive is a broad leaved evergreen tree in the plant family oleaceae. There are about 20 species of olive found in the tropical and sub- tropical region of the world but the edible fruits and oils are produced only from the cultivars of *Olea europea*. Olive is mainly used for oil extraction, which is used in cooking and manufacture of perfumed soaps. Olive is not only nutritious and tasty but its fat contents are also free from cholesterol. Ripe olive also contains calcium, iron and Vitamin A. Besides oil extraction, olive is used for making pickle and has got medicinal importance.

In Himachal Pradesh, the practical indication of the possibility of commercial cultivation of olive is provided by the presence of wild species of olive, locally known as " Kahu" in concentrated belts between elevations ranging from 1000-1300 meters above mean sea level. These wild olive belts are found in the districts of Kullu, Mandi, Chamba, and Sirmour while scattered wild olive plants are also found in the Shimla and Solan districts of Himachal Pradesh.

The introduction of the cultivated olive varieties in the state of Himachal Pradesh was initially made in the year 1959 when 21 olive trees of Italian varieties were introduced at the Progeny-cum-Demonstration Orchard Jadhari (Tehsil Kandaghat Distt. Solan H.P.). Later on 14 varieties of olive were introduced at the PCDO Nihal, Distt. Bilaspur, in the year 1963 on experimental basis. The olive plantation made at the Progeny orchard Nihal failed due to unfavourable agro-

climatic conditions but the plantation made at Progeny orchard Jadhari performed well. These preliminary trials provided broad indications regarding the micro climatic range in which the olive cultivation could be experimentally tried.

Utilization of the available wealth and wild olive species for development of olive plantation through the technology of top working was another significant aspect taken care of during the 1970's and large scale top working programme of wild olive trees with superior varieties were carried out in the mid hill regions of Chamba and Mandi Districts. During the year 1972 and 1974 two olive development stations were established at Lanji (Chamba District) and Panarsa (Mandi District) and a large number of wild olive trees were top worked with superior varieties earlier imported at Nihal (Distt. Bilaspur).

Indo-Italian Project for the development of olive and other fruits was implemented from the year 1986 to 1993 in two phases. Under this project, 16 olive cultivars have been introduced at Project Base Bajaura Distt. Kullu. Main emphasis under the Indo- Italian Olive Project was given on the evaluation of olive varieties under local agro- climatic conditions. Demonstration plantations were established in different locations in Mandi, Kullu, and Chamba districts. The olive plantation showed very encouraging results in the year 1992-93 when 7.37 MT of olive production was recorded which yielded 874 litres olive oil. The crop during the years 1993-94 to 1995-96 was very poor due to adverse weather conditions during the flowering time. However, evaluation of olive varieties has shown encouraging results, which has yielded about 23% oil of virgin quality. The infrastructure for processing of olive and extraction of olive oil has been established at fruit canning unit, Shamshi, Kullu. The Indo-Italian project was terminated on 31st December, 1993 and since then the activities of the project is being carried out under the state plan funds.

The olive development work in the state will be undertaken under this scheme during 11th Five year Plan with the following objectives:

1. Introduction of improved olive varieties from abroad and multiplication of planting material of outstanding olive varieties in glass houses set up at Bajaura and Chamba for supply to the fruit growers.
2. Planting of demonstration plots in the field of the farmers in various districts/locations to evaluate the performance of different olive varieties at different locations.
3. To provide extension services to olive growers so as to acquaint them with the improved techniques of olive cultivation.
4. To organize training to olive growers in various operations in olive production.
5. Training of field staff in the propagation of olive planting material.
6. To intensify the drive to popularize the olive cultivation in mid hill areas of the state.

E. Development of Mango/Litchi in Lower Hill Areas

The most appropriate system of agriculture that can be adopted in the rain fed areas is the raising of deep-rooted crops, which can explore the soil moisture and nutrients to great depths than any agricultural crops. Mango has wide adaptability in lower hill areas upto an elevation of 1200 meters. With deep root system, it has a capacity to withstand drought conditions, hence is suitable under rain fed conditions. Therefore, mango is developing as the main fruit crop in lower hill areas. Besides, mango, litchi has shown good potential in lower hill areas especially in Kangra District. But its cultivation has been confined to the certain pockets only because it has got very specific climatic requirements. The areas with high humidity and abundant moisture are best suited for its cultivation. The young plantation of mango and litchi are required to be protected from frost during winter months. However, preference for the development of these fruit crops will be given in frost free areas.

1. Increase the mango and litchi production by bringing more and more area under these crops, in lower hill areas for economic upliftment of rural population.
2. Increasing the production of planting material of mango and litchi in departmental and private orchards and fruit nurseries.
3. To demonstrate the technology in plantation and maintenance of litchi orchards.
4. To demonstrate the technology " *In Situ*" plantation of mango.
5. To create employment generation through large-scale plantation of these fruit crops in rural areas.

Generally fruit plantations are raised by planting seedlings or grafted plants in the properly spaced pits. Under normal plantation programme, planting material is first grown in the nursery and after one or two years, these are transplanted into pre-prepared pits. But mortality in such plantation is very high under rainfed conditions. Therefore, raising of seedling by directly sowing the seeds in to the well spaced pits supplemented with the moisture conservation techniques like grass or plastic mulching etc. is most appropriate technology for establishing fruit orchards in rain fed areas. The seedlings so raised are later on grafted with the scion of improved varieties at appropriate time. This technology is known as '*In Situ*' plantation of orchards. This technology has been successfully practiced for raising mango orchards in lower hills and valley areas of the state. Since mango is one of the most potential crop in Himachal Pradesh, it is therefore, proposed to raise mango plantations through "*In Situ*" technique in 7000 hectare area during 11th Five Year Plan at the rate of 1400 hectare per annum.

F. Development of Strawberry and Other Small Fruits

So far not much attention has been paid towards the promotion of cultivation of small fruits like strawberry, rasp berry, blue berry, currants etc. The small fruit has utilization in processing industries for the manufacture of high quality fruit products as well as has demand in fresh market. But these fruits are highly perishable, so the cultivation of these fruits will preferably be encouraged in the areas surrounding the processing industries in the state. The cultivation of these fruits also be encouraged in the orchards as inter crops to supplement the income of fruit growers in case of failure of the main crops.

It is proposed to establish 1-2 demonstration orchards-cum-nurseries for the collection of improved germplasm of strawberry and other small fruits and propagation of planting material of these fruit crops for supply to the fruit growers.

G. Development of Medicinal and Aromatic Plants

The plant based pharmaceuticals; herbal medicinal perfumery, cosmetics, fragrances and food flavour industries have made a phenomenal expansion in market size over the last 15 years. This sector figured in high annual growth rate industries in agri.-business. Consumers in industrialized countries are seeking alternatives to allopathic medicines, antibiotics, steroids and hormonal drugs which have shown ill effects on body functions. The scenario in global situation provides vast scope for promoting the cultivation of medicinal and aromatic plants in our country. The cultivation of medicinal and aromatic plants has got greater significance in saving the forest wealth of the state, because at present large quantities of herbal plants are being extracted from the forests of the state in a haphazard manner which would not only lead to extinction of many herbs but would also create environmental/ecological imbalance.

The decade of seventies, when Indian Council of Agricultural Research launched All India Coordinated Research Project (Medicinal and Aromatic Plants) with introduction of several medicinal and aromatic plants into regular agriculture, necessitating development of new varieties and improved productivity of traditionally grown crops basically to broaden raw material base for expanding native industries. This task was largely accomplished as the high mark of this research and development efforts culminated in rapid growth of market share of farm based raw material over products emanating from forestry sector. The decade of nineties has opened up farm based economy in the country leading to increased export value products in the form of intermediary phytochemicals, perfumery, food flavours, cosmetics and toiletry goods.

In view of the facts given above, the state Govt. has taken a policy decision to make the development of medicinal and aromatic plants as farm based activity and hence the mandate of cultivation of these plants has been given to the Department of

horticulture which previously was with Ayurveda Department. The state Horticulture University, Nauni, has made the collection of germplasm of many medicinal and aromatic plants and standardized the package of practices for these crops. Therefore, this scheme aims at promotion of cultivation of medicinal and aromatic plants in the state. The objectives of the scheme are under:-

1. To establish demonstration farms for the collection and multiplication of medicinal and aromatic plants for supply to the farmers.
2. To demonstrate the technology in the cultivation of medicinal and aromatic plants on the fields of the farmers.
3. To provide incentives to the farmers for increasing the production of medicinal and aromatic plants in the state for providing raw material to the pharmaceutical and cosmetic industries.
4. To supplement the farm income of the farmers for their upliftment.

H. Horticulture Information Services

The importance of mass media of communication in dissemination of modern technical know-how amongst the orchardists for increasing production/productivity as also for publicizing the horticultural productions of the state in the consuming centres for creating market demand for our horticultural commodities need not be over emphasized. This is more so in the state like Himachal Pradesh where the farming population is inhabited in far flung and difficult areas and the marketing centres for the state horticultural products are also located all over the country. Taking these factors into consideration, the horticultural information and publicity services need to be properly strengthened, to be able to serve the ever increasing needs of the orchardists of the state through:

1. Publication of farm bulletins, pamphlets, posters, handouts, newsletters monthly magazines, farming guide and horticultural calendars.
2. Issue of press notes, farm features and special supplements on various aspects of horticultural development for publication in the newspapers and periodicals.
3. Publicity thorough Radio and Television by supplying scripts and recorded tapes of features, talks and timely limits to the orchardists.
4. Setting up of State and Regional Horticultural Museum.
5. Organization of farmers' fairs, horticultural shows, exhibition and horticultural production competitions.
6. Preparation of films and videotapes on horticultural subjects.
7. Publishing the horticultural products of the state through advertisements, hoardings, radio, television, slides and publicity brochures etc.
8. Establishment and maintenance of departmental libraries at directorate and district level.

9. Provision of modern equipments required for preparing publicity materials and other teaching aids etc.

Under this scheme, it is proposed to organize fruit shows-cum-exhibitions in state/district fairs besides publications of various booklets, farmers bulletins-books and CDs on recommended package of practices for fruit crops, floriculture, medicinal plant cultivation etc. and organizing seminars.

I. Development of Hops

Hops is an important economic horticultural crop of tribal areas of the state which has got specified market in brewing industries, bakeries and pharmaceutical industries. The development of hops was started in Lahaul Valley in the year 1975-76 but much progress was not made upto 8th Five Year Plan when great thrust was given on increasing hops production in the state and as a result of which the area under hops has increased from 10 hectare in 1991-92 to 215 hectare in the year 1995-96, thereby increasing the hops production of 21.5 MT in 1992-93 to 130 MT in the year 1994-95. After that a great set back was received by the hops industry of the state due to liberalized import policy of Govt. of India under which the import duty on hops and its products have been reduced considerably. Consequently, the hops in value added products like pellets etc. are freely available in the Indian market and brewing industries in the country have switched over to the use of hops pellets in place of dried hops cones. The state was not having technology in the production of value added products of hops like hops pellets, oil and extracts etc. After the year 1994-95 the hops production gradually reduced to 29.6 MT in the year 1998-99. The area under hops was also reduced to 65 hectare as most of the hop growers had abandoned the hops plantation and new hop plantation has come to stand still.

To save the hops industry in the state from closure, the state Govt. has established a hops processing industry at Baddi in Solan Distt. during November, 2000 under joint sector for the production of value added products of hops like hops pellets, oil and extracts etc. which is procuring hops at the price fixed annually by the intervention of the state government so that availability of sufficient raw material (hops cones) could be ensured to feed this industry. With the setting up of this industry the hops cultivation in tribal areas of the state has started picking up. The objectives of this scheme are as under:-

1. Intensification of drive to increase the hops production in tribal areas.
2. Introduction of improved aromatic and non-aromatic varieties of hops and multiplication of the same for supply to the hops growers.
3. To make necessary arrangements for the marketing of hops products to the brewing and pharmaceutical industries and for export.

To increase the hops production in the state, it is proposed to bring 80 hectare area under hops cultivation at the end of 11th Five Year Plan 2007-12. A target of 45 MT hops production is proposed for 11th Five Year Plan.

4. Plant Nutrition

Application of nutrients to the fruit plants is one of the most important aspects in commercial fruit production. Generally, most of the horticultural crops draw large quantity of nutrients from the soil and for the replenishment of nutrient reserve, it is quite essential to add fertilizers and other micro-nutrients into the soil. It is also a well established fact that indiscriminate application of fertilizers to the fruit plants creates nutritional imbalance in the plants which may seriously reduce the crop yield and the quality of fruits even in the absence of any noticeable reduction in the tree growth and vigour.

Diagnosis of such conditions can be done with desired accuracy, rapidity and economically by chemical analysis of plant tissues. Leaf analysis has been found to be the most suitable technique in assessing the nutritional status of perennial and deep rooted crops. Therefore, three plant nutrition laboratories viz. Shimla, Bajaura (Kullu) and Dharamshala (Kangra) have been established for providing free advisory services to the fruit growers for determination of nutritional status of their orchards. Besides these, two small laboratories for the collection and drying of plant leaf samples have also been set up in tribal areas viz. Reckong Peo (Kinnaur) and Bharmour (Chamba). The leaf samples collected and prepared by these small units are sent for analysis in these state laboratories.

The main objectives of this scheme are as under:-

1. Strengthening and maintenance of existing fruit plant nutrition laboratories by providing additional staff and equipments.
2. Preparation of optimum and economic fertilizer schedule for fruit orchards based upon the plant tissue analysis and to provide free advisory services to the fruit growers in the field.
3. Survey of different fruit growing pockets in the state to assess the nutritional status of orchards and in the long run to prepare nutritional map of fruit growing areas.
4. Conducting adaptive trials regarding efficiency of various fertilizers and organic manures etc. as available in the market, in removing the nutritional deficiencies in fruit plants.

From the review of the functioning of this scheme, it is observed that the staff provided in this scheme is quite insufficient for running three plant nutrition laboratories in full capacity. Therefore, it is proposed to provide additional technical staff in these laboratories by deployment from other schemes. A target of 60000 leaf samples to be collected from fruit growers' orchards and analysed at the plant

nutrition laboratories is proposed for 11th Five Year Plan 2007-12. A target of 12,000 leaf samples to be analyzed is proposed during Annual Plan 2009-10.

5. Development of Apiculture

Himachal Pradesh offers very rich potential for the development of bee keeping because of larger area under horticulture, agriculture and forest. There is a big demand for Honey produce in Himachal Pradesh, in the country as well as good export potential is also there. As a cottage industry, it is possible to adopt bee keeping on commercial lines by the farming community for getting additional income to improve their economic conditions. Besides honey production, the honey bees are also recognized as important source of pollination for increasing crop productivity. Under this scheme main emphasis will be given on the strengthening of bee keeping stations of the department of horticulture.

The objectives of the scheme are as under:-

1. Application of modern techniques for harnessing of honeybees for pollination in the orchards and increasing the production of honey and other bee products in the state.
2. Creating opportunities of self-employment to the unemployed rural youths by setting up of beekeeping units by them.
3. Establishing big regional nucleus apiaries in the potential areas for breeding of honeybees and large-scale multiplication of honey with honey processing and grading facilities.
4. Maintenance of present small beekeeping stations in the state.
5. Arrangement of bee keeping equipments/tools/modern beehives etc. to the beekeepers.
6. Preparation floral calendar and floral maps of different regions/ areas.
7. Supply of bee colonies on rental basis to the orchardists for pollination in their orchards during flowering season.
8. Providing mobility for the migration of bee colonies during flowering and winter season.
9. Honey processing and grading under Agmark.
10. To arrange for the marketing of honey produced by private bee keepers.

6. Development of Floriculture

Commercial floriculture was one of the main thrust of 11th Five Year Plan in the state. The commercial cultivation of the flowers is of recent origin in the State of Himachal Pradesh. The total area under floriculture has increased from almost negligible to about 600 hectares now. About 2240 growers are involved in the floriculture activities producing flowers worth Rs. 19.90 crores per annum. The potential existing in the form of diverse agro-climatic conditions in various regions of the state is being exploited for the cultivation of wide range of flowers, ornamental

plants and production of flower seeds/bulbs etc. for year round supplies to the domestic as well as export market. The districts of Bilaspur, Mandi, Sirmour, Shimla and Chamba have particularly made headway in floriculture especially in the production of carnation matching international standards. The Department of Horticulture has established seven floriculture nurseries in various districts, viz. Navbahar and Chharabra in Shimla district, Mahog Bag and Parwanoo in Solan district, Bajaura in Kullu district and Dharamshala and Bhatoan in Kangra district.

The objectives of the scheme are as under:-

1. Introduction and multiplication of planting material/bulbs/seeds of improved flower varieties for supply to the flower growers at reasonable rates.
2. Identification of potential pockets for the development of commercial flower cultivation.
3. Introduction of modern technology in the flower production and post harvest management of flowers.
4. Strengthening of extension services in commercial flower cultivation in the state by updating the knowledge of existing extension staff in flower cultivation through special training to extension officers.
5. Creation of infrastructural facilities for the establishment of commercial floriculture model centre.
6. Demonstration of commercial flower production at identified progeny-cum-demonstration orchards of the department of horticulture.
7. To organize apex body of flower growers cooperative societies to facilitate the marketing of flower produce in a collective way.
8. Strengthening and maintenance of existing flower bulbs and seeds in tribal areas.
9. To explore the possibility of collaboration with some advanced countries for commercial flower production for export markets.

In order to boost commercial floriculture in the State, the Government of India sanctioned a “Model Floriculture Centre” for Himachal Pradesh. The “Model Floriculture Centre” has been established at Mahog Bag (Chail), District Solan and a Tissue Culture Laboratory has been set up for the propagation planting material of commercial important floriculture crops. The present infrastructure at the “Model Floriculture Centre” consists of 1706 sqm of Greenhouse area, one unit for post harvest handling of flowers and three Cool Chambers for storage of planting material. Establishment of another Model Floriculture Centre in public sector has been approved by the Govt. of India for the year 2006-07 under Horticulture Technology Mission. This Floriculture Centre has been instrumental in proliferation of commercial floriculture in the State through collection and multiplication of improved floriculture germplasm and to create modern facilities for mass propagation of the same. The centre is providing training/demonstration to the commercial flower growers, entrepreneurs and Departmental Extension staff.

The scheme has proved to be quite useful in raising the socio-economic status of the farmers of the State. An area of 500 hectare under floriculture is proposed to be covered during 11th Five Year Plan 2007-12. A target to 630 Hect. has been proposed for the Annual Plan 2009-10.

7. Establishment/Maintenance of Government Orchards / Nurseries

Fruit plants as a basic input has vital importance in the development of fruit industry. Due to long gestation period of fruit crops, the fruit growers have to take utmost care while selecting the planting material for planting in their orchards, because any mistake made in the beginning in selecting the right type of plant material may result in huge economic losses at later stages. Therefore, keeping this fact in view the concept of progeny-cum-demonstration orchards and nurseries as growth centers was developed right from the First Five Year Plan (1951-55). The Department of Horticulture is maintaining 100 Progeny-cum-Demonstration Orchards and nurseries in the state occupying about 500 hect. of land on which progeny trees of different species have been planted as a source of budwood for the propagation of planting material for supply to the fruit growers. These Progeny cum Demonstration orchards (PCDOs), apart from serving as models of demonstration to the orchardists are also sources of preservation, production and multiplication of quality plant material for commercial plantations in the state. The main objective of the scheme are given as under:-

1. To stock progeny trees of outstanding merit for the supply of bud wood.
2. To multiply and supply pedigree and disease free plants at reasonable rates and to make supply available from the nearest possible source.
3. To conduct adaptive trials regarding the suitability of various varieties/ fruits/ new introductions and also the university recommendations on various package of practices on micro area basis.
4. To serve as model demonstration orchard and nucleus for the proliferation of the orchards in the surroundings areas.
5. To serve as an extension centre with a zone of impact in a radius of 8 kilometer.

A target of 40 lakh fruit plants to be produced at departmental fruit nurseries is proposed for 11th Five Year Plan and 8 lakh fruit plants are to be produced in Annual Plan 2009-10. Major thrust will be given on increasing the production of nursery plants of sub tropical fruits especially of mango. In temperate region, major stress will be given on the multiplication of clonal rootstocks of apple, pear, cherry and stone fruits and the production of grafted plants of improved varieties on these rootstocks for higher productivity in the orchards.

8. Development of Mushroom

Mushrooms are popular for their delicacy, flavour as well as food value. The agro climatic conditions prevailing in many parts of the state provide ample scope for the cultivation of mushroom, both for domestic consumption as well as for export purpose. Mainly two types of mushroom viz. while button mushroom (*Agaricus bisporous*) and Dhingri (*Pleurotus spp*) are being cultivated in the state. The modern technology in commercial cultivation of mushroom was introduced under two externally aided projects implemented in the state viz. FAO/UNDP Mushroom Development Project, Chambaghat, Solan during 6th Five Year Plan and Indo Dutch Mushroom Development project at Palampur (Distt. Kangra) during the 7th Five Year Plan. To cover the remaining potential areas of the state under mushroom development programme, two more bulk pasteurization units have been established at Dharbaggi (Baijnath) distt. Kangra and Bajaura in distt. Kullu with the Central Govt. assistance. The installed capacity of these units is about 1800 MT annually (900 MT each). With the completion of these two new units the production capacity of pasteurized compost under public sector has been increased to 3150 MT per annum. It is proposed that during the annual plan 2009-10, 600 MT pasteurized compost will be prepared at these units and distributed to the mushroom growers. Two bulk pasteurization units for compost have been established under these projects with total production capacity of 1350 MT of pasteurized compost (Chambaghat 350 MT and Palampur 1000 MT). The pasteurized compost from these units is being made available to the registered mushroom growers of Shimla, Solan, Sirmour, Kinnaur, Kangra, Chamba, Hamirpur, Una and Bilaspur districts. The small and marginal farmers and unemployed graduates are being given preference under these projects.

The main objectives for the scheme are as under:

1. To provide facilities for training in mushroom cultivation on the prospective mushroom growers.
2. To provide extension services to the mushroom growers.
3. To demonstrate the techniques of mushroom cultivation in the production chamber of the projects.
4. To provide consultancy services to cooperative and private sector for setting up of mushroom production and processing units.
5. To develop suitable marketing and processing channels for this industry.

A target to achieve a production level of 6000 MT Mushroom per annum is proposed for 11 Five Year Plan. Similarly a target of production/supply of 3500 MT pasteurized compost through departmental units is proposed for 11th Five Year Plan 2007-12. With a target of producing 6200 MT Mushroom and 600 MT Compost through departmental units in Annual Plan 2009-10.

Subsidy for Mushroom Development

The scheme aims at providing incentives to farmers and unemployed graduated in the form of subsidy on the following items required for mushroom production, so as to encourage large number of farmers and unemployed graduates to take to this avocation for their socio-economic upliftment.

Sr. No.	Item	Incentives.
1.	Subsidy on compost for maximum 400 trays	Rs.20/- per tray to Small/marginal farmers and unemployed graduates & Rs.40/-per tray to SC/ST and IRDP
2.	Transport Subsidy on pasteurized compost.	100% to all the above categories

9. Horticulture Training and Extension

(A) Training Programme

Training and extension is an important programme for the transfer of technology to the farmers for increasing horticultural production. This programme is also very important for human resource development to meet the skilled manpower need of the horticulture industry. This scheme aims at organizing training camps/ workshops/ seminars/ courses/ study tours etc. for the farmers as well as to the technical officers and field functionaries of the Department of Horticulture. Therefore, this scheme has the following two aspects:-

i) Training of Farmers

The fast development of horticultural industry in the past four decades has opened vast opportunities for skilled manpower on various aspects of horticultural operations. Implementation of suitable human resources development programme for skill formation/skill improvement in various horticultural techniques is the need of horticultural industry and for catering to the manpower employment to the educated youths in rural areas. Training is an important tool for the transfer of technology by "Learning and Doing" method. The importance of training is realized more in an avocation like horticulture whose specialized practices like pruning, plant protection, fruit preservation, beekeeping, mushroom production, floriculture, hops production, medicinal and aromatic plant cultivation etc. can be effectively learnt only through practical training. The following training programme shall be organized for the farmers during the 11th Five year Plan 2007-12 under the scheme:-

Sr. No.	Training Programme	Duration	No. of farmers to be trained
1.	Village/Block and Distt. level training camps	1-2 days	200000
2.	Training Courses 1.Mushroom Cultivation 2.Beekeeping 3.Horticulture	5-10 days	2000 1000 2000
3.	Study tours 1.Within state (40 farmers/tour) 2.Outside the state(40 farmers/tour)		1000 1000

During the training period each trainee will be provided subsistence allowance and other charges, if any, in accordance with the approved procedure by the State Govt. for organizing the training programme.

ii) Training Courses for Technical Officers

The training exposure of the high, middle and grass root level functionaries is an important critical technical input for upgrading their knowledge, skills and attitude for planning, implementing and follow up of horticulture extension activities. Moreover, specialized training courses are required for up gradation of skills of the existing technical staff posted at various Progeny-cum-Demonstration orchards/ Nurseries and other departmental units. Therefore, to achieve the above objectives, the work shops, refresher training courses, seminars, etc. are proposed to be organized in collaboration with the State Horticulture University, Nauni Distt Solan for technical officers/ field functionaries of the Department of Horticulture.

(B) Organization of Exposure visit of farmers departmental officers to foreign countries

In the era of globalization, it is pertinent that the farmers in the state and the technical officers of the department get themselves equipped with the knowledge of the recent trends in horticulture technology prevailing worldwide to keep pace with the process of development. This can only be achieved if they are exposed to horticulturally developed countries to see for themselves and gain experience. This scheme, therefore, aims at organizing exposure visits/study tours of the farmers as well as the technical officers and field functionaries of the department to foreign countries to expose them to the modern horticulture technologies being adopted by the advanced countries in the fast changing

scenario under WTO regime, to provide them opportunities to augment their knowledge and understanding through the concept of 'Seeing is believing'.

Therefore, this scheme has the following two aspects:

1. **Exposure visit of the farmers to the foreign countries:** It is proposed that during 11th Five year Plan 2007-12, 80 farmers (4 farmers per group) be sent for exposure visit to different countries.
2. **Exposure visit of the technical officers/field functionaries of the Department of Horticulture to the foreign countries:**
It is proposed that during 11th Five year Plan 2007-12, 60 officers (3 officers per group) be sent for exposure visit to different countries.

(C) Horticulture Extension programme

Horticulture is an integral part of the economic development of the state. The Govt. and the farmers have key roles in bringing out horticultural development. The main role of the government usually is to create and maintain the infrastructure required for agricultural development. Farmers' reaction in managing their farms and deciding between production alternative depend upon the infrastructure and other economic incentives of the agriculture sector. In addition to establish a supportive infrastructure, a concern of Govt. in agriculture development is, therefore to ensure that the farmers are continually exposed to attractive production options. However, they could respond appropriately and quickly if they clearly understand both the most recent technologies applicable to their farms as well as the broader agro- economic environment in which they operate. Therefore, the Agricultural / Horticultural extension services have a central role to facilitate this through the development of appropriate production recommendations and the transfer of new technologies to farmers. As such the extension services to farmers in hilly state like Himachal Pradesh is a necessary pre-requisite to widespread and sustained agricultural development.

10. Fruit Processing and Utilization

The fruit and vegetable preservation is a basic necessity for the horticulture industry about 20-25 percent of the fruit production goes waste unless, it is, utilized in the manufacturing of processed fruit production. Moreover, the processing grade and substandard fruits not only receive very low prices in the market but also affects the rates of good quality fruits adversely, thereby causing economic losses to the fruit growers. The only solution to solve this problem is to utilize such fruits in the manufacture of value added processed product like juices/juice concentrates, jam, jelly, squashes, alcoholic beverages etc. the department of horticulture is, therefore, implementing a scheme for the utilization of unmarketable surplus fruits and vegetables since the year 1959.

1. Setting up of fruit processing units in the fruit growing areas.
2. Organizing community canning service and training in home scale preservation of fruits and vegetables in rural areas.

At present, the department of horticulture is running 8 small fruit processing units in different districts with total installed capacity of processing of 500 MT fruit products. Besides these, one micro biological laboratory for product development and standardization of recipe of different fruit products and other laboratory for testing the quality of fruit product being manufactured in departmental units, has also been set up at Shimla.

The objectives of the scheme are as under:-

1. Utilization of unmarketable surplus of fruits and vegetable in the state.
2. Creation of infrastructural facilities for providing community canning services to the local population in each district.
3. Organizing training in home scale preservation of fruits and vegetables in rural areas specially for women folk.
4. Standardization of recipe of the fruit products based upon the raw material available in the state.
5. Ensuring quality control over the production of fruit products for making the same available to the consumer on the reasonable rates through departmental units.
6. Providing consultancy and technical advisory services to the entrepreneurs for setting up of their own processing units.

A target of manufacturing 1000 MT fruit product in the departmental units and 250 M.T. fruit products to be processed under community canning services is proposed for 11th Five year Plan 2007-12. A target of manufacturing 200 MT of fruit products at departmental units and 50 MT through Community Service is proposed for the year 2009-10.

11. Horticultural Economics and Statistics

The importance of dependable data in an era of planned development need not be over emphasized. For the preparation of realistic horticultural development programme/schemes/ projects a dependable data on various aspects of horticultural production is required to be generated and maintained at the directorate level under this scheme. The scheme has the following objectives:

1. Regular monitoring and evaluation of progress under various departmental schemes.
2. To conduct field surveys for pre harvest forecasting of fruit yield annually.

3. Collection of data at the exit points of the state for export of fruit produce from the state for the estimation of actual fruit production in the state.
4. To conduct field trials for the preparation of cost of production of various fruit crops.
5. To conduct field experiments for the estimation of fruit crop yield in different parts of the state.
6. To conduct horticultural census to know the actual area under different fruit crops.
7. To conduct potential survey and analytical studies for the preparation of techno-economic feasibility studies for various schemes/projects etc.
8. Establishment of modern electronic telecommunication system for scientific data management and information dissemination.

12. Short term projects for solving field problems of emergent nature

The rapid growth of any industry gives rise to some sudden problems which, if not solved in time, may pose serious problems to the existence of the industry. This has been happening with the horticulture industry of the state when serious problems like pre-mature leaf fall in apple plantation, phytoplasma disease in Peach plantation, damage to Mango plantation due to severe frost conditions, indices of Varroa mite in bee colonies, processing and utilization of Hops etc. has threatened the existence of horticulture industry in the state. The problems have caused colossal loss to the horticulture industry of the state in general and affected the fruit industry wherein important problems may crop in the field from time to time, a special provision of funds of Rs. 3.00 lakh has been proposed for evolving a solution during Annual Plan 2009-10.

13. Horticultural Research and Education

The application of science and technology is the most crucial factor in the process of development of horticulture in the state. With the increase of the area under different fruit crops in the state, the problem of the horticulture industry has increased to the greater extent requiring solution to solve them so as to keep the industry in the line of business. Increasingly problems of insects, pests and diseases, low productivity of fruit crops, plant nutritional problems, post harvest losses of horticultural produce etc, are the major problems which are threatening the economic viability of the state horticultural industry. A strong research support is required to solve the problems of the horticulture industry. Therefore, emphasis will be given on intensification of research programme of the horticulture industry.

Himachal Pradesh being a hilly state, the pattern of growing of seasonal horticultural crops differ in many ways than the plains and as such the problems of this industry in the state are also quite different in nature. Keeping this fact in view,

the state Govt. under the Act No. 6 of 1986 established a full-fledged state Horticulture University at Nauni, District Solan with the following objectives:

1. Creation of infrastructural facilities for the research and education programme of the State Horticulture University.
2. Making provision for imparting education in horticulture, forestry and other allied services of learning and scholarships.
3. Furthering the advancement of learning and prosecuting of research, both basic and applied in various fields of horticulture and forestry.
4. Undertaking the spread of education of such sciences especially to the rural people of the state.
5. Such other purpose as the University may determine from time to time.

Since the State Horticulture University does not have enough financial resources for the maintenance and creation of its infrastructural facilities required for the research and education programme, the financial support in the form of grant-in-aid is being provided by the State Govt. to the University under the Head of Development "Research and Education".

14. Marketing and Quality Control

Himachal Pradesh is one of the major fruit growing state in the country and has witnessed remarkable progress in fruit production during previous five year plans. The success in raising fruit plantation, however, does not stop with the production of fruits but it is also extended to taking the produce to the consumers through various marketing processes and channels. For getting remunerative prices for his produce, the orchardists need proper facilities for quality control and smooth transport system besides adequate training in the post harvest operations like picking, packing, grading and also market advisory service. To keep the farmers informed with day-to-day market trends in the consuming markets, the market information through various media needs to be provided to them so that they can harvest the benefits of remunerative prices prevailing in different markets of the country. The following scheme is being implemented under this major head of development during 11th Five Year Plan 2007-12.

a) Market Intervention Scheme

During the heavy crop year, the fruit growers receive very low price from the market as a result of glut in the market. This situation is also faced by them when the crop is damaged by weather vagaries like hail storms. Therefore, to stabilize the market prices for fruits and to save the fruit growers from economic losses, the Govt. has formed a policy to provide market support to the growers for their fruit produce under Market Intervention Scheme. The procurement of fruits under this scheme is done through HPMC and HIMFED for utilization in fruit processing industries, with the extension support of the

Department of Horticulture, Himachal Pradesh. It is also proposed to introduce the policy of Apple Crop Insurance during the 11th Five Year Plan. Efforts are being made at Government level to include Apple fruit under Crop Insurance Scheme. In this regard, a proposal submitted by the ICICI Lombard General Insurance Co. Ltd. for introduction of Weather Insurance of Apple in Shimla district on pilot basis is under consideration of the State Govt. Similarly a proposal for designing Insurance scheme on apple has been prepared by the Agriculture Insurance Co. of India Ltd. which has been sent to IRDA for approval. As and when the proposals are received, the same will be put forth to the Government for finalization of modalities for implementation.

3. Animal Husbandry

Animal Husbandry plays an important role to boost the rural economy. With its large livestock population, HP has vast potential for meeting the growing needs of the people, particularly in respect of livestock products such as milk, eggs, meat and wool. The livestock sector not only provides animal protein but various types of raw material for industrial use. Besides, this sector has a large potential for generating employment particularly for unemployed rural youth.

In Himachal Pradesh, more than 90% of rural population rear livestock which caters to the needs of entire population in the form of milk and milk products. Due to the hilly topography of the State and climatic variation most of the people rear indigenous cattle, sheep and goats where as in plain areas of the State people have switched over entirely to cross breeding.

Animal Husbandry and dairying activities continue to be an integral part of human life. As a sequel to the age old practices and dependence of population on livestock, Himachal Pradesh is endowed with the large livestock population. According to 2003 Census, total livestock population of H.P. is 50.46 lakh which includes 21.96 lakh cattle, 7.73 lakh buffaloes, 9.06 lakh sheep, 11.15 lakh goats and 0.17 lakh horse and ponies. Poultry population of the State is 7.64 lakh.

Achievements:

Salient achievements recorded during the last two five year plans are as under:-

Sr. No.	Item	Unit	Eleventh Plan 2007-12 Target	Annual Plan 2007-08 Actual Ach.	Annual Plan 2008-09		Annual Plan 2009-10 Target
					Target	Achievement	
1	2	3	4	5	6		7
A Livestock Production							
a)	Milk	000 Tonnes	920.00	873.46	875.00	875.00	890.00
b)	Eggs	Millions	109.00	84.28	103.00	103.00	105.00
c)	Wool	Lakh Kg.	16.75	16.07	16.60	16.60	16.65
B Cattle/Buffaloe Development							
i)	A.I. performed with Frozen semen	Lakh No.	6.20	5.72	6.50	6.50	6.60
ii)	Cross bred cows available	Lakh No.	5.75	6.00	6.40	6.40	6.60
C Livestock Health Programme							
i)	Opening of New Veterinary Dispensaries	Nos.	400	-	-	-	-

Priority Areas for the 11th Five Year Plan (2007-2012)

1. 100% coverage of breedable cows and buffaloes by providing artificial insemination in all veterinary institutions connected with roads. In far flung areas cows and buffalo bulls will be supplied to panchayats free of cost.
2. Identification of elite cows enabling the farmers to get good remuneration.
3. Reduction of contagious diseases outbreak through vaccination of susceptible animals.
4. Making available more number of exotic rams through increasing carrying capacity of exotic sheep breeding farms so that quantity and quality of the production of wool increases.
5. Registration of animals for minimizing the number of stray animals.
6. Providing nutritious feed and fodder to the cross breed animals by encouraging the farmers for growing nutritious grasses and fodder plants.
7. Encouragement of Self Help Groups to adopt poultry farming.
8. Rehabilitation of all stray cattle in Gosadans.
9. Strengthening of rabbit farms to import sire lines of Angora Rabbit to nullify the adverse effects of in breeding in the parent stock.

Approach to be adopted during 11th Five Year Plan and Annual Plan 2008-09

The Sector wise thrust areas which need to be addressed and require highest attention during 11th Five Year Plan period and Annual Plan 2009-10.

1. Veterinary Services and Animal Health

To protect the livestock from epidemics and to provide timely veterinary aid, the department has a net work of veterinary institutions in the Pradesh. In an era of planning, spanning more than 56 years, polyclinics, veterinary hospitals, central veterinary dispensaries and veterinary dispensaries have been opened. The growth of this sector since inception has reached the level of 2138 institutions at the end of 31st March, 2008. Under this scheme following protectives measures are taken:-

Efforts to strengthen the existing veterinary institutions by providing laboratory and other diagnostic aid facilities will be made so that quality veterinary services could be provided.

- To protect animals against contagious diseases like Foot and Mouth Disease, HS, BQ and PPR diseases. The Government of India will be requested to provide sufficient grant under Centrally Sponsored Scheme “Assistance to control of animal diseases”(ASCAD) for purchase of vaccines to cover entire population of the state.

- Sero Surveillance programme for detection and monitoring of other diseases like Brucellosis, TB, JD and CRD etc. will be started in the state in addition to continuation of ongoing surveillance programme.
- To maintain cold chain for vaccines efforts to provide refrigerator upto grass root level institution (Veterinary Dispensary) will be made.

2. Cattle and Buffalo Development

Indigenous cows ((non-descript local) are being upgraded by cross breeding programme by breeding with Jersey and Holstein bulls so that the exotic blood level is maintained. The artificial insemination by frozen semen technology is being adopted in cows and buffaloes. Three Cattle farms located at Kothipura (Bilaspur), Kamand (Mandi) & Palampur (Kangra) are being run by the department to produce genetically superior breeding bulls. At Bhangrotu district Mandi young Bulls which are to be used for semen collection are being served. These bulls are used for semen straw production at sperm station of the department at Palampur (Kangra).

Artificial insemination facility is being provided from 1725 Veterinary Institutions in the state. In the remote areas, where it is not possible to introduce artificial insemination technique, natural service with improved breed of bulls is being carried out. To give boost to cross breeding programme, Government has formed “HP Livestock Development Board” by getting 100% grant from Govt. of India. This grant-in-aid is being spent on strengthening of artificial insemination facilities in the State. The department is planning to provide 100% coverage of breedable cows and buffaloes mainly through artificial insemination.

Castration of indigenous bulls is also being undertaken by the department so that more and more cows are covered through artificial insemination programme and are not breed with indigenous bulls.

According to breeding policy of the State, inheritance of exotic blood i.e. Jersey/Holstein is to be maintained at 50% and remaining 50% inheritance will be contributed by Pahari/Hilly cattle. This policy will ensure the benefit of higher milk production potential of exotic breed and as well as disease resistance and hardiness traits of Hilly and Pahari Cattle to farmers of the State. The highlight of the programme are:

- In Himachal Pradesh artificial insemination to cover all breedable cows and buffaloes will remain continued for cross breeding purpose.
- The cattle breeding farms will be strengthened by providing irrigation facilities and farm machinery so that farms become self dependent for fodder production and all farms will be run to their full carrying capacity.
- Dry dairies will be established so that stray Cattle can be housed and maintained with the active involvement of NGOs and byproducts like cow dung and urine are used as bio-fertilizer/pesticides.

- Bio-security of cattle farms in the form of fencing will be carried out so that livestock is protected against wild animal attack and land is saved from encroachment.
- Cattle population in the State will be registered with the active participation of respective Gram Panchayats so that stray cattle menace is routed out.
- All inaccessible Gram Panchayats will be provided jersey and buffaloe bulls free of cost for the purpose of natural service.
- Government of India will be requested to provide maximum funds under national project on cattle and buffaloe breeding programme Phase-II during 11th Five Year Plan.
- To solve the stray cattle problem in the State, Registration of cattle has been started from the year 2007-2008.
- Rehabilitation of all stray cattle will be carried out in Gosadans in a phased manner.

3. Poultry Development

The poultry farming in Himachal Pradesh plays an important role in improving the socio-economic status of rural population. The sale of eggs on day to day basis helps in providing supplementary income as well as nutrition of high protein without incurring extra expenditure. Six poultry farms, six extension centres and two hatcheries are working in the State for the benefit of the farmers. A project for poultry development is also functioning in the State covering 3 districts namely Shimla, Una and Bilaspur. Following programmes are being undertaken under Poultry Development by the department:-

- Existing backyard poultry scheme of 10-50 Chicks unit of coloured stain of low input technology will be continued during 11th Five Year Plan also for self-employment generation and boosting of nutritional status.
- Self help groups under backyard poultry farming to adopt poultry farming will be encouraged.
- Transportation of Chicks from hatcheries to nearest road head point of beneficiaries to give boost to rural backyard poultry in the State will be continued.
- Efforts will be put to extend 200 broiler unit schemes to the entire State under Scheduled Caste Sub-Plan.

4. Sheep & Wool Development

Sheep rearing is one of the main occupation of the people in Himachal Pradesh. Rampur Bushari and Gaddi breeds of Himachal Pradesh are famous for indigenous carpet wool production in the country. In rural areas, 37% of agricultural families rear sheep. The local sheep is crossed with good quality rams of Rambouillet, Russian Merino so that the quality as well as quantity of wool

production is increased. To bring desired increase in quality and quantity of wool produced by the indigenous sheep, department has maintained four sheep Breeding Farms and one Ram Center. These farms are located at Karchham (Kinnaur), Jeori (Shimla), Tal (Hamirpur) and Sarol (Chamba). High yielding rams of exotic Russian Merino and Rambouillet breeds are sold at nominal rates from these farms to interested sheep breeders to carry out cross breeding of indigenous sheep with these exotic breeds. Ram Centre, Nagwain (District Mandi) provides Rams during breeding season to sheep breeders and at the end of breeding season, these rams are brought back to the Ram Centre, so that farmers are saved from the cost of maintaining these Rams. Apart from these farms, there are ten sheep and wool extension centres in various parts of the State. These extension centres are also making available pure exotic rams from the State farms or cross breed ram from improved flock of sheep breeders to interested farmers. These extension centres are also managing health care of sheep flocks of their respective regions. Two wool analysis laboratories located at Tal (Hamirpur) and Sarol (Chamba) are also working in the State. These laboratories help in grading of wool and thereby ensuring good price to the sheep owners.

To bring improvement in the quality and quantity of wool yield per sheep, a cross-breeding programme is being carried out in the State. Fine woolen rams of Rambouillet and Russian Marino breeds of sheep are used for this cross breeding. Till date, only 20% of sheep population in the State is cross-breed and for so many years the Government could not import the quality germ plasm. As per prescribed norm, 4% rams are provided for 100% coverage of the total sheep. Therefore, the department needs 15,000 rams to cover all the breedable sheep population. With the present status, the department is only able to produce 300 rams per year. In order to produce more rams, the department needs extra budget in this scheme so as to raise the strength of the farms to their carrying capacity and to meet the increasing demands for breeding rams. The following activities are undertaken in this scheme:

- The sheep breeding farms will be strengthened by providing irrigation facilities and farm machinery so that farms become self dependent for fodder production and all farms run to their full carrying capacity.
- Bio-security of sheep farms in the form of fencing will be carried out so that livestock is protected against wild animal attack and land is saved from encroachment.
- To cover maximum number of sheep population under cross breeding programme pure breed of exotic rams distribution will continue. There is a need of import of pure breed Rambouillet sheep to nullify the adverse effect of inbreeding in the parent stock of sheep breeding farms. Rams distribution will continue.

5. Other Livestock Development

a) Angora Rabbit Scheme

The climate of the State is favorable for rearing of Angora Rabbits and it is a good source of income and self employment. With the assistance of UNDP, a germ plasm centre at Nagwain (District Mandi) has been established, where pure breeds are being bred on scientific lines. At this centre training to interested breeders is being imparted and trained persons are being provided infrastructure and rabbits for starting their own rabbit breeding farms. Another rabbit farm at Kandwari in Palampur is also being run by the department where German Angora Rabbits are being reared. During the plan period following activity will be continued:

- Existing rabbit farms will be strengthened and efforts will be made to import sire lines of Angora rabbit to nullify the adverse effects of inbreeding in the parent stock.

b) Horse/Yak Breeding Programme

Spiti (Chamurthi) is a recognized breed of horses found in Pin Valley of Lahaul-Spiti district and Hungrang tehsil of Kinnaur District. This breed of horse is sure footed and best mode of transportation in remote and hard areas. The department is running a horse breeding farm at Lari in district Lahaul-Spiti to preserve this breed of the horse. To inflict a sense of security and to inculcate confidence in the tribal people, department organizes a horse show every year at Rampur Bushehar on (4-6 November) before Lavi fair and prizes in the form of cash are given to owners having best Chamurthi & Spiti animals. For the improvement of the breeding programme following activity will be continued:

- Since the population of both the species Viz Chamurthi Horse and Yak is declining at an alarming rate, existing horse breeding farm at Lari will be strengthened for the conservation of these species, so that Chamurthi Ponies and Yaks are maintained and reared and their surplus progeny is distributed to the interested breeders.

6. Feed and Fodder Development

To make animal husbandry a success, availability of sufficient quantity of fodder is necessary. Veterinary aid institutions are providing following facilities to livestock owners for the development of fodder:

- Department is supplying certified seed of cultivable fodder crops at full cost to all farmers and at 50% subsidy to IRDP, SC/ST and women.

- Department is supplying improved fodder grass roots and plants to the farmers.
- Two seed multiplication farms are also being run by the department at Sunni (Shimla) and Kotla Barog (Solan).
- The pasture land in the state is decreasing day by day due to rapid growth of weeds which is adversely effecting the sheep population of the state. In order to overcome this difficulty de-weeding and regeneration of pasture land by seedling with temperate grasses and fodder trees will be carried out.
- Fodder plant nurseries will be raised so that parent stock of grass roots and fodder trees are maintained and further distributed to the farmers.

7. Education & Training

a) Setting up of State Veterinary Council

Under centrally sponsored scheme “Professional Efficiency Development (Setting up of State Veterinary Council)” Grant-in-aid is provided to H.P. State Veterinary Council on 50:50 basis. The main purpose of grant-in-aid to H.P.State Veterinary Council is to regulate veterinary practice in the state. As per Veterinary Council Act, 1984, no person other than a registered veterinary practitioner can hold a government/semi-government or any other like office. Therefore, even the qualified veterinarians have to get themselves registered before entering into service/ veterinary practice. Indulgence into veterinary practice by any body else renders him liable for prosecution. GIA is required for the payment of salary burden of staff posted in the council and to meet out the day-to-day expenses because H.P. State Veterinary Council has no independent resources of its own.

4. Fisheries

Himachal Pradesh is blessed with some of the finest rivers viz. Sutlej, Beas and Chenab originating from the permanent glaciers and spring-beds. The rivers and their branches are bestowed with exotic trout, mahaseer, snow trout, loaches, indigenous lesser barilas and mirror carps. Besides, there are many natural lakes located in the higher reaches, man made impoundments harbouring more than 78 species of fish belonging to sisordac, belonidae, ophiocephalidae and masteermbelidae and series of pounds dotted especially in sub-mountainous region.

Fisheries in Himachal Pradesh are artisanal in character involving roughly 12,500 families of fishermen and engaging from localized subsistence fishing to highly mobile and intensive fishing. The activities are mainly 'capture' in character where the fishermen operate varied types of fishing devices in open waters.

Strategy of 11th Plan

1. Fish seed is the nucleus of fisheries development hence maximum thrust is laid on strengthening of Carp and Trout farms. Eight seed farms (four Trout and four Carp) would be either upgraded or renovated while construction of Trout Farm at Dhamwari (tehsil Rohru, Distt: Shimla) shall be completed. One trout farm, Nagini (Kullu) washed away due to the floods in 2005 shall be reconstructed and fish seed ranching of Tirthan river resumed.
2. Plan aims at immediate arrest of the downward trend in the reservoir fish catches. For achieving this intensive fish seed stocking would be done besides improvement in management measures.
3. Intensification of aquaculture practices through Fish Farmer's Development Agencies.
4. Implementation of welfare schemes such as accident insurance, risk fund and saving-cum-relief for fishermen.
5. Revival of Riverine fisheries by setting up Mahseer fish farm.
6. Initiation of ornamental fish farming and dissemination of technology to private sector.
7. Extension of commercial trout farming technology in private sector.

Schematic details are as under:-

I. Inland Fisheries

1. Management and Development of Reservoir Fisheries

(i) Conservation of Reservoir Fisheries

Reservoirs hold a prominent place in the fish production of the state besides ameliorating the economic status of dam oustees of these sprawling water bodies. Various studies conducted by the scientific institutions and past experience gained by the department during their management indicates that their fish production can be further enhanced. Instead of increasing the catches from Gobind Sagar & Pong these had been showing downward trends for the last two years. Keeping this in view, a decision has been taken to stock these water bodies with adequate seed of commercially important fish species besides giving new orientation to the observance of fishing close season during breeding season of fish. There is a need to bring these reservoirs under one administrative control on the analogy of trout farming.

(ii) Production of Carp Seeds

Fish seed is the nucleus of all fishery activities. In all, six carp farms have been set up in the State, which are producing 20.00 million per annum seed of carp mainly consisting of common carp as the major area of the State falls in cold zones unsuited for the breeding of Indian Major Carps. The State has achieved success in breeding Golden Mahseer (*Tor putitora*) at its farm and its farm has been stocked in Chamera reservoir. All the existing carp farms in the State have been assigned clear mandate for the production of fish seed of a particular fish species instead of keeping all the different species irrespective of the fact whether they are capable of breeding at these farms or not. Besides, a fish farm is being remodeled for conversion into ornamental fish seed farm.

Besides, every year angling competitions of Mahseer are organized by the department with the collaboration of tourism department to promote angling competitions/angling meet in the State. Such competitions are becoming popular and besides giving publicity to tourists in-flux in the State, such competitions give an assessment of the establishment of the particular sport fish in the water body.

2. Development and Maintenance of Sports Fisheries-Trout Seed Farm

The department has initiated a phased programme on remodelling and expansion of existing trout farms as well as construction of new ones. Under this programme augmentation of water supply and setting up of modern hatchery has been taken up at Barot and at Dhamwari farm. The department intends to continue trout farms modernization programmes in view of compelling need of large seed stocking in the

rivers and streams as well as promotion of trout farming in the rural areas of the State. All the State trout farms are proposed to be upgraded on the level of Indo-Norwegian trout farming project with adequate water supply provision, filtration modern hatchery equipped with latest hatching equipments, adequate rearing space, feed mill and residential accommodation. Maximum stress would be given on quality seed production in trout farms for stocking in river/streams as well as supplying to enterprising trout farmers.

Trout is the renowned game fish of the world and every year angling competitions of trout are organized by the department with the collaboration of tourism department to promote angling tourism meet in the State.

3. Development & Maintenance of Carp Farms

There is no denial that Golden Mahseer (*Tor-putitora*) a prestigious game fish of hills is fastly depleting from State waters in view of several man made and natural hazards. The present situation warrants large-scale seed transplantation of this species in the different ecologically suitable pockets of streams and rivers.

Now the State Government has decided to set up a Mahseer farm at Machhiyal, Tehsil Joginder Nagar, Distt: Mandi. The land for the construction of the farm has been arranged and A/A & E/S has also been accorded for the work and this work has been proposed to be completed within the shortest possible period.

II. Extension & Training

Training has been identified as the weakest link of the department. A number of State & centrally sponsored schemes initiated by the department could not get adequate popularity in view of poor extension and training efforts. Presently, the training programme organized by the department lack regularity and run purely on ad-hoc manner. There are no fixed training schedules and selections of the trainees are also not done in a systematic way. Similarly, extension programme especially participation in exhibitions, melas, State fairs, holding of camps etc., lack requisite planning and projection. In fact, there is no such 'Extension & Training' wing in the department, which should be entrusted for carrying out these programmes and due to lack of such a mechanism aquaculture programme is not making a good headway or impact especially in the rural pockets of the State. It is, therefore, proposed to set up an extension & training wing in the department.

III. Intensification of Aquaculture Programme

1. Fish Farmers Development Agency (S25N) (FFDA)

Development of aquaculture programme would be one of the major priority areas of the department during the plan period. Despite having tremendous potential

of raising the State's fish production, generation of employment, strengthening of fish production, aquaculture could not make any discernable impact in the State in earlier years in view of inadequate availabilities of quality seed and lack of technical know how which could benefit the State's complex topography. The running water scheme initiated in the State during the 10th Plan period has provided an adequate answer to many of the problems of pond fish culturists. In view of plenty of water flowing in the form of streams, kuhals and abundance of Mirror Carp seed in the State, the scheme of 'Running Water' fish culture is getting increasingly popular among the fish farmers of the State. The pond culture is also going to get boost during the coming years in view of availability of fish seed, initiation of several extension & training schemes and department's stress on extension programme.

2. Development of Inland Fisheries Aquaculture

State of Himachal being hilly & few districts like Shimla, Kullu, Lahaul & Spiti, Kinnaur, part of Chamba & Mandi, Kangra & Sirmaur are cold-water zone, therefore, under above FFDA complete State was not being benefited from the ongoing schemes. A new dimension has been given to the FFDA schemes for cold-water areas under the title Inland Fisheries & Cold Water Aquaculture "Development of Inland Fisheries & Aquaculture". This shall cover aquaculture along with reservoir fisheries development mainly purchase of fish seed etc..

5. Forestry and Wild Life

(A) Forestry

Himachal Pradesh is one of the premier states of the Himalayan region that forms catchment of main rivers of northern India and happenings in the watersheds affect the flow of water and transport of sediments to the rivers and reservoirs down streams. The maintenance of adequate forest cover in the state is, therefore, of great importance.

The total geographical area of the State is 55,673 Sq. Kms. Total forest area (as per forest record) is 37,033 sq.kms. Out of the total forest area, 16,376 sq.kms area is not fit for tree growth comprising of alpine pastures, area under permanent snow and other similar areas being above the tree line although it forms part of vital eco-systems and wild life habitats. The culturable forest area is only 20,657 sq.kms.

As per latest State Forest Report of Forest Survey of India (FSI), an area of 14369 sq. km. is actual forest cover. This is constituted by 1,097 sq. km. of very dense forest, 7,831 sq. km. moderately dense cover and 5441 sq. km. with open forest. In addition to this, 383 sq. km. area has been described as scrubs.

Afforestation work in Himachal Pradesh started from the first Five Year Plan and is continuing till date. Afforestation over 2,825 sq.kms area done prior to the year 1980 is presumed to have been registered in the satellite imageries being used by FSI. Plantations over 7114 sq.kms area has been done in the post 1980 years, the survival of which is about 60%.

The afforestation programmes will be continued with enlarged emphasis on community participation in development and management of forests. Emphasis on utilizing the forest resources for promotion of eco-friendly tourism will be enlarged.

In the light of what has been said above, the current scenario is described in the following table:

(Area in Sq. kms.)			
Sr. No.	Category	Area	Remarks
1.	Geographical Area of the State	55,673	-
2.	Area required under forest cover as per NFP, 1988	37,115	Total culturable area under recorded forests is 20657 sq.kms. For the purposes of policy requirements, unculturable area forming vital eco-system and wildlife habitats shall also have to be considered.

Sr. No.	Category	Area	Remarks
3.	Forest Area as per forest record	37,033	
4.	Unculturable Area	16,376	Includes area under snow-cover, permanent high altitude pastures, rocky mountains and above tree line (unfit for tree growth).
5.	Culturable Area	20,657	
6.	Very Dense Forest	1,097	Requires protection.
7.	Moderately Dense Forest	7,831	Requires protection improvement in density.
8.	Open Forest	5,441	Requires protection improvement in density.
9.	Balance Culturable Area	6,288	Includes scrub, blank areas and area covered by plantations, which is not picked up in the satellite imagery (say post 1980 plantations).
10.	Plantations (Post 1980 till 2007-08)	7,114	Assumed to be fully surviving and left out of the satellite imagery.
11.	Area under Scrubs	383	Requires conversion into useful forests.

In view of the above scenario, category wise break up of the area in Himachal Pradesh is as under:-

Category	Area in Sq.Km.
Total Geographical Area	55,673
Area under management with the Forest Department	37,033
Area under alpine pasture including under permanent snow	16,376
Balance Area	20,657
Area over which forests can be raised/tree cover can be provided/density can be increased	12446 (Sr. No. 5-6-10)

The policy requirement places demand for additional areas to be brought under tree cover, whereas the total culturable area that is available under recorded forests is 20,657 sq.kms. There are areas like permanent pastures, which can not support tree cover and grass is the best vegetation that can grow there. In the current scenario, there seems to be no other way out except to consider the un-culturable areas forming vital eco-systems and wildlife habitats also as part of forest/tree cover although it is agreed that for carbon sequestration purposes, tree cover is the only lasting answer. The National Forest Policy needs to consider maintaining eco-systems and habitats as well in addition to giving emphasis on tree/forest cover alone.

The strategy for the future has taken following facts into consideration:

- The area under Moderately Dense (7831 sq.kms) requires protection improvement density.
- The blank area needs to be afforested.
- The scrub area (383 sq. km.) needs to be converted into some useful tree cover.
- The post 1980 plantations (7114 sq. km.) were presumed to be fully surviving. But in reality, many of the areas may not be fully surviving requiring re-visit/re-forestation (say about 40% = 2846 sq. km.).
- The village grazing lands and even the permanent pastures require improvements in terms of soil and moisture conservation and increase in the nutritious and palatable grass. Low altitude pastures are available for Silvi-pastoral activities also. These grazing lands and pastures require frequent re-visiting at short intervals keeping in view the high grazing pressure.

To achieve the goals set forth in the National/State Policy, the following steps will be considered while implementation of the State Plan:-

- The forest working has been nationalized by creating a public sector undertaking, which deals with exploitation and sale of forest produce.
- Various legal and administrative steps have been taken during the past few years to protect/conservate this national wealth worth about Rs. 1,00,000 crore by checking illicit felling/organized timber smuggling through:-
 - a) Himachal Pradesh Land Preservation Act, 1978 has been enacted for regulating the felling on private lands.
 - b) Himachal Pradesh Forest Produce (Regulation of Trade) Act, 1982 which prohibits Sale of restricted/nationalized species by any private owner to any one except the H.P. State Forest Corporation.
 - c) The Indian Forest Act (H.P. Second Amendment Act) 1991 has been the latest enactment of this Act vide which sub- section 52(A) has been added to check smuggling of forest produce.
 - d) Vide Himachal Pradesh Govt. Notification No. 1-2/71-LSG dated 8.6.1994, DFOs in the State have been empowered under Himachal Pradesh Public Premises & Land (Eviction and Rent Recovery) Act to deal with the problems of encroachment on the forest lands.
- ◆ In view of tremendous pressure on forests due to extraction of timber, fuel wood and fodder etc. worth approximately Rs. 1020 crore annually, it is essential to compensate this loss by large scale afforestation and pasture

development works. During the 11th Plan (2007-12), an area of 41,700 hectare is likely to be afforested under different schemes.

- ◆ Evaluation of plantation raised under various schemes is receiving greater attention. As organizational measure, a system of mandatory field inspection works by various field functionaries is being done.
- ◆ Completion of forest settlement operations in Himachal Pradesh is also underway, according to the recommendations of the State Level Committee relating to forest settlement operations approved by the Government in May, 1979. Additional financial resources and administrative measures can only expedite this work for which steps are being taken.
- ◆ All the expired working plans are being reviewed/updated so that the forest area in the whole of the State is brought under scientific management.

With the experience gained in the past and to continue the schemes undertaken relevant to the forestry priorities, objectives for the Eleventh Five Year Plan according to the State and National Forestry Policies are as under:-

- i) Settlement, demarcation and consolidation of forest area to be undertaken on war-footing.
- ii) For protection of forest wealth of Himachal Pradesh of Rs.12.68 crore m³ standing volume, valuing about Rs. 1,00,000 crore from where removals/services worth Rs. 1020 crore are being taken every year will be protected by strengthening the existing legal frame work.
- iii) The degraded forest lands, the village Common Lands and Wastelands will be rehabilitated through various State & Centrally Sponsored and Externally Aided Projects/Schemes so that the forest cover as per policy of the Government is achieved.
- iv) Integrated micro watershed based approach for Forestry and Soil Conservation will be adopted.
- v) Need for organizing comprehensive training both in the country and abroad to be considered on high priority for capacity building and improving professional management of the cadre.
- vi) More and more Integrated Externally Aided Projects will be prepared for conserving and ameliorating the environment of the State.
- vii) The concept of Joint Forest Management will be implemented in letter and spirit as per notification issued by the Government and making people partners in the management of forests.
- viii) Forestry will be developed in such a way that it will supplement Rural and Tribal Development.

- ix) On account of moratorium on green felling resulting in loss of revenue, efforts will be made to get special assistance from the Central Government, in the overall national interest.

Description of Programmes and Schemes

A. State Plan Schemes

1. Direction and Administration

This is a staff oriented ongoing scheme since previous plans to have the management needs identified and administration strengthened. After rationalization of the schemes and to achieve better and effective result, the staff which were earlier charged in concerned schemes is now being charged under this scheme.

2. Forest Research and Training

With increasing pressure on the forests, applied research in the forestry is gaining significance. Establishment of seed stand, preservation plots and bio-sphere reserves etc. are among the various activities taken up under this scheme.

3. Forest Conservation and Development

a) Survey and Demarcation

In order to eliminate chances of illicit felling and incidence of encroachment due to ill-defined boundaries, the forests are to be demarcated by fixing boundary pillars. The survey operations as envisaged under this scheme are to be carried out.

b) Forest Protection

Protection of forests under the increasing biotic pressure becomes more significant. To ensure this and protecting the forests from fires, an effective and adequate infrastructure needs to be developed.

c) Working Plan Organization

For scientific forestry and systematic management of the forests, revision and up-dating of working plans is an important pre-requisite to achieve the goal. All efforts are being made to revise the working plans.

4. Social and Farm Forestry

After rationalization of schemes, the following new schemes were introduced during 2000-2001 in place of Production Forestry and Social & Farm Forestry:-

i) Development of Pasture and Grazing Land Improvement

This is an ongoing scheme since the second Five Year Plan. In this hilly State, cattle, sheep and goat mainly depend upon the pasture land in the higher reaches. Under this scheme, the high altitude pasture as well as grazing lands adjoining the village is taken care of by introducing better grasses and raising fodder trees. Besides this, steps are also taken to prevent soil erosion.

ii) Improvement of Tree Cover

The following schemes will be implemented under improvement of Tree Cover:-

a) Afforestation Scheme

i) Objective: This scheme envisages covering blank areas for bringing them under tree cover in order to achieve optimal land use. Both conifer and broad leaved species of indigenous as well as tried and tested exotic origin suitable to the site will be planted.

ii) Activities: Fencing of the area, soil moisture conservation measures, planting and bush cutting to a limited extent will be done to facilitate establishment and growth of plants.

b) Enrichment Planting

i) Objective: Areas of poor density with inadequate stocking (with density ranging from 5% to 20%) shall be covered under this scheme to improve their stocking and productivity.

ii) Activities: Fencing of the area, soil moisture conservation measures, planting wherever necessary, bush cutting and cultural operations etc. shall be done under this scheme.

c) Re-afforestation of Scrub Areas

i) Objective: To convert areas under scrub including those covered by bushes and weeds like Lantana, Eupatorium and Ageratum etc. into productive forests/plantations by introducing suitable species of indigenous and exotic origin.

ii) Activities: Fencing of the area, soil moisture conservation measures, weed removal bush cutting and planting etc. shall be done under this scheme.

iii) Raising Nurseries for Departmental Planting and Public distribution

To raise genetically superior and healthy plants for planting activities and also for distribution to the public to achieve right balance of mix of suitable species (both conifer and broad leaved) of long, medium and short gestation period in the departmental nurseries. The scheme would help separate the cost of raising of the nursery from the planting cost.

5. Externally Aided Projects:

I) Integrated Watershed Development Project for Mid Himalayas

IWDP(Hills-II) Himachal Pradesh is being implemented in Shiwalik area of Himachal Pradesh since 1999. The performance of this project has been appreciated at various levels including World Bank Supervisory Missions. Encouraged by the results of the project in the field and overwhelming response of the people, a new Integrated Watershed Development Project has been formulated for the Mid-Himalayas of Himachal Pradesh with an estimated cost of Rs. 365 crore. The Mid-Himalayas in the State include the part areas of districts Chamba, Kangra, Hamirpur, Mandi, Bilaspur, Solan, Sirmaur and Shimla ranging from 800m to 1600m. The project focus primarily on the issue of poverty alleviation alongwith resource rehabilitation, conservation and development assimilating the lessons learnt from IWDP (Hills-II) Kandi. The total duration of the project will be of seven years. The first year will be treated as zero year and will be mainly utilized for institutional building followed by full-scale implementation of various activities for another five years. Last year of the project is proposed for phasing out phase i.e. withdrawal of the project. The basic aims of the project are as under:

- Prevention of degradation of high potential areas while optimizing productivity of arable and non-arable lands with eco-friendly technologies.
- Preserving and protecting the areas of high bio-diversity through better forestry process, livestock management and soil and water conservation practices.
- Restoration of productivity of degraded lands.
- Improving the productivity of the livestock by increasing the proportion of graded animals.
- To improve the accessibility of rural areas in order to facilitate the implementation of the project and carriage of farm produce to the nearby markets.
- To organize the local communities and to strengthen the local institutions in natural resource management.

II) Swan River Flood Management Project (CAT-I)

This project located in the Una district of the Pradesh has been started in the year 2006-07 with the help of Government of Japan, ODA loan package. The funding pattern of the project is 85 percent loan and 15 percent State share in the shape of salaries to staff and taxes etc. The main objective of the project is to reduce soil erosion and watershed catchment treatments of the 73 tributaries of the Swan river to reduce the water traffic to the main Swan river. The span of the project is 8 years and will be terminated on 2014.

The annual plan wise outlay provided for this project is given as under:

(Rs. in Crore)		
Sr. No.	Annual Plan	Outlay
1	2	3
1.	2006-07	1.38
2.	2007-08	8.18
3.	2008-09	9.75
4.	2009-10 (Proposed)	20.00

6. Regeneration of Chilgoza Pine

The scheme earlier started as 100% Centrally Sponsored Scheme has been taken up in the State Plan during the year 1987-88. The scheme aims at developing Chilgoza Pine nursery and subsequent raising in field.

7. Other Expenditure

a) Amenities to Staff and Labour

This scheme is meant for providing the basic amenities for the staff and labour.

b) Sanjhi Van Yojana

This scheme has been introduced in the year 1998-99 to have the participation of communities in the natural resource management in general and forests in particular. The scheme is community oriented. It aims at empowering people, and the communities in accepting a greater role and responsibility in management of the natural resources. It is essentially an exercise in social engineering and can not be strait-jacketed into a cut and dry blue print approach of laying physical and financial targets alone. The scheme would have long term implications in improving planning and management skills of the communities and staff which would be visited by a

process approach. The commitment and awareness shown by the communities and its people would determine the progress. It would thus need to be monitored against milestones in developing the inherent authority of people's power and its effect on more equitable and sustainable use (conservation) of natural resources in general and forest products in particular. Thus flexibility of approach would be the corner stone in building the edifice of the scheme. The main objectives are:-

- i) Involvement of grass root level institutions such as Gram Panchayats, Mahila Mandals, Yuvak Mandals, Schools, Village Development Committees (VDC's), NGOs etc. in eco-restoration.
- ii) Regeneration of degraded forest areas through community involvement.
- iii) Creation of social assets for the benefit of the communities.
- iv) Increasing productivity of the forest areas by improvement of nursery stock through adoption of modern nursery techniques.
- v) Re-orientation of the forest staff for facilitating community participation.
- vi) Generation of employment opportunities in rural areas.
- vii) To bring more areas under tree cover by encouraging rehabilitation/plantations of private wastelands on cost/benefit sharing basis.

8. Communication & Buildings

a) Communication

This is an ongoing scheme since first Five Year Plan. The scheme envisages to serve the inaccessible productive tracts of forests with adequate communication network, thus increasing the out turn of the produce and its effective management. It aims at providing better means of communication in the shape of jeepable roads, bridle paths, inspection paths etc. in the interest of speedy development.

b) Buildings

Duties of the Forest Officers demand that they stay in the remote forest areas. Under this scheme, functional as well as residential buildings are to be constructed as housing facility to the field staff still continues to be inadequate.

(B) Wild Life

The fauna of Himachal Pradesh is very impressive, diverse and unique. Among the pheasants there is progression with the increasing altitude- Kalij in the foot-hills, Koklas and Monal in the temperate and mid-level forests and the snow cock in the alpine areas. The western tragopan, a rare and endangered species is confined only to western Himalayas. Himachal Pradesh has probably the biggest population of Chir pheasants in the world. Small mammals include the Himalayan and long tailed Marmots, Himalayan Squirrels and wolves. Among herbivorous are the Ibex, Serow, Blue sheep, Thar, Musk Deer, Goral and the Yak. Himachal Pradesh represents a large variety of carnivorous, which are either rare or of intermediate status like Black Bear, Brown Bear, Himalayan Weasel, Yellow Throated Marlin, Stone Marlin, Wolf, Common Leopard. Snow Leopard is a proud representative of the larger cats in the State.

At present there are two national parks and 33 sanctuaries in the State. The total area under both categories of protected areas is 7160.75 Sq. Kms which is about 12.7% of the total forest area of the State. Felling of trees for any purpose in both the National Parks and 33 sanctuaries is prohibited.

The following activities are being carried out in the Pradesh:-

- Protect, develop and scientifically manage the wildlife in the protected areas.
- Bring more area under the protected area net-work.
- Protect the wildlife and its habitat in areas outside the protected areas.
- To carry out integrated eco-development work in the vicinity of protected areas to reduce the biotic pressure in protected areas.
- Carry out the captive breeding and rehabilitation of endangered species.
- Create nature awareness among local people in general and youth in particular and also to involve the Non-Governmental Organizations.
- Carry out field research regarding wildlife of Western Himalayas.
- Establish and develop zoological parks for Western Himalayas.
- Propagate Eco-Tourism

The brief description of some of the important schemes is as under:-

I. State Plan Schemes

1. Wildlife Preservation

After rationalization of schemes, a new scheme namely Wildlife preservation has been introduced during the year 2001-2002 in place of Wildlife Management and Nature Conservation, Improvement and Development of wildlife sanctuaries and Awareness for nature and Wildlife Conservation amongst youths. The main objective of the scheme is payment of relief on account of loss of injury to human life and loss of cattle life by the wild life animals in protected areas.

2. Development of Himalayan Zoological Park

This is a continued scheme from the Seventh Five Year Plan and upto the end of this plan period, 6-7 centres for collection of Western Himalayan Species were developed under this scheme in the State. The area of expenditure under this scheme is repair of existing enclosures and feeding of zoo animals including the expenditure of treatment of the ailing Wildlife animals and birds. Now the base is ready to undertake the establishment of Nature Park in the State for which surveys and preparation of feasibility report has already been taken up.

3. Improvement and Development of Wildlife Sanctuaries

This is a continued scheme from the Tenth Five Year Plan for tribal areas. The area of expenditure under this scheme is Wildlife Survey, Habitat Improvement, Fodder and Pasture Improvement plantation and Soil Conservation works, Census of animals/birds, construction of infrastructure.

II. Central Sector Schemes

1. Assistance for Development of National Parks and Sanctuaries

The scheme envisages intensive management of 33 Wildlife Sanctuaries and two National Parks in the State on modern scheme lines. The area of expenditure under this scheme is protection works, habitat improvement, research work, fire protection measures, soil conservation works, plantation of fuel and fodder trees, improvement of existing paths and enclosure, training/awareness programme, salt licks construction of retention dams/ponds etc. in the National Parks and Sanctuaries. Also School/College students and local Youths are taken to wildlife areas for exposure and creating love in them for wildlife and nature conservation. Equipments like projectors, film, camping Equipments etc are purchased

2. Development of Pin Valley National Park

The Pin Valley National Park is situated in the Pin Valley of Spiti Sub-Division of Lahaul and Spiti District. The area supports unique flora of cold desert eco-system. Pin Valley National Park is one of the few areas where Snow Leopard, which is a highly endangered species in the world, is found alongwith its prey species. Besides main birds, animals found in this park area are Snow Wolf, Ibex, Himalayan Brown Fox, Himalayan Blue Sheep, Snow Rabbit, Marmots, Weasels, Snow Cock, Chukor, Hill Pigeon, Yellow Billed Chough etc.

This is a continued scheme from Seventh Five Year Plan and during this period, emphasis has been laid on creating the infrastructure, creation of posts and settlement of rights. Efforts are being made to develop this park for providing proper protection to all wildlife specially to Snow Leopard etc. The works like construction of buildings to all categories of staff, construction of bridle/inspection paths, construction of water ponds, water harvesting structures, habitat improvement, fire protection measures, study and research works, soil conservation works, acquisition of rights etc. will be carried out under this scheme.

6. Rural Development

Rural development and poverty alleviation have been the major areas of concern and thrust for the nation since independence. The Community Development Programme consisting of various sets of schemes was launched on 2nd October, 1952 throughout the country with the objective of overall development of rural areas with the active participation of community. Development Blocks were created and considered pivotal for planning and implementation of various rural development schemes.

Alleviation of poverty has been an important element in India's strategy for Development, which is not viewed merely as a function of growth. Since mid 1970's, a series of special programmes aimed at alleviating acute poverty and increasing rural employment, are being implemented in the country. These include resource and economic development programmes for the rural poor like IRDP, TRYSEM, DWACRA works oriented programmes for creation of supplementary employment opportunities like NREP, RLEGP, GRY and special area development Programmes like DPAP, EAS and Desert Development Programme. In the earlier five-year plans i.e. 6th, 7th, 8th, and 9th, the benefits were provided to the rural poor under these programmes. According to the BPL census conducted for the ninth five-year plan, total 286447 families have been identified below poverty line. The criteria adopted for the identification of these families were monthly per capita consumption expenditure. Now as per guideline of Government of India the identification of BPL households for 10th five year plan, has been done on the basis of cut off score. During 10th five year plan the poverty eradication remained the focus and accordingly the financial provision were also kept. Similarly, during eleventh five year plan, efforts will be made to reduce poverty in the rural areas by providing employment to the rural poor with the involvement of Panchayati Raj Institutions and NGOs in the Planning and Execution of poverty alleviation and employment generation Programmes. The department is presently implementing the following schemes / programmes.

Strategy for Eleventh Plan (2007-12)

A. Special Programmes for Rural development/ Area Development.

(I) Watershed Development Programme

Government of India launched Watershed Development Programme on watershed approach during the year 1995-96. The main objectives of the programme were to ensure over all development of rural areas, harvesting of rainwater, employment generation, poverty alleviation, community empowerment and development of human and other economic resources of the rural areas, mitigating

the adverse effects of extreme climatic conditions and development of natural resources etc.

Under these components, the targets are, to treat the land identified under Watershed Development Projects. The main activities are soil moisture conservation, Water Harvesting, Afforestation, Pasture Development, Horticultural /Agricultural Dev. etc. Presently, following three programmes are being implemented on watershed approach:

1. Integrated Wastelands Development Programme (IWDP)

1. Drought Prone Area Programme (DPAP)

2. Desert Development Programme (DDP)

IWDP is being implemented in district Chamba, Hamirpur, Kangra, Kullu, Mandi, Shimla, Sirmour, Four blocks of district Solan (Nalagarh, Solan, Kandaghat & Dharampur) and two blocks of district Kinnaur (Kalpa & Nichar)

DPAP is being implemented in district Bilaspur, Una and two blocks (Kunihar & Dharampur) of the district Solan.

DDP is being implemented in district Lahaul-Spiti and Pooh block of the district Kinnaur.

Prior to 1-4-2000, under IWDP, 100% cost was released by the GOI and per hectare cost was Rs.4000/-. Under DPAP, prior to 1.4.1999, the sharing pattern was Rs.50:50 between Centre and State which was revised to 75:25 % between Centre and State and per hectare cost was Rs.5000/- per hectare. After 1.4.2000, the Government of India has revised the cost at the rate of Rs.6000/ per hectare for treatment of the area. The programme wise details are as under:-

New projects sanctioned after 1-4-2003 are being implemented as per Hariyali Guidelines. Projects sanctioned under Hariyali guidelines will be implemented through the Panchayati Raj Institutions. However, projects sanctioned prior to 1.4.2003 will continue to be implemented as per Guidelines of 2001. Under Haryali Guidelines the execution of watershed projects will be through the Panchayati Raj Institutions and funds will be released in five installments by the GOI instead of seven installments as per old guidelines.

During 9th & 10th Five Year Plan the Projects totaling more than Rs. 450 Crore have been sanctioned for treatment of 7.77 lakh hectare of wasteland. The project period under these schemes is normally 5 years but it has been observed that the projects are completed between a period of 6-8 years. As per information in Wasteland Atlas of India, an area of 28327 Sq. Km. is wasteland area in the State which is 50.88% of total geographical area. The area which has been identified for

treatment is roughly 27%. Hence, it is estimated that an area of 6.00 lakh hectare will be covered during 11th Five Year Plan under IWDP, DPAP &DDP.

Under IWDP, an amount of Rs.19232.00 lakh is expected from GOI under ongoing and new projects and an amount of Rs.1747.59 lakh is needed as state share during 11th Plan.

Under DPDA, an amount of Rs. 6906.00 lakh is expected from GOI for ongoing and new projects against which an amount of Rs. 2302.00 lakh is required as State Share during 11th Plan.

Under DDP, approximately an amount of Rs. 9300.00 lakh is expected from GOI and Rs. 3099.01 lakh are needed to meet out the requirement of State Share during 11th Plan.

(II) DRDA Administration

The Government of India has restructured various centrally sponsored schemes and has stressed the need for qualitative implementation and monitoring of these schemes at grass root level. Besides, in order to have better results and proper utilization, DRDAs and State Level Monitoring Cell have been created. For this purpose, the Government of India provides funds in the following manner:

- | | | |
|---|---|----------------|
| 1. For Districts having Blocks less than 6 | = | Rs. 46.00 lakh |
| 2. For Districts having Blocks upto 10 | = | Rs. 57.00 lakh |
| 3. For Districts having Blocks more than 10 | = | Rs. 65.00 lakh |

Under DRDA Administration, the expenditure is shared by the Central and State Government on 75:25 sharing pattern. It is estimated that an amount of Rs. 2797.00 lakh will be received as central share. The requirements of state share will be Rs.932.19 lakh during 11th Five Year Plan.

(III) Indira Awas Yojana

Indira Awas Yojana is a Centrally Sponsored scheme. Under this scheme, an assistance of Rs.38500/- is provided to a BPL family. The criteria of selection of beneficiaries is done in the Gram Sabha. The sharing of funds between Centre and State is in the ratio of 75:25. Under this scheme, the financial assistance of Rs. 38500 is being provided for construction of a house to a BPL family. This will be continued during 11th five year plan. As per estimates, an amount of Rs.4231.00 lakh will be received as central share, against which an amount of Rs.1410.15 lakh is required as state share for construction of 20508 houses during 11th Five year Plan.

B. Rural Employment / Self Employment Programmes

(I) Swaranjayanti Gram Swarozgar Yojana

Swaranjayanti Gram Swarozgar Yojana has been launched from the year 1999-2000 as a major poverty alleviation programme in the State. This Yojana lays emphasis on group approach instead of individual beneficiary approach which would enable the beneficiaries to start with viable projects in a joint manner which can bring them higher incomes. This approach will also improve the skills of the poor through an in-built training component, up-gradation of technology, providing adequate backward and forward linkages, availability of adequate infrastructure and better marketing arrangements. There is a dire necessity to explore the possibility of finding small industrial units on the basis of local raw material. At the national level, 15% funds have been earmarked under SGSY exclusively for implementing infrastructure development projects to ensure maximum self-employment opportunities to the target group families in the rural areas. The subsidy at uniform rate of 30% of the project cost subject to a maximum limit of Rs.7500/- will be provided. In respect of SCs/STs and disabled persons, subsidy will be @ 50% and Rs.10000/- respectively. For groups of swarozgaries (SHGs), the subsidy would be 50% of the project cost subject to per capita subsidy of Rs.10, 000/- or Rs.1.25 lakh whichever is less.

Proper training of officials/non officials at the district and block level is to be ensured. There is also a need to strengthen the field functionaries at all levels. This calls for strengthening the existing training institutions and identifying certain other institutions where these functionaries may be imparted training about the implementation of anti-poverty employment generation and other social welfare programmes. The Central and State Governments are funding this scheme on 75:25 sharing pattern. Hence, it is estimated that an amount of Rs.3685.11 lakh will be received as central share under normal SGSY against which an amount of Rs.1228.37 lakh will be needed as State share for 11th Five Year Plan to assist approximately 36277 BPL households.

(II) Sampoorna Grameen Rozgar Yojana. (SGRY)

In order to create additional gainful wage employment to the rural people particularly the weaker sections of the society, employment generation programme “**SAMPOORNA GRAMEEN ROZGAR YOJANA**” is being implemented in the State. The scheme is being implemented on cost sharing basis between centre and the state in the ratio of 75:25 of the cash component. The food grains are free of cost. This scheme focuses on the creation of rural infrastructure for more sustained wage employment and rural development. During 11th Plan, the estimated amount to be received from the GOI as Central share is Rs.2160.00 lakh and an amount of Rs. 720.00 lakh is required as State Share. Apart from this, an amount of Rs.99.50 lakh is needed to meet out the transportation charges of foodgrains. However, this has been merged into NREGA w.e.f. 01-04-2008.

(III) National Rural Employment Guarantee Act.

Parliament has enacted the National Rural Employment Guarantee Act, 2005 in September, 2005. Under the act, the livelihood security of the house hold in rural area has been ensured by guaranteeing one hundred days of guaranteed employment in every financial year to every households whose adult members volunteer to do unskilled manual work. The act came into force w.e.f. 2nd February, 2006 in the districts notified by the Government of India. In Himachal Pradesh, Chamba, Kangra, Mandi and Sirmour districts have been covered under this scheme. The rest of the districts of Himachal Pradesh have been covered w.e.f. 1.4.2008. If applicant is not provided with an employment within 15 days of applying, he or she shall be entitled to a daily unemployment allowance. The unemployment allowance for first 30 days will be one fourth of the daily wage and after that the unemployment allowance will be 50% of the wage rate. The scheme will be implemented on 90:10 cost sharing basis between Centre and the State Government. But 100% expenditure on unemployment allowance will be borne by the State Government although the scheme is demand driven yet the department has proposed an estimated outlay of Rs.16409.00 lakh for 11th Plan.

(IV) Guru Ravidass Civic Amenities up-gradation Scheme

This scheme has been launched in the State to provide Civic Amenities like pucca streets, drainage, and public hydrant or in the absence of piped water supply provision of a hand-pump etc. in the villages having highest concentration of Scheduled Castes population. The ward will be surveyed for gaps in availability of civic amenities like pucca streets, drainage, public hydrant or in the absence of piped water supply provision of a hand-pump etc. Based on this assessment, in each Vidhan Sabha Constituency, an amount of Rs. 3.00 lakh is provided in a year to meet such needs from the year 2006-07. The allocation under this head has been increased to Rs. 10.00 lakh for each constituency in non- tribal areas of the state. In view of the revised allocation, the estimated requirement of funds during 11th Five year Plan will be Rs.3250.00 lakh.

C. Housing

I Atal Awas Yojna

Atal Awas Yojna will be started as new housing scheme for poor houseless persons w.e.f. 1-04-09. This scheme will be administered on the pattern of the ongoing Centrally Sponsored Scheme “Indira Awas Yojna”. The scale of assistance is exactly equal to Indira Awas Yojna and this scheme also covers the beneficiaries living below the poverty line.

7. Community Development

The present set up of the schemes under Community Development Programme is based on old community development concept which aims at development of community with the initiative and participation of community itself. For 11th Five Year Plan, the funds are to be provided under different schemes under this head.

(I) Total Sanitation Campaign

All 12 district of the State have been covered under Total Sanitation Campaign and Government of Himachal Pradesh has launched a comprehensive strategy to tackle the sanitation challenge by promoting full sanitation coverage in rural areas and eliminate the practice of open defecation in the state. The programme is being implemented with an active participation of rural masses and Panchayati Raj Institutions. The primacy of awareness in generating a demand for sanitation through IEC is the successful achievement of goals of sanitation. The State of Himachal Pradesh has already developed an IEC manual and a technical manual. These manuals contain information about low cost technology and IEC activities to be taken at different levels. In addition to it, state has also arranged different workshops on IEC in which large numbers of participants like members of Zila Parishad, Panchayat functionaries, NGOs, representatives from departments like IPH, Health, Education and DRDAs have participated.

The DRDAs have been requested to promote the scheme at the Panchayat level to get the award under Nirmal Gram Puskar Yojana. A parallel state level reward is also there to promote the programme. This is a sanitation competition scheme for the cleanest Gram Panchayat in which different criteria like ODF village, methods of solid waste management and waste water disposal, hygiene and community sanitation usage etc. are taken into account. With the revision of BPL subsidy and addition of the components like solid waste management is definitely going to pace up the achievement of the programme and state will be able to achieve the goal by the year 2015.

Convergence of the Total Sanitation Campaign with National Rural Health Mission has also started at State level. At district level, the District Health Mission would guide activities of sanitation at district level and promote joint IEC for public health, sanitation and hygiene, through village Health and Sanitation Committee and promote household toilets and school sanitation programme, which will be successfully achieved during the 11th plan. Hence, in view of the position explained above, necessary provision of sufficient outlay for 11th Plan are needed under the scheme and it has been estimated that an amount of Rs. 1200.00 lakh is needed to meet out the requirement of state share.

(II) Mahila Mandal Protsahan Yojana

With the objective of encouraging Mahila Mandals towards involvement in development programmes, the department has introduced a scheme titled “**Mahila Mandal Protsahan Yojana** ” from the year 1998-99 which aims at creating awareness of various developmental programmes among the people through the Mahila Mandals and encouraging their involvement in development programmes. Besides, it aims at generating awareness among the rural woman in family planning and child care, promotion of small savings, participation in literacy/post literacy campaigns and educates them about the social evils like drinking, dowry and crimes against women. The funds under this scheme are being provided to only registered Mahila Mandals on the basis of their performance in various developmental activities. The incentive money sanctioned under this scheme is utilised for creation of community assets, purchase of utensils, dairies, furniture, musical instruments, and organization of cultural activities/awareness camps and conducting of study tours within the State. Under the scheme, it is proposed that this amount will be increased to Rs.75.00 lakh for each year during 11th Five Year Plan (2007-12).

(III) Construction/Completion of Office/ Residential Buildings

Under this sub head, funds are provided to the blocks for the construction/completion of staff residential buildings and Gram Sewak huts. Besides, the funds are also provided for completion of on going Office buildings. But it has been observed that the office/ residence buildings constructed under Community Development Programme are not in good conditions and construction of new buildings are required in majority of development blocks.

(IV) Grant-in-aid to Panchayat Samities

Grant-in-aid is being provided to Panchayat Samities under the heads Execution of Minor Irrigation Schemes and Execution of DWS/drainage. But it has been observed that the amount provided under these heads are very meager and it is proposed that this amount be increased to Rs.1.00 lakh for each Panchayat Samiti.

8. Panchayats

After the enactment of 73rd Constitutional Amendment Act & Himachal Pradesh Panchayati Raj Act 1994, 3 tiers Panchayati Raj System has been set up at grass root level in the State. These are Gram Panchayats, Panchayat Samitis at block level and Zila Parishad at the district level. Presently, there are 3243 Gram Panchayats, 75 Panchayat Samitis and 12 Zila Parishads in the State. The Panchayati Raj Institutions are being provided more and more administrative and financial powers besides devolving them the powers, functions & responsibilities of 15 different line departments of the state in consonance with the provisions of the Act *ibid*. These institutions are also being provided funds for developmental activities. However, creation of proper infrastructure is needed.

1. Construction of PRIs Buildings

There are 3243 Gram Panchayats, 75 Panchayat Samitis and 12 Zila Parishads in the State. Of these, 345 Gram Panchayats do not have their own buildings, which include 206 new Gram Panchayats created during the year, 2005 by way of re-organization and bifurcation. Out of 75 Panchayats Samitis, 19 do not have their Bhawan. For imparting training etc. to the elected representatives of PRIs, provision is also needed to be made for construction of training hall at the block and district level. Therefore, funds are required for this purpose in a phased manner during the 11th Plan.

2. Imparting of training to the newly elected representatives of PRIs

The elections to the Panchayat Raj Institutions were held in the month of December, 2005 and more than 25000 office bearers have been elected. Now they are to be acquainted with the knowledge of Panchayati Raj Act, Rules, Accounts and Audit procedure etc. Therefore, training to the newly elected representatives is being imparted by all District Panchayat Officers in training institutes at Mashobra and Baijnath. The regular training/exposure visits and refresher courses are required in capacity building of the elected representatives.

3. District Planning

Under the provision of Article 243 ZD and Section 185 of Himachal Pradesh Panchayati Raj Act 1994, District Planning Committees have been constituted in each district. As per the mandate of the constitution, planning process has to be started at each tier of PRI and these plans will be consolidated at the district level by the District Planning Committees. Preparation of plan is a technical work as such technical assistance and funds are required to be provided for this purpose.

4. Project Proposed through PRIs by the GTZ for H.P.

The total cost of GTZ aided “Micro Planning at Panchayat Level” Project is Rs. 12.20 crore. The project will be completed in 4 years in the sharing pattern of 85:15% between donor agency and state government. The project was started in June, 2007 and will be concluded in December, 2010. The project is being implemented in the society mode by the Panchayati Raj department. The main objectives of the project are as under:

1. Preparation of Model Guidelines/Manual to facilitate the preparation of best Micro Plans by the Panchayats.
2. Constitution of core group of experts for monitoring and advocacy regarding Micro Planning.
3. Study/Exposure visits of core group members and selected office bearers of Gram Panchayats outside the state and within the state.
4. Capacity Building.

An amount of Rs. 52.34 Lakhs has already been provided during the financial year 2007-08 & 2008-09 and an amount of Rs. 38.98 lakh has been proposed for the Annual Plan 2009-10

5. Backward Region Grant Fund

The Government of India had launched a scheme known as Rastriya Sam Vikas Yojna (RSVY) which was being governed by the Planning Department of the State before 2007-08. From the financial year 2007-08, this scheme has been placed under the administrative control of Panchayati Raj Department and the nomenclature of the scheme has also been changed from Rastriya Sam Vikas Yojna (RSVY) to Backward Region Grant Fund (BRGF). Now this scheme is being implemented in two districts of the State i.e. in Sirmour and Chamba. A provision of Rs. 30.00 crore has been proposed under this scheme for the year 2009-10.

9. Irrigation & Flood Control

Irrigation and Flood control section comprises of sub sectors of major and medium irrigation, minor irrigation, command area development and flood control. The sub sector-wise details are as under:

(a) Irrigation

Total geographical area of Himachal Pradesh is 55.67 lakh hectares. Out of this, a high percentage of area is under perpetual snow or under forests and steep barren slopes. As per latest available figures, only 5.83 lakh hectares is the net area sown. It is estimated that ultimate irrigation potential of the state is approximately 3.35 lakh hectares out of which 50,000 hectares can be brought under irrigation through major and medium irrigation projects and 2.85 lakh under minor irrigation schemes. The statistical data regarding irrigation potential available and created is given below:

Irrigation Potential in Himachal Pradesh

Sr. No.	Item	Unit	Area
1.	2.	3.	4.
1.	Total Geographical Area	Lakh Hect.	55.67
2.	Net Area Sown	Lakh Hect.	5.83
3.	Ultimate Irrigation Potential Available	Lakh Hect.	0.50
	i) Major & Medium Irrigation	Lakh Hect.	2.85
	ii) Minor Irrigation		
	Total	Lakh Hect.	3.35
4.	Created upto 31st March, 2008	Lakh Hect.	2.24

Irrigation Projects are classified into three categories major, medium and minor. Projects having culturable command area (CCA) of more than 10,000 hectares are classified as 'Major Irrigation Projects', projects which have a CCA of more than 2,000 hectares but less than 10,000 hectares are classified as 'Medium Irrigation Projects' and projects with CCA of 2,000 hectares or less are classified as 'Minor Irrigation Projects'. Under Minor Irrigation projects, both types of water development viz. surface and ground is included.

Review of Achievements

Unlike other development schemes, viability of irrigation schemes is to be judged by way of cost benefit ratios/internal rate of return (IRR). The benefits are in the shape of increased production and cost is taken as the interest on capital investment together with the annual maintenance cost for running the irrigation schemes. Schemes with a cost benefit ratio of more than 1.5 or IRR more than 12% are approved only.

Starting practically from scratch, an area of 2,17,067 hectares of land by different agencies viz. Govt. schemes, rural development department schemes and through private kuhls has been brought under assured irrigation upto March, 2008 which is nearly 64.7% of the irrigable area and 38 % of the culturable area of the State.

The physical and financial achievements made during the different plan periods are given in the following table: -

Physical and Financial Achievements 1st Plan onwards

Year	Irrigation potential created by Rural Development, Agriculture Department and Private Schemes (Hect.)	Irrigation potential created through Govt. Schemes executed by IPH Department (Hect.)			Expenditure (Rs. in Lakh)
		Minor	Maj. / Medium	Total	
1.	2.	3.	4.	5.	6.
1951-56	61,000	2370	-	2370	33.57
1956-61	1,500	3687	-	3687	65.66
1961-66	1,550	2805	-	2805	44.21
1966-67	1,550	821	-	821	7.86
1967-68	850	4720	-	4720	76.44
1968-69	300	1660	-	1660	27.31
1969-70	4,000	6175	-	6175	289.84
1970-75		3442	-	3442	109.09
1975-76		1385	-	1385	128.44
1976-77	8,643	2100	-	2100	148.55
1977-78		2993	-	2993	200.92
1978-79		1325	-	1325	343.09
1979-80		3364	-	3364	422.17
1980-81		4888	3190	8078	495.67
1981-82		5407	2996	8403	650.88
1982-83	3,485	4000	-	4000	721.24
1983-84		3826	-	3826	447.08
1984-85		2376	200	2576	505.51
1985-90	3,095	10571	1750	12321	6615.56
1990-91	2,685	2430	250	2680	2227.44

1.	2.	3.	4.	5.	6.
1991-92	4,503	3466	-	3466	3426.82
1992-93	35	2440	210	2650	3105.90
1993-94		1503	235	1738	1936.34
1994-95		1619	250	1869	2482.13
1995-96		1608	800	2408	3019.35
1996-97		1614	1055	2669	3792.92
1997-98		2000	300	2300	5078.50
1998-99		2000	150	2150	5481.92
1999-2k		2120	150	2270	5754.45
2000-01		1819	200	2019	5229.27
2001-02		2073	100	2173	6058.64
2002-03		2088	200	2288	8105.05
2003-04		2161	300	2461	6011.22
2004-05		2126	300	2426	5950.11
2005-06		2338	300	2638	9689.38
2006-07		2202	2216	4418	16132.88
2007-08		2697	2500	5197	
Grand Total	93,196	106219	17652	123871	104815.41

Thus, total irrigation potential created upto March, 2008 is as under:

Sr. No.	Item	Area in Hect.
1.	2.	3.
a)	By Rural Development, Agriculture Department & Private Schemes	10,1000
b)	By IPH Department Schemes	1,23,871
	Total	2,24,871

Details of schemes/projects under operation in the state are as under: -

(i) Major Irrigation Projects

Shah Nehar

The only major irrigation project in the state is Shah Nehar which falls in district Kangra. With the construction of Shahnehar barrage, the water of river Beas was diverted by Punjab, thereby adversely affecting irrigation rights of the inhabitants of

Himachal Pradesh. The matter was taken-up with the Government of Punjab and an agreement was signed in July, 1983 whereby the Punjab Government agreed to release 228 cusec of water for Himachal Pradesh and to bear the entire cost of providing lined carrier channel system for irrigating the area, which would have received irrigation had the barrage not been constructed and water allowed to flow. One field Circle with allied staff was created for survey, investigation and preparation of the project and detailed project report amounting to Rs. 49.30 crore was prepared and submitted to the Central Water Commission, New Delhi during 1987 for scrutiny and approval. This was updated and an estimate amounting to Rs. 93.20 crore was submitted to Central Water Commission on 1-7-90 for approval. Punjab government contested the estimates and the case was referred to the Central Water Commission for arbitration. The award was given by the Central Water Commission on 19-5-95. In the light of the award, modified project reports were submitted to Central Water Commission during August, 1995 for approval.

The project was cleared for Rs. 143.32 crore on techno-economical consideration by technical advisory committee headed by Secretary, Ministry of Water Resources on 3rd April, 1996 subject to clearance from Ministry of Environment and Forests. A sum of Rs. 88.49 crore based on present price level shall be given by the Govt. of Punjab and the rest shall be shared by the Govt. of H.P. The project was accorded A/A & E/S vide FC-cum-Secy. (IPH) G.O. HP letter No.IPH (4)-15/85 Vol-III dated 10-6-97 for Rs.143.90 crore.

The year wise financial phasing and share of the state as approved in the project was as under:

Share of Punjab and Himachal Pradesh in Project

(Rs. in Crore)

Sr.No.	Year	H.P. Share	Punjab Share	Total
1.	2.	3.	4.	5.
1.	1997-98	8.52	14.96	23.48
2.	1998-99	9.79	15.72	25.51
3.	99-2000	10.55	18.70	29.25
4.	2000-01	8.64	15.43	24.07
5.	2001-02	13.52	18.76	32.28
6.	2002-03	3.81	4.92	8.73
	Total :	54.83	88.49	143.32

The salient features of Shah Nehar Project are as under:

Salient Features			
Sr. No.	Item	Unit	Particular
1.	2.	3.	4.
a)	Area to be covered		
i)	Gross Command Area	Hect.	22,627
ii)	Culturable Command Area	Hect.	15,287
iii)	Villages to be covered	No.	93
b)	Water to be utilised (as per agreement)	Cusecs	228
c)	Yearly Water Requirement	MAF	0.163
d)	Length of Canals		
i)	Right Bank Canal	Kms.	48.85
ii)	Left Bank Canal	Kms.	30.00
e)	Benefit Cost Ratio		2.77:1
f)	Internal Rate of Return	%	18.00
g)	Cost per Hectare	Rs. in Lakh	0.9375
h)	Expenditure upto March, 2007(cumulative)	Rs. in Lakh	13020.34
i)	Revised Outlay 2006-07	Rs. in Lakh	2983.54
j)	Approved Outlay 2007-12	Rs. in Lakh	13000.00
k)	Approved Outlay 2007-08	Rs. in Lakh	6000.00
l)	Approved Outlay 2008-09	Rs. in Lakh	5800.00
m)	Proposed Outlay 2009-10	Rs. in Lakh	4300.00

Recently, the cost of this project has been revised to Rs. 310.89 crore. This revision in project cost was conveyed to us by Central Water Commission vide its letter No. 2(118) 1/2007-WR dated 17th January, 2008. Based on the revised cost the project is to be funded as under:-

Project Funding

(Rs.in Crore)

Shah Nehar Project	Total Cost	Central Grant 90% direct to H.P.	H.P. Share including CLA	Punjab Share including CLA	Funds provided by Punjab	Balance
1.	2.	3.	4.	5.	6.	7.
Original Cost(1995)	143.320		54.830	88.490	65.306	23.184
Revised DPR Cost (2007)	310.89		118.94	191.95	65.306	126.644
Expenditure upto 3/2007	159.411		60.986	98.4252	65.306	33.1192
Balance Cost	151.479	136.331	5.795	9.353	-	9.353
Total:	310.890	136.331	66.781	107.7782	65.306	42.4722

(ii) Medium Irrigation Projects

Irrigational facilities in the State can be generated in a substantial manner under medium and minor irrigation projects/schemes. Under these projects/schemes, irrigation, potential of 12,636 hectares stands created upto March, 2005.

The approved outlay for 10th Five Year Plan under Medium Irrigation Projects was Rs. 2500.00 lakh with a target of 2500 hectares. The work of medium irrigation projects was taken in hand during the fifth plan period. Four medium irrigation projects in the State have been completed and the work on another two is in progress. The physical and financial achievements made by the end of March, 2008 are as under: -

Financial and Physical Achievements

Sr. No.	Year	Expenditure (Rs. in Lakh)	Physical Achievement (In Hectares)	Name of Projects
1.	2.	3.	4.	5.
1.	1980-81	203.67	3190	Giri Irrigation and Bhabour Sahib Phase-I
2.	1981-82	142.28	2996	Giri Irrigation and Bhabour Sahib Phase-I
3.	1982-83	52.06	Nil	Giri Irrigation, Bhabour Sahib Phase-I and Balh Valley
4.	1983-84	82.71	Nil	Giri Irrigation, Bhabour Sahib Phase-I and Balh Valley
5.	1984-85	130.00	200	Balh Valley
6.	1985-90	656.57	1750	Balh Valley
7.	1990-91	208.37	250	Balh Valley
8.	1991-92	215.52	Nil	Balh Valley and Bhabour Sahib Phase-II

1.	2.	3.	4.	5.
9.	1992-93	235.81	210	Balh Valley & Bhabour Sahib Phase-II
10.	1993-94	245.93	235	Balh Valley & Bhabour Sahib Phase-II
11.	1994-95	259.12	250	Balh Valley & Bhabour Sahib Phase-II
12.	1995-96	343.43	800	Balh Valley & Bhabour Sahib Phase-II
13.	1996-97	454.66	1055	Balh Valley & Bhabour Sahib Phase-I
14.	1997-98	1012.12	300	Balh Valley & Bhabour Sahib Phase-II
15.	1998-99	1203.38	150	Shahnehar, Sidhata & others
16.	1999-2k	1624.86	150	Shahnehar, Sidhata & others
17.	2000-01	1398.12	200	Shahnehar, Sidhata & others
18.	2001-02	1198.94	100	Shahnehar, Sidhata & others
19.	2002-03	1192.29	200	Shahnehar, Sidhata & others
20.	2003-04	1545.00	300	Shahnehar, Sidhata & others
21.	2004-05	1751.64	300	Shahnehar, Sidhata & others
22.	2005-06	3112.04	300	Shahnehar, Sidhata & others
23.	2006-07	5262.21	2216	Shahnehar, Sidhata & others
24.	2007-08	9641.95	2500	Shahnehar, Sidhata & others
	Total :	32172.68	17652	

The details of expenditure and physical achievements made through completed medium irrigation projects is as under:

Expenditure and Physical Achievements

Sr. No	Name of Project	Estimated Cost 3/98 (Rs.in lakh)	Total Expenditure Incurred (Rs. in lakh)	Physical Achievement (In hecets.)
1.	2.	3.	4.	5.
1.	Giri Irrigation Project	823.00	823.00	5263
2.	Bhabour Sahib Ph-I	85.00	115.00	923
3.	Balh Valley Project	827.00	1174.51	2410
4.	Bhabour Sahib Ph.II	1142.00	1146.20	2640
	Total:	2877.00	3258.71	11236

1. Sidhata Project

The project area is situated in Jawali tehsil of Kangra district. The water of Dehar stream is proposed to be diverted by constructing a small weir at village Anuhi through open channel, tunnel cut and covers section. The project was approved in the Technical Advisory Committee (TAC) meeting held on 9-9-97 amounting to Rs.33.62 crore with CCA of 3150 hectares. The A/A & E/S of this project was accorded vide FC-cum-Secy. (IPH) letter No.PBW (PH) F (11)-1/92 Vol-VI dated 17-12-97 for Rs.33.62 crore. The project completion was envisaged in 7 years. The work on this project was started in the year 1998-99. The approved outlay for 10th Five-Year Plan was Rs. 1200 lakh with a target of 1000 hectares.

Recently, the cost of this project has been revised to Rs. 66.35 crore. This revision in project cost was conveyed to us by the Central Water Commission vide its letter No. 20(8) 2006-WR dated 8th November, 2007. This project is slated for completion by 2008-09.

Salient Features

Sr. No.	Item	Particulars
1.	2.	3.
1.	Name of the Project	SIDHATA IRRIGATION PROJECT
2.	Source	Dehra Khad
3.	C.C.A.	3150 Hect.
		(a) Lift = 715 Hect.
		(b) Gravity = 2435 Hect.
		Total = 3150 Hect.
4.	Gross Command Area	4250 Hect.
5.	Total Length of the Canal	13.27 Km. on the right bank of Dehar khad
6.	Length of the tunnel	1.7 Kms.
7.	Cut and Cover section to bye pass slide prone reach	2.3 Kms.
8.	Length of 2 lined distributries	3.55 Kms.
9.	Carrying capacity of the Canal.	2.70 cummecs (96 cusecs) with annual withdrawl of 31 million Cubic meters.
10.	Villages being covered	45
11.	Pumps proposed to be covered 715 Hect.	6 pumps to cover area at a higher elevation. One such lift pump is proposed on the left bank to serve an area of 150 Hect. The water for left bank is to be lifted from head works while in the right bank from the main canal.

1.	2.	3.
12.	Type of Lining	Cement concrete lining over polythene film in the entire length of canal.
13.	Section of the Canal.	Mehboob with full supply depth at head 1.15 metres Bed slope 1:1000 and side slope 1:1
14.	Cross-drainage works	Nine aqueducts and one super passage have been proposed. Total length of such structures is 558 metres.
15.	Other structures on the main canal	Bridges = 11 No. Escapes = 5 No. Water control structure = 1 No.
16.	Expenditure upto 3/2006(cumulative)	Rs. 1916.61 lakh
17.	10 th Plan Proposed outlay	Rs. 1200 lakh
18.	Annual Plan 2006-07 Approved outlay	Rs. 1300 lakh
19.	Approved Outlay for 11 th Plan 2007-12.	Rs. 2800 lakh
20.	Approved Outlay for Annual Plan 2007-08.	Rs. 2000.00 lakh
21.	Approved Outlay for Annual Plan 2008-09.	Rs. 1800.00 lakh
22.	Proposed Outlay for Annual Plan 2009-10.	Rs. 700.00 lakh

2. Lift Irrigation Project Changer Area

An agreement between the Govt. of Punjab and Himachal Pradesh was reached in the year 1983 according to which Himachal Pradesh agreed to acquire some land situated in village Dabat Majari, Distt. Bilaspur in Himachal Pradesh, which was required by the Govt. of Punjab for the construction of Anandpur Hydel Channel Project. In lieu, thereof, the Govt. of Punjab agreed to release 25 cusecs of water regularly from Anandpur Hydel channel for irrigation and drinking water purposes in Himachal Pradesh.

Project reports of this proposal were submitted to Central Water Commission (CWC) for techno-economic appraisal thrice in the year 1989,1991 and then in 1995. The CCA of first two projects reports was less than 2,000 hectares. These proposals were returned back thrice due to the peak water requirement of 46.15 cusecs against the availability of 18.59 cusecs. So Govt. of H.P. decided to dig 12 tubewells in the command area to meet with the balance requirement of water. In pursuance of this proposal, the Central Water Commission (CWC) advised to refer the report to Central

Ground Water Board (CGWB) Chandigarh to explore Ground Water (GW) availability and yield from the tubewells proposed to be installed in the command area.

The revised proposals were almost similar to the proposals submitted by Govt. of Himachal Pradesh in January, 1995 except change in the post project-cropping pattern which has been reviewed. Finally, the project was cleared by Central Water Commission (CWC) and A/A & E/S accorded during 1998-99 vide letter No.PBW-(PH) F (6)-1/97 dated 22-6-99 for Rs. 28.37 crore. An outlay of Rs. 800 lakh was proposed for 10th Five Year Plan with a target of 500 hectares.

Salient features of the Anadpur Hydel Project

Sr. No.	Item	Particular
1.	2.	3.
1.	G.C.A	7591 Hect.
2.	C.C.A	2350 Hect.
3.	Revised Cost	Rs. 8821.00 lakh
4.	Phasing of Expenditure:	
5.	1999-2000	Rs. 28.00 lakh
6.	2000-01	Rs. 283.00 lakh
7.	2001-02	Rs. 567.00 lakh
8.	2002-03	Rs. 567.00 lakh
9.	2003-04	Rs. 567.00 lakh
10.	2004-05	Rs. 567.00 lakh
11.	2005-06	Rs. 258.00 lakh
12.	Total	Rs. 2837.00 lakh
13.	Cost per Hect.	Rs. 93284.00
14.	Cost Benefit Ratio	2.19
15.	Phasing of expected benefits:	
16.	2002-03	470 Hect.
17.	2003-04	1175 Hect.
18.	2004-05	1880 Hect.
19.	2005-06	2350 Hect.
20.	Actual Expenditure up to 3/07(cumulative)	Rs. 1379.99 lakh
21.	10 th Five Year Plan Approved Outlay	Rs. 800.00 lakh
22.	Approved Outlay 2006-07	Rs. 650.00 lakh
23.	Approved Outlay 11 th Plan 2007-12	Rs. 5900.00 lakh
24.	Approved Outlay 2007-08	Rs. 2300.00 lakh
25.	Approved Outlay 2008-09	Rs. 3000.00 lakh
26.	Proposed Outlay 2009-10	Rs. 1500.00 lakh

Recently, the cost of this project has been revised to Rs. 88.09 crore. The investment clearance in project cost was conveyed to us by the Planning Commission New Delhi vide letter No. 20(8)2000-WR dated 3rd April, 2008.

3. Balh Valley Medium Irrigation Project (Left Bank)

The project envisages providing of irrigation facilities to 60 villages in the valley in the Left Bank of Suketi Khad covering CCA of 2780 Hect. (2175 Hect. by surface water and 605 Hect. by Ground Water). It is proposed to tap water from Suketi khad from a point upstream of the existing silt ejector of Sundernagar balancing reservoir, which is a part of Beas Satluj Link Project (BSL).

This project stands approved in the 75th meeting of the Advisory Committee, Irrigation and Flood Control and Multipurpose Project, which was held on 18/12/2000 in the Ministry of Labour, Govt. of India, New Delhi. This project was accepted by the advisory committee for Rs. 41.64 crore as item No.5. The approval was conveyed by the Member Secretary, Advisory committee vide No. 16/27/2000 PA (N)/2363-3307 dated 22/12/2000. Due to increase in cost, the revised DPR amounting to Rs. 62.75 crore has been accepted in the 87th meeting of the Technical Advisory Committee (TAC) held on 17.11.2006 at New Delhi vide Chief Engineer (Project Appraisal Organisation) & Member Secretary No. 16/27/2006-PA(N)2088-120 dated 22-11-2006.

4. Phina Singh Medium Project

This project has been named after Late Shri Phina Singh, a local resident of village Niari, who presented the idea of constructing an earthen rock fall Dam across Chakki khad near Lahroo for irrigation purpose.

Proposed site for construction of Dam across Chakki khad lies near village Lahroo in tehsil Bhattiyat district Chamba. Village Lahroo is situated on Nurpur Chamba Road at a distance of 25 KM from Nurpur. This village is also connected by fair weather road from Darman via Sihunta-Chawari and is 5 KM from Chawari town, the head quarter of Bhattiyat tehsil. The nearest railway station is Nurpur, which is a narrow gauge rail line. The gross command area of various villages proposed to be covered under this project is 8436 hectares and 4650 hectares of land is likely to be culturable command area. As per the report of geological survey conducted by State Geologist, Himachal Pradesh open channel construction has not been found feasible as such tunnel measuring 4500 meters with an intervening portion of cut and cover in 25 mtrs. length between RD 2550 to 2575 across Sanjhi Nallah has been proposed. The proposed tunnel has been designed to carry a discharge of 224 cusecs in a grade of 1: 4000. The height of the proposed dam axis is 686 mtrs. (MSL) and top of the dam is proposed at R.L. 717. The length of dam at crest level shall be 243 mtrs. The area likely to be submerged in the reservoir has been estimated 2,65,000 sqms. Parchhod village having 25 houses with 250

population, a Govt. High School and a pump house of LIS Naddat will be submerged in the reservoir. The CCA to be covered shall be partly by lift and partly by gravity. The project report for this project stands submitted to Govt. of India, Director Central Water Commission (CWC) Monitoring and Appraisal Kasumpti, Shimla-9 vide Joint Secretary (IPH) No. PBW (PH) F (2) 2/98 dated 1-10-2003 for Rs. 63.00 Crore. The proposed Dam was not technically suitable from geological consideration and an alternative site for the dam has been selected upstream of existing proposed site, the approval on this account has been conveyed vide Principal Secretary IPH letter No IPH(F)9-2/2004 dated 6.6.06. Accordingly the necessary detail has been provided to the Director, Geological Survey of India, Chandigarh and a request has also been made to convey the approval of new alternative site. Now the approval for alternative site for the construction of dam selected on the upstream of the earlier proposed site has been received from Director, Geological Survey of India, Chandigarh. Accordingly the fresh Detailed Project Report(DPR) amounting to Rs. 147.15 crore has been prepared and submitted to Govt. of India for approval. Further observation was conveyed to us by the Central Water Commission vide its letter no. MAS/424/2003/1613-16 dated 5/8/2008.

5. Survey and Investigation of New Projects

To harness the irrigation potential through the implementation of medium irrigation projects, a large number of projects are under investigation. The following projects are proposed to be investigated:

1. Phina Singh Project
2. Bara Solda Nagrota Suriyan Project

After investigation, these are proposed to be posed for arranging bilateral assistance. The preliminary investigations indicate that the projects are feasible but detailed investigation is required to be carried out for ascertaining the technical and economic viability.

Minor Irrigation

Himachal Pradesh is a mountainous state having boundaries with Uttrakhand and Jammu and Kashmir. The population of the state as per 2001 census was 6.08 million. Almost 80% of the population is engaged in Agriculture. Most of the people are engaged in agriculture work although a little over 10% of the total land area is cultivated. The land holdings of most of the farmers are very small. The total irrigable area estimated as per Master Plan is 3.35 lakh hectares of which 2.07 lakh hectares has been created. The Irrigation & Public Health as well as Agriculture/Rural Development department are executing the minor irrigation schemes under state sector. Since the resources of the state are scarce/limited, loans under Rural Infrastructure Development Fund (RIDF) programme are being arranged for bringing more and more area under irrigation.

Under RIDF-I, incomplete or ongoing projects in minor, medium and major irrigation along with projects in flood protection, watershed management and soil conservation were accorded priority. Projects relating to (a) Harvesting of rain water to reduce the run off. (b) Irrigation projects that were already completed and not operationalized and could have been made functional after some renovation were also considered as eligible for support under RIDF-III.

Accelerated Irrigation Benefit Programme (AIBP)

Under AIBP, 42 minor irrigation schemes were included in the first instance vide G.O.I. No. F. No. 41 (I) PFI /99-314 dated 14-2-2000. However, later on only 28 schemes were taken up under this programme as remaining 13 schemes were financed under NABARD assistance. In 2nd shelf, 18 schemes were subsequently included vide GOI sanction No. 41(I) PFI / 2000-03 dated 4-4-2000 of which one scheme was executed under NABARD. All schemes stand completed except 1 No., which has been deleted due to dispute. A new shelf of 102 MIS was approved by the Govt. of India vide Ministry of Finance letter No F.No.44(1)PF-1/2005-61 dated 6.10.05, the execution of these schemes is in progress and 68 schemes have been completed upto 31-10-2007. A new shelf of 116 MIS have been approved by Govt. of India vide Ministry of Finance letter No.F.N.41(I)/PF-1/2007-153 dated the 3-10-2007 amounting to Rs. 12072.12 lakh with CCA 17374.86 hectare.

(b) Flood Control

The entire region of Himachal Pradesh forms catchment of rivers Yamuna, Satluj, Beas, Ravi and Chenab, which flow through its territory and carry a very heavy load of silt. The paths that these rivers and their tributaries traverse is having steep slopes causing thereby high velocity and erode much of the cultivable lands. The population also get effected, houses and agriculture lands, often get submerged or washed off. The losses due to flood include, human life, Cattle heads, crops and land damages and damages to big projects and schemes.

Flood protection works in the shape of channelisation of the rivers and their tributaries by construction of embankments, spurs etc. at places prone to floods is essential for the helpless residents who get affected year after year due to flood havoc. According to a rough estimate, about 2.31 lakh hectares of area in the state get affected by heavy floods. There is an immediate need for providing flood protection works in most affected flood prone areas along Giri and Bata rivers alongwith Suketi khad, Swan khad, Sirsa Nadi and Chakki khad. The approximate cost of the projects is likely to be as under: -

Approximate cost of Projects

(Rs. in crore)

Sr.No.	Name of Project	District	Approximate cost
1.	2.	3.	4.
1.	Seer khad Project	Hamirpur	12.77
2.	Chakki River Project	Kangra	11.20
3.	Sirsa Nadi Project	Solan	60.00
4.	Suketi khad Project	Mandi	10.00
5.	Integrated Giri & Bata River Projects	Sirmour	38.00
6.	Channelisation of Swan khad Project , Phase-I	Una	106.00
7.	Channelisation of Swan khad Project , Phase-II	Una	243.20
8.	Balh Valley	Mandi	50.00
9.	Pabbar khad	Shimla	55.62
	Total :		586.79

10. Power

On power issues, particularly on generation of hydel power a detailed chapter titled as 'Hydel Power Generation', Chapter No-3 has been included in this document.

Apart from hydel power generation, State Govt. is proposing to allocate Rs. 60.00 Crore as equity support to the newly formed H.P. Transmission Corporation Ltd. This H.P. Power Transmission Corporation Ltd. Shimla came into existence on 27th August, 2008. Details of business to be carried out were notified and accordingly HPPTCL has been assigned execution of all new lines and Sub Station of 66 KV and above including up gradation, formulation and updation of Transmission Master Plan, for the state besides co-ordination with various stake holders in State & Private Sectors.

The office of HPPTCL has been established and a few officers/officials have also joined the Corporation. The preliminary works as assigned has also been taken up including fine tuning of Transmission Master Plan amounting to Rs. 4519 crores for evacuation of power from HEPs and up gradation of transmission system in the State.

During the financial year 2009-10 HPPTCL is expected to provide system to evacuate approximately 150 MW of power of new SHEPs from different river basins of the State. Budge to the tune of Rs. 400 Crore is required for part execution of these evacuation lines/Sub Stations. A scheme amounting to Rs.423 crores for this purpose has been sent to REC for bridge loan & its approval is expected shortly. Work on this scheme will start immediately after the funds are received.

Asian Development Bank (ADB) has also approved an amount of \$9 lac in favour of this Corporation as technical assistance for fine tuning of Transmission Master Plan which requires detailed studies keeping in view the paucity of corridor/right of way in narrow Valleys of the State. This is to ensure the minimum No. of transmission lines with adequate capacity to carry the generated power. The planning for evacuation of power from Chenab valley basin has also been taken up. It is proposed that power shall be pooled at selective points and further evacuated through high capacity lines.

11. Industries

Industrialization in Himachal Pradesh is comparatively a recent phenomenon. The severe climatic conditions, topographical and geographical severities are the main hurdles in this process. In such a scenario, the monetary and fiscal benefits in the form of incentives and subsidies as well as the development of appropriate infrastructure are the main instruments to woo industrial investment in the State. Though industrialization in the State has not been able to gather momentum as compared to the neighbouring states like Punjab, Haryana, U.P and Uttarakhand yet with investment in infrastructural facilities, formulation of well defined policies, scientific management, marshalling and optimization of scarce resources, we have been able to offset the locational and geographical disadvantages to considerable extent. The industrial sector in the State has entered the takeoff stage with a well diversified base of industries ranging from rural and traditional Handloom and Handicrafts, Cottage, Micro and SSI units to High-tech. Textile, Telecommunication equipment, sophisticated electronic units, pharmaceuticals, engineering, high quality precision tools, food processing industries etc. The share of the Secondary Sector (including Industries) in the economy of the State has risen from 16.73% of the State Domestic Product (at current prices) in 1970-71 to 36.83% in 2005-06. Out of this the share of industrial sector has risen from 9.50 % in 1950-51 to 37.81 % by 2005-06. The share of the tertiary sector increased from 24.71% to 38.14% over the same period. By November, 2008, the State had 34897 Small Scale and 397 Medium & Large Scale industrial Units with an investment of Rs. 7483.03 Crore and employment generation of 2.22 lakh persons. However, a lot remains to be done as yet as compared to other States, the pace and extent of industrial development in H.P. is yet to pick up fully. The latest SIA statistics available for the month of May, 2008 released by SIA Department of Industries Policy and Promotion, GOI revealed that out of total industrial investment proposals received in the country from August, 1991- April, 2008, the share of Himachal Pradesh stood at 0.54 %. (Rs. 21746 crores worth investment for H.P.)

Industrial Policy of State Government

Keeping in view the area specific resource constraints and for a harmonious and balanced industrial growth of all the regions of the State, the entire State has been classified into three categories depending upon the level of industrialization i.e. developing areas, backward areas and developed areas. The tribal areas which are the backward areas have been declared as Tax Free Zones. Besides, the climatic conditions of the State are congenial to horticulture, herbal and vegetable based industries. The industries based on fruit, vegetable and maize and units consuming locally available raw materials have been included in the priority sector and have been offered special package of incentives.

The objectives of the Industrial Policy are as under:

- To achieve uniform growth of industry and service sector throughout the State.
- Disperse industries and service sector activities to all parts of the State.
- Facilitate generation of employment opportunities for local resource owners and stakeholders.
- Reiterate the Government's commitment to the development of key infrastructural sectors like Power, Housing, Social Infrastructure Development, Human Resource Development and Vocational Education so as to create a congenial investment climate for existing industries to grow as well as to attract further investments in the State.
- Give Industrial Incentives of fiscal nature.
- Facilitating ease of doing business and specifically address the issues impeding industrial growth such as procedures for setting up of industry, obtaining mandatory permissions required under various Labour Laws, addressing issues related to transportation of industrial produce so as to lay the foundation for a strong and consistent growth of the industrial sector.

The Special Package of incentives granted by the Govt. of India in January, 2003 has been supplemented by the Industrial Policy and Incentive Rules, 2004 which provide more incentives to the potential and existing entrepreneurs in the State such as tax concessions, concessional rates of Electricity duty, special incentives for establishing industrial units in the backward and tribal areas of the State, incentives for training and development of manpower etc. Apart from these incentives for industrial development, the department is providing all industrial services and infrastructure at identified places all over the State in the notified industrial areas and estates with basic facilities such as water supply , electricity roads, drains etc.

Apart from providing attracting incentives to the industries developed plots/ sheds are allotted to the entrepreneurs on easy terms & conditions in its 38 developed industrial areas and 15 Estates in the State.

The Govt. in view of the limited availability of land for industrial development has created a land bank for entrepreneurs. Presently, it comprises of identified land both in the Govt. as well private possession in six districts suitable for setting up of industrial units. The entrepreneurs are being invited to set up industries in these lands. The Govt. land comprised in the land bank will be handed over to the potential investors on payment of the lease money. In the private identified areas of land bank, the entrepreneurs will be encouraged to deal directly with the owners and the Govt. will only provide escort services and facilitate negotiation between the entrepreneurs and the land owners.

Development of Industrial Infrastructure

The State Govt. in recent years has been laying stress on the development of basic infrastructure for industries in the form of development of roads, transportation and communication network and adequate and uninterrupted power supply especially in the highly industrialized areas of the State like Baddi, Barotiwala, Parwanoo, Kal Amb, Paonta Sahib, Nalagarh, etc. A Development Authority called Baddi -Barotiwala -Nalagarh -Development Authority (BBNDA) has been set up to ensure planned and speedy development of the area. The State Govt. has set up a Solid Waste Management Plant at Baddi in the PPP mode with a cost of Rs. 35 crores and Common Effluent Treatment Plant with a cost of Rs. 185 crores is also being set up in this area. In order to boost export, an Inland Container Depot (ICD) is being set up at Baddi with a cost of Rs. 53.00 crores. A MOU in this regard has been signed with Container Corporation of India (CONCOR) and a Trade Centre with a cost of Rs. 10.80 crores is also being set up at Baddi. In order to overcome the shortage of housing, two labour hostels with a capacity of 900 persons each for men and women are being constructed at Baddi area. In order to strengthen the power infrastructure, a MOU has been signed with GAIL (India) Ltd. for the supply of Natural Gas for industrial, transport & domestic sector in the State. A Polymer Park is also being set up at Baddi for on the spot buying and selling of different grades of plastics.

Power is very important ingredient for industrialization of a State. This State has been more or less sufficient in generation and transmission of power including in the industrial sector. A little over 27% of the connected load is used by the industries located in the State. However, of late the availability of the power for industrial usages especially in the more developed areas has come under some stress. The situation is being redressed by the strengthening of Transmission & Distribution System by spending an amount of Rs. 322.78 crores under the "Accelerated Power Development and Reform Programme (ARDP).

Availability of a viable road network is a sine quo non for industrial development of any region and more so in a hilly state like H.P.. As on March, 2008 the State had over 29,157 Kms. of road length, out of which 16540 Kms. (56.72%) are black topped. The State has 8 National Highways with a total length of 1260 Kms., out of which 305 Kms. are single lane and 206 Kms are intermediate lane and 749 Kms are double lane. As far as future planning is concerned, the lifeline of the Pradesh i.e. the Kalka Shimla road is proposed to be made four lanned in stages. The National Highway Authority of India has invited bids on BOT basis for the four lanning of Zirakpur Parwanoo portion of the Highway which also includes the construction of bye passes at Pinjore, Kalka and Parwanoo. For NH-21 A, the Govt. of India has provided a sum of Rs. 45 crores to the National Highway Authority of India for the widening / strengthening the Pinjore-Baddi portion. The Govt. of India has agreed to declare two roads viz. (i) Paonta Sahib-Rajban-Shillai-Meenus-

Hatkoti Road and (ii) Mehtapur-Una-Amb- Mubarikpur- Ranital- Nagrota as National Highways.

System of Industry related clearances

With a view to ensuring expeditious clearances from the respective Departments / Boards for setting up of industrial units in medium and large scale sector, a State Level Single Window Clearance and Monitoring Authority under the Chairmanship of Hon'ble Chief Minister has been constituted to clear projects and ensure speedy approval from various Departments/Boards. So far, from February,2004 to December, 2008, 746 projects have been cleared by the authority with an investment of Rs.24560 crores and employment potential of 119856 persons.

Flow of investment, IEM trend and employment

After the notification of special package of incentives to industries in H.P ,the Department of industries has approved 958 new investment proposals (79 expansion proposals) in Medium and Large Scale Industrial Sector and 10446 new investment proposals (242 expansion proposals) in Small Scale Industrial Sector with combined envisaged investment of Rs. 35667.43 crores and employment potential to 4.08 lac persons upto 30/11/2008. The highest number of proposals approved are in the category of food processing followed by misc. Engg, Electrical, Pharmaceuticals , Electronics respectively.

During the same period, 195 new industrial units (73 expansion) in Medium & Large Scale Sector and 4201 new industrial units (205 expansion) in Small Scale Sector have been set up in the State with a total actual investment of Rs. 4649.70 crores and generating employment to 62779 persons upto 30/11/2008.

The figures available for IEM's implemented from August,1991 to April,2008 reveal that 69 IEM's (0.95% of the total IEM's implemented in the country) were actually implemented in the country with an investment level of only Rs. 1711 crores (0.646%) of the total investment in the country. If this figure of IEM's filed for the State of H.P. during August,1991 to April,2008 are to be compared with the figures of IEM's implemented during the same period, it is revealed that 842 IEM's were filed for the State of H.P. with a proposed investment of Rs. 21298 crores and proposed employment of 154467 persons. During this period only 69 IEM's were implemented (which is 8.19 % of IEM's filed) involving an investment of Rs.1711 crores (which is 8.05%) of total investment proposed and employing 65909 persons which is 42.67 % of employment proposed .This data revealed the lower rate of conversion of proposals to actual investment and also needs to be boosted up by laying increased emphasis on all round development of infrastructure in the State so

as to encourage proposed investment to actually fructify and be implemented in the State.

During the year 2006-07, a total number of 27412 persons were provided employment under various sectors and this increased to 28612 during 2007-08. During the current year i.e 2008-09 against the target of 27800 persons upto 30.11.2008, 13400 persons have been provided employment.

Handloom, Khadi & Village Industries Sector

The Handloom sector, with a long tradition of excellence in its craftsmanship, occupies a place of eminence in preserving the State's heritage and culture and plays a vital role in the economy. It represents one of the most aesthetic aspects of our existence as the innovative weaver, with his skilful blending of myths, symbols and imagery provides the cloth an appealing dynamism. The level of artistry and intricacy achieved in the handloom cloth is unique. It can meet every need ranging from the exquisite fabrics, which takes months to weave, to popular items of mass production for daily use.

The handloom industry in Himachal Pradesh is one of the important cottage industries which is providing gainful employment to about 45000 handloom weavers. The main handloom concentration areas are Kullu, Mandi, Kangra, Kinnaur, Chamba, Shimla and Lahaul-Spiti districts. The main handloom products are Shawls, Stoles, Tweeds and Dress material etc. For the survival of Kullu Shawls being woven in Kullu District, the Government of India has registered it under "Geographical Indicators (GI)" Act.

For the development and promotion of this sector, the following Centrally Sponsored and State schemes are being implemented:-

Centrally Sponsored Schemes

Under Integrated Handloom Development Scheme, financial assistance is provided for base line survey, preparation of diagnostic study report, formation of consortium by the weavers, skill upgradation, setting up of yarn depot, design development, publicity & marketing etc. The Government of India has sanctioned two clusters (One at Gohar in Mandi District and another in Kangra) at a project cost of Rs. 100.90 lakh for the benefit of about 3100 handloom weavers. A proposal for development of two more clusters (Reckong Peo, District Kinnaur and Rampur, Anni, Nirmand cluster) to benefit 600 weavers has been sent to Government of India for sanction. In addition to it, the Government of India has sanctioned an amount of Rs. 30.79 lakh for development of Small Groups of Weavers of Shimla, Kangra and Mandi Districts. About 110 weavers will be benefited.

Under Handloom Weavers Comprehensive Welfare Scheme, the healthcare facilities are provided to handloom weavers under Health Insurance Scheme component. During the current financial year (upto December, 2008) 10940 weavers of the State have been enrolled under Health Insurance Scheme. Under Mahatma Gandhi Bunkar Bima Yojana, enhanced insurance cover and scholarship to the children of insured weavers is provided. During the current financial year (upto December, 2008) 6400 weavers of the State have been covered under this Scheme.

Under Marketing and Export Promotion Scheme, the financial assistance is provided to handloom weavers and agencies to organise/participate in the exhibitions held at National, Regional, State and District levels. During this year, 10 District Level Events have been sanctioned by Government of India in favour of H.P.State Handloom and Handicrafts Development Cooperative Federation (HIMBUNKAR) Kullu.

Under 10% Rebate Scheme, central assistance is provided as reimbursement to the handloom agencies on account of 10% rebate given by them on sale of their products during the period of festivals/events approved by Development Commissioner (Handlooms), Government of India. During this year, the State has received a central assistance of Rs. 82.32 lakh for further disbursement to 35 handloom weavers cooperative societies of the State. Another proposal of Rs. 1.37 crore for the benefit of 31 handloom weavers cooperative societies has been sent to Government of India.

During 2009-10, the Department has proposed to implement the following schemes and programmes:-

A. Village & Small Industries Sector

Industrial Promotion & Training

This scheme aims at promotion of industrial activities in the form of guidance, policy formulation, conducting studies, organisation of employment melas, improvement of productivity, dissemination of information, consultancy and providing training to the prospective entrepreneurs through Entrepreneurship Development Programmes (EDPs) , Industrial Awareness Programmes (IAPs) and Industrial Awareness Workshops (IAWs). Entrepreneurship Development Programme (EDP) is a training programme wherein the rural educated unemployed youths are motivated to set up their own self employment ventures . The main objective of these programmes is to introduce the industrial culture among youths at grass root level. The duration of such programmes generally varies between 7 days to 6 weeks. The duration of short term EDPs is just one week. Similarly the main objective of Industrial Awareness Programme (IAPs) is to generate industrial /business awareness amongst youth and educate the prospective entrepreneurs about the latest techniques, incentives, facilities and other assistances offered and

available from different financial institutions and departments. The duration of such programme is 3 days.

These programmes are being got conducted through recognized /approved agencies like H.P. Centre of Entrepreneurship Development (HPCED), Himachal Productivity Council(HPC), Small Industries Service Institute (SISI) Solan and Himachal Pradesh Consultancy Corp.(HIMCON). The cost of conducting such programmes ranges between Rs.9000 to Rs.85000 and about 20-25 trainees are trained under single programme.

Development of Industrial Estate/ Industrial Area

Under these schemes, the industrial sheds and the industrial plots equipped with the basic infrastructure facilities like roads, drains, water supply, power and sewerage etc. are developed in identified industrial estates and industrial areas .The sheds and the plots therein are provided to the industrial units on reasonable rates and leasehold basis. Presently, 15 industrial estates and 38 Industrial areas have been developed in the State. HPSIDC is the main development agency through which these areas /estates are being developed. During 2009-10, the department proposes to develop and strengthen the existing industrial areas/estates and develop few new industrial areas.

District Industries Centre:

The scheme has the following three components:-

(i) Industrial Scheme

Under this scheme expenditure on account of office expenses, motor vehicles and minor works which includes repair of buildings is covered during 2009-10.

(ii) Rural Industries Programme / Rural Artisan Programme (RIP/RAP)

This scheme aims at to upgrade and promote the skills of rural artisans by providing them the required training in improved techniques and tools so that they could be rehabilitated in these trades to earn their livelihood. Tailoring, Carpet and Dari weaving, Computer training, Blacksmithy, Welding, Electrician Beautician etc. are the main trades wherein the artisans are trained. This training is imparted for one year. During training the trainees are given stipend of Rs. 100/- per trainee per month and the Master Craftsmen are provided Rs.50/- per trainee per month. After the completion of training the trainees are provided a subsidy @ Rs. 500/- to purchase a toolkit. Annually about 5000 artisans are trained under the scheme.

(iii) DIC Building

Under this scheme, the construction of office and the residential buildings of different District Industries Centres and residential quarters of Extension Officers Industries at block level in H.P is carried out.

(iv) Subsidy to SSI units

This scheme is being implemented only under Tribal Sub Plan. Under the scheme the eligible industrial units are being provided incentives and subsidies to SSI units in tribal areas as per the provisions laid down in Industrial Policy of the State.

(v) Development of Handloom & Handicrafts

This scheme aims to promote the development and growth Handloom & Handicrafts in the state. Under this scheme the State Handicrafts & Handloom Corporation is provided Grant-in-Aid to promote the growth and development of Handicrafts & Handloom Industry in the State, to free the weavers & artisans from exploitation from traders, impart training to weavers /artisans to promote and improve their skill in different activities/trades and promote and provide marketing facilities to weavers and artisans.

(vi) Development of Sericulture

Sericulture is an agro-based labour intensive rural cottage industry, which is providing subsidiary employment to the rural people and income by way of rearing silkworms for production of silk cocoons.

Under Sericulture presently the department has been implementing the following schemes and programs :-

- a) Maintenance of departmental mulberry farms and nurseries** of improved mulberry varieties for yielding planting material to propagate food plants of silkworms in the nurseries. Leaves produced in the departmental farms are utilized for departmental young age rearing of silkworms before these young silkworms are distributed to the farmers for further rearing to produce silk cocoons. Surplus leaves are utilized by the sericulture farmers for rearing late age silkworms for production of silk cocoons.
- b) Distribution of silkworm food plants:** One year-old mulberry saplings of improved varieties are distributed to the planters at the nominal price of Rs. 0.25 each from the departmental nurseries.
- c) Distribution of Silkworms:** The Govt. bears the cost of incubation of silkworm seed and young silkworms reared for ten days under departmental technical supervision before distributing young silkworms to the sericulture

farmers at the nominal price of Rs. 20 of worms hatched from each ounce of silkworm seed for late age rearing and production of silk cocoons.

- d) Disinfection of private rearing houses:** Disinfection of private rearing rooms or spaces and rearing equipment and free supply of disinfecting material and rodenticide to the sericulturists for prevention of silkworm diseases and pests.
- e) Technical assistance and guidance** are provided to the sericulturists/ entrepreneurs, besides undertaking training programme for their skill upgradation.
- f) Marketing arrangements** are made to fetch a fair price of silk-cocoon produce.

The department has got approval of the Central assistance of Rs. 70.00 lakh from the CSB, Ministry of Textiles, GOI under Catalytic Development Programme (CDP) for the development of Post Cocoon Sericulture Sector- Marketing and Silk reeling, yarn twisting in the State.

The CSB has also earmarked Rs. 40.00 lakhs during 2008-09 for the Cluster Development Centre, CSB, Hamirpur to implement mulberry sericulture in the District Hamirpur and Mandi where it is proposed to cover 150 beneficiaries under cocoon sector during 11th Plan Period (2007-12). Total Project cost during 11th Plan Period is estimated Rs. 256.7 lakhs with CSB share of Rs. 210.72 lakh (82.09%), State share of Rs. 24.48 lakh (9.54%) and Beneficiary share of Rs. 8.37 lakh (Rs. 8.37%).

Private Sector investment is being encouraged in sericulture and silk industries. During the current year 2008-09, one more silk yarn reeling unit is being set up in district Bilaspur and one silk twisting unit is being set up in district Mandi with the assistance from the Central Silk Board.

(vii) Integrated Handloom Development Scheme

The office of the Development Commissioner (Handlooms), Government of India during the year 2007-08 has introduced this centrally sponsored scheme by merging the components, with or without modification of four schemes (i) Deen Dayal Hathkargha Protsahan Yojana (ii) Integrated Handloom Cluster Development Scheme (iii) Workshed-cum-Housing Scheme (iv) Integrated Handloom Training Programme. The scheme is an attempt to facilitate the sustainable development of handloom weavers located in outside identified handloom clusters in a cohesive, self managing and socio-economic unit. The scheme has the following four parts:-

1. Assistance for Handloom Cluster, having handlooms in the range of 300-500.
2. Group Approach for Development of Handlooms.
3. Financial Assistance to Handloom Organisations.

4. Assistance for Innovative Ideas and Publicity, Monitoring Supervision, Training and Evaluation of Scheme.

Under Cluster Development component, there is a provision to provide financial assistance to a handloom cluster having loomage in the range of 300-500. The financial assistance is provided for base line survey, preparation of diagnostic study report, formation of consortium by the weavers, skill up-gradation, setting up of yarn depot, design development, publicity & marketing.

Under "Group Approach" there is a provision to provide financial assistance for the cluster of 10 or more weavers in the form of Self Help Group/Primary Weavers Cooperative Society/Other independent/individual weaver having the similar production characteristics under Basic Inputs, Skill Up gradation and construction of workshed component. The sharing pattern for Basic Inputs component for Himachal Pradesh would be 90% by GOI, 5% by State Government and 5% by the beneficiary organisation. For the construction work shed Rs. 25000/- will be provided by GOI. A maximum upto Rs. 60.00 lakh per cluster will be provided for a period of 3 years depending upon the requirement.

During the year 2007-08, the Government of India has sanctioned two clusters (one Gohar in District Mandi and another for Kangra District.) with the project cost of Rs. 91.18 lakh and released an amount of Rs. 23,92,500/- as first installment of Central share. The same alongwith State share is Rs. 9.72 lakh has been disbursed to H.P. State Handicrafts & Handloom Corporation and HIMBUNKAR, Kullu for the implementation of this scheme in the aforesaid clusters. During the current financial year, two more clusters (one at Reckong Peo in Kinnaur District and another at Rampur, Anni and Nirmand Area of Kullu District have been identified and a proposal to sanction the same has been sent to Govt. of India. The Govt. of India has also sanctioned 7 proposals of Shimla, Mandi and Kangra districts under "Group Approach" component with a project cost of Rs. 30.80 lakh.

(viii) State Awards to Eminent master Crafts Persons and Handloom weavers

With a view to recognise the outstanding contribution, craftsmanship, development of crafts and survival of the languishing crafts of Craftspersons and weavers of the State, this Scheme was introduced in the year 2006-07. Under this Scheme, there is a provision to confer State Awards consisting of a Cash prize of Rs. 15,000/- for the first selected entry, Rs. 10000/- for second and Rs. 5000/- for third entry alongwith a merit certificate, ladies/gents shawl and a cap. From the last two years, State Awards to the artisans/ weavers of selected entries are being conferred by the Hon'ble Chief Minister of Himachal Pradesh on occasions of National/State Level Festivals.

(ix) Health Insurance Scheme (Handloom weavers Comprehensive Welfare scheme)

The Government of India has introduced this scheme under the components "Health Insurance Scheme (HIS)" and "Mahatma Gandhi Bunkar Bima Yojana(MGBBY)" as a welfare measure for the benefit of Handloom Weavers of the State. These Schemes are implemented through ICICI Lombard General Insurance Company Ltd. and Life Insurance of India. The basic objective of HIS is to enable the weaver community financially to access the best of healthcare facilities. The scheme is to cover not only the weaver but his wife and two children, to cover all pre-existing diseases as well as new diseases and keeping substantial provision for OPD. Against the total premium of Rs. 781.60 per annum, the Government of India contribution is Rs. 642.47 per annum and Rs. 69.57 (each) is the contribution of the State Government and concerned Weaver.

B. Large & Medium Sector

Industrial Area & Promotion.

This scheme relates to development of Industrial area. Under this scheme the Deptt has been undertaking minor works in industrial areas /estates and paying compensation for acquisition of land for industrial areas /estate and industrial purposes. Recently, the Govt. has signed MOU with CONCOR for development of Inland Container Depot in Baddi. For this about 17 bigha land @ Rs.15 lakh/ bigha is being acquired in mouza Baddi- Shitalpur for which about Rs.255 lakhs will be required.

1. Arts & Exhibition

This scheme aims at to provide exposers of new techniques and products to artisans, manufactures and industrial units of the State. This scheme ensures the participation of Department in different State and National Level exhibitions/fairs and Indian International Trade Fair Delhi.

2. Geology and Mining

Himachal Pradesh with an area of 55,673 Sq. Kms. has the potential for the occurrence of economic minerals, but has not brought to light any worthwhile metallic mineral deposits so far. Though there are old workings of metallic minerals, there is no major metal mine in the whole state. The situation however is different in respect of non-metallic minerals having abundant reserves of cement to chemical grade limestone and small reserves of barytes, gypsum, rock salt, shale, quartzite and silica boulders. The slates and building materials are also important minor minerals of the state. Presently about 37 minerals are reported in the state and except for

limestone, barytes, shale, rock salt, silica sand, quartzite, slate, bajri, building stone and sand, other minerals have only academic importance.

The state has vast reserves of limestone, spread over various locations and is ranked 4th in all India as far as reserves under proven category are concerned and 7th as far as total reserves are concerned. Based on these deposits three cement plants with capacity of about 6.4 million tonne per annum are already in operation and five cement plants with total capacity of about 14.7 million tonne per annum are in the pipeline.

With regards to regulation of minerals in the state, two sets are applicable i.e. Regulation of Major Minerals which are controlled under the provisions of Mines and Minerals (Development & Regulation) Act, 1957 and Mineral Concession Rules, 1960 and Regulation of Minor Minerals under the provisions of Himachal Pradesh Minor Minerals (Concession) Revised Rules, 1971. Prior to grant of any mining lease, the area is jointly inspected by the Joint Inspection Committee constituted by the Government under the Chairmanship of the concerned Sub-Divisional Magistrate and comprising members from Forest, PWD, I & PH, Pollution Control Board and Industries Department, Leases are only granted after the recommendations of this Committee. Consent of the concerned Gram Panchayat is also mandatory prior to grant of the mining leases. Presently, about 332 mining leases i.e. 50 Major Minerals, out of which 42 are for mineral limestone and 282 under minor minerals, out of which about 176 are for captive source for stone crushers have been granted. Based on these about 366 industrial units mainly comprising of stone crusher (234), limestone powder/poultry feed (92) and few other units of calcium carbonate, hydrated lime, mini cement plants, stone cutting units and hollow block have been established. This sector has given direct employment in the interior of the state to more than 12,500 persons and indirect employment to more than 40,000 persons. During the year 2007-08 state earns royalty to a tune of Rs. 60.32 crores and the indirect revenues by way of road tax, sales tax, central excise etc. could be many more times.

The royalty generation could have been much more but due to the enforcement of 1952 Notification of Forest Deptt. wherein all government lands are forest land thus attracting the provisions of FCA, 1980, the department is not in a position to grant mineral concession in many parts of the State. This has resulted in illegal mining, mostly of minor minerals like sand, stone and river borne bajri. However to check the menace of illegal mining, the Government has delegated powers to various officers/ officials of Industries, Administration, Forest, PWD & I PH Departments under various provisions of MM (D&R) Act, 1957. Further a Sub-Divisional Level Flying Squad under the chairmanship of concerned Sub-Divisional Magistrate with members from Forest and Police Departments have also been constituted. Above all the Deputy Commissioners of each district are also reviewing and submitting quarterly reports with regard to monitoring of illegal/indiscriminate mining to the Hon'ble High Court as per orders dated 25.5.2004 in CWP No.

777/2003. During the year 2007-08 about 3392 raids against illegal mining were conducted and 2100 numbers of cases were detected, 530 numbers of cases were compounded by realizing Rs. 27.28 lakh. During this period 865 numbers of cases were also decided by various courts by imposing penalty of Rs, 11.26 lakh.

With regards to environmental issues related to mining and associated activities, the State Govt. is very pro-active and has formulated the “River/Stream Bed Mining Policy Guidelines-2004” which was notified on 28.2.2004. Its basic objectives are to ensure scientific and systematic mining, conservation of mineral, proper replenishment of minerals, protection of environment, ecology river banks and public and private property. Infact every lease holder under Minor Minerals is also required to prepare a Working-cum-Environment Management Plan and to work according to its proposals. Bans have also been imposed in certain stretches of river where instances of illegal and unscientific mining were reported.

12. Civil Aviation

1. Development of Aero Sports

Himachal Pradesh is coming up fast on the international tourism map as an adventure sports destination. To boost these types of activities, training and infrastructural support for organizing aero sports activities is provided as also to hold national and international level aero-sports events to attract the tourists to the state and also to keep them engaged in adventure activities are organised. In addition, the department has been organizing Para Gliding Pre-World Cups since the year 2002 regularly. A lot of expenditure on publicity of event, transportation, boarding-lodging, rescue, retrieval and safety operation etc. is incurred during the event.

2. Construction of Helipads and Airstrips

At present, the State has 57 operational helipads. The department has a proposal to start heli-taxi services in the State and these helipads will be used for heli-taxi services in addition to the present utilisation. Starting heli-taxi service is one of the priority areas on which the department has been working for quite some time since a dedicated tourist helicopter service would be a major step for promotion of high end tourism in the State. The department initiated the proposal of starting heli-taxi service during the year 2004 by inviting expression of interests from some selected companies. Two options emerged from examination of proposals received on this issue. The option of operation of heli-taxi service without any equity participation by State Govt. was considered more flexible than the option of equity participation by the State Govt. In order to see the light of the day, this option envisages the State Govt. to guarantee some minimum hours of flying every month so that viability gap, if any, can be bridged. The heli-taxi service has not been able to take off in the State due to absence of commitment on viability gap funding issue.

13. Roads & Bridges

Himachal Pradesh has been blessed with excellent agro-climatic conditions for horticulture, growing of cash crops, off-season vegetables and vegetable seeds. It has huge potential for dairy development, tourism, horticulture/forest products & mineral based industries and generation of hydel power, yet this potential for economic growth could not be exploited in the past due to lack of means of communication. There were just 288 Kms. motorable roads in the State at the time of its formation in 1948. The inaccessibility of area was not only handicap for exploitation of resources but kept the population isolated from progressive influences resulting in social, cultural and political backwardness as well as poverty.

Roads are the only means of communication in predominantly hill state of Himachal Pradesh in the absence of Railways and Water Transport. Out of its 55,673 Sq.Kms. area, 36,700 Sq.Kms. is inhabited and its 17449 villages are scattered over slopes of hill ranges and valleys. There are 49 towns and 93% of population is rural.

1. Development Scenario

Realising importance of the construction of roads for connecting production areas with market centers and for providing much needed employment to rural population on road works the Himachal Pradesh Government since the inception of Five Year Plans gave first priority to road construction programme.

Considering the need for construction of roads all over the inhabited area and meagre resources available, to start with, plan was drawn for construction of main arterial roads connecting major valleys, administrative centers and production areas. Initially work on construction of tracks on motorable road alignments on these roads was taken up and these tracks were developed in phased manner to jeepable, single lane motorable road standards, providing of cross-drainage, construction of bridges, metalling, tarring and widening of few roads to double lane standards 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 scratch, 29157 Kms. motorable roads have been constructed in Himachal Pradesh till March 2008. The over-all status including the National Highways, as on 31.3.2008 is given in the following table

Table -1
Road Network in H.P. as on 31.3.2008

Sr. No.	Category of Roads	Motorable Road Length (In Kms.)			
		Single Lane	I/L	Double Lane	Total
1.	2.	3.	4.	5.	6.
1.	Motorable Road (Formation) :				
	(a) State Roads:				
	(i) State Highways	1193	-	631	1824
	(ii) Major District Roads	1050	-	720	1770
	(iii) Rural Roads	23583	-	-	23583
	Total	25826	-	1351	27177
	(b) Central Roads:				
	i) National Highways	305	206	749	1260
	ii) Border road with DGBR	451	-	269	720
	Total	756	206	1018	1980
	Total Length of Motorable Roads				29157
2.	Road density achieved	52.37 kms./100 sq.kms.			
3.	Length provided with cross drainage/ bridges out of the total length of 29,157 kms.	18,976 kms.(65.02%)			
4.	Metalled and tarred length, out of total length of 29,157 kms.	16,514 kms. (56.64%)			
5.	Permanent bridges of different types of construction	1537			
6.	Villages connected with either kutchha or pucca motorable roads (Out of total 17,449 census villages)	8,838 (50.65%)			
7.	Population wise break-up of connected villages:				
	(a) Above 1500 Population	199			
	(b) Above 1000 to 1500 Population	248			
	(c) Above 500 to 1000 Population	1050			
	(d) Above 200 to 500 Population	2970			
	(e) Less than 200 Population	4371			
	Total	8838			

Expenditure incurred on Roads & Bridge sector since independence and progress of development of roads in State Sector during various plan periods is as under:-

Table -2
Financial and Physical position of Roads during Plan Era

Plan Period	Investment and Expenditure (Rs. in lakh)			Motorable Roads (In Km.) (only State Roads)	
	State Plan Investment	Exp.incurred on roads	%age	During Plan Period	Cumulative at the end of Plan Period.
Upto 1948	-	-	-	-	288
Ist Plan 1951-56	527.25	225.40	42.75	216	504
2 nd Plan 1956-61	1602.80	533.84	33.30	796	1300
3 rd Plan 1961-66	3384.47	1018.11	30.08	814	2114
Three-Annual Plans 1966-69	4000.82	1228.57	30.70	2439	6196
Addition due to Merger of Punjab areas in the State in the Year 1966		3500.00	-	1643	
4 th Plan 1969-74	11340.00	2800.00	24.7	2846	9042
5 th Plan 1974-79	23450.00	4700.00	20.0	1352	10394
Annual Plan 1979-80	7880.00	1497.00	19.0	573	10967
6 th Plan 1980-85	62833.00	10176.00	16.19	2670	13637
7 th Plan 1985-90	117422.00	15889.13	13.53	1867	15560
Annual Plan 1990-91	36000.00	4388.58	12.19	411	15971
Annual Plan 1991-92	41000.00	5064.80	12.35	405	16376
8 th Plan 1992-97	325058.00	32122.28	11.60	2000	18376
9 th Plan 1997-2002	760058.54	90892.84	11.96	3003	20837 Note:- During 1998-99 & 1999-2000, 542 Kms. length State Highways were declared as National Highways.
2002-2003	184000.00	23528.73	12.79	673	21510
2003-2004	217100.00	20817.06	9.59	556	22066
2004-2005	140000.00	22672.97	16.19	521	22587
2005-2006	160000.00	28464.13	17.79	504	23091
2006-2007	180000.00	19169.32	10.65	498	23589
2007-2008	210000.00	31852.25	15.16	655	24244

The above table shows that expenditure on road construction programme has progressively come down from 42.75% of the total plan expenditure during Ist Five Year Plan to 15.16% in the year 2007-08. Only 50.65% villages of the State have been connected with motorable roads by March, 2008, giving a road density of 52.37 Kms./100 Sq.Kms. area. As linking of an area by modern means of communication precedes all developmental activities, therefore the population of about 51% villages of the State remained backward from the roads point of view and most of the developmental programmes of the Govt. could not provide the desired effect in the absence of road links to such villages.

2. Requirement Assessed

As per policy of the Govt. all the villages are to be connected with all weather motorable roads in a phased manner. As per master plan prepared, about 39045 Kms. roads in total, are required to be constructed in Himachal Pradesh to connect all villages, giving a density of about 70 Kms. per 100 Sq.Kms. area. District-wise requirement of motorable roads to connect villages of the State has been assessed on the basis of detailed survey conducted in the years 1999-2000 and the details of the same alongwith achievements upto March, 2008 are given as under:

Table-3
District wise Assessed Requirement

Sr. No.	Name of District	Area in Sq.Kms.	Population as per 2001 Census	For providing complete connectivity (In Kms.)	Assessed Density (Kms.)		Status as on 31.3.08		
					Per 100 Sq.Kms. of Area.	Per 1000 Population	Length in Kms.	Density Per 100 Sq.Kms.	Density Per 1000 Population
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.	Bilaspur	1167	340885	1561	133.76	4.58	1416	121.34	4.15
2.	Chamba	6528	460887	4564	69.91	9.90	1988	30.45	4.31
3.	Hamirpur	1118	412700	1892	169.23	4.58	1665	148.93	4.03
4.	Kangra	5739	1339030	6705	116.83	5.01	5123	89.27	3.83
5.	Kinnaur	6401	78334	891	13.91	11.37	703	10.98	8.97
6.	Kullu	5503	381571	2244	40.77	5.88	1439	26.15	3.77
7.	L&Spiti	13835	33224	1421	10.27	42.77	1145	8.28	34.46
8.	Mandi	3950	901344	6210	157.23	6.89	4359	110.35	4.84
9.	Shimla	5131	722502	5293	103.16	7.33	4610	89.87	6.38
10.	Sirmour	2825	458593	3294	116.61	7.18	2697	95.47	5.88
11.	Solan	1936	500557	3210	165.81	6.41	2402	124.07	4.80
12.	Una	1540	448273	1760	114.29	3.93	1610	104.55	3.59
	Total:	55673	6077900	39045	70.13	9.65	29157	52.37	4.80

As about 39045 Kms. Aggregate road length is required in the State to provide maximum possible connectivity to all the Census (17440) villages. Out of it, lot of work has already been done. The approximate cost requirement at 2007-2008 prices, for constructing the balance road length in the State, as well as all weather roads, is given in the following table:-

Table- 4
Cost Assessment to provide Balance Connectivity

Sr. No.	Major items of road works in Kms.	Total requirements in Kms.	Already provided or constructed in Kms. (as on 31-3-2008)	Balance work in Kms.	Cost requirement (Rs. in Crore)
1	Formation/Cutting	39045	29157	9988	1150
2	Cross-drainage including bridges	39045	18976	20069	1204
3	Metalling/tarring	39045	16514	22520	2107
Total cost: Rs. 4461 Crore					

3. Achievements of Annual Plan 2007-2008

Following achievements have been made by the end of 31st March, 2008:

Table - 5

Physical Achievement during 2007-08

Sr. No.	Item of Work.	Unit.	Target	Achievements
1	Motorable	Kms.	600	655
2	Jeepable	Kms.	20	82
3	Cross-drainage	Kms.	640	566
4	Metalling & tarring	Kms.	700	541
5	Bridges	Nos.	34	44
6	Villages	Nos.	40	80

4. Proposals for Annual Plan 2009-10

During the year 2009-10, it is targeted to construct 650 Kms. of new roads. Besides, work on up-gradation and improvement of State Highways & Arterial roads shall also be continued to meet the demands of growing traffic. The detailed break-up of proposed activities is in following paras. In addition to plan activities, work under this sector would also be continued under PMGSY programme.

(i) Rural Roads

It is targeted to construct about 650 Kms. new roads in the Annual Plan 2009-10 which includes assistance from NABARD and CRF. During the year, 45 Census villages are to be linked with motorable roads.

(ii) State Highways

The existing State Highway No. 20 of the State needs a lot of improvement and upgradation. During 2008-09, 15 Kms. length of State Highway is to be metalled/tarred, besides carrying out other improvement of these roads. The Government of Himachal Pradesh has sought a loan/credit financing of about US\$ 203.65 million from the World Bank towards the cost of the proposed up-gradation of about 447 Kms. four double or intermediate lane traffic standards and improvements mainly in the form of periodic renewal on about 2000 Kms. of State Highways and Major District Roads under State Road Project. This project would be prepared and implemented in 5 years period as per World Bank guidelines. The State Government has also identified and approved the “ HP Road and other Infrastructure Development Corporation Ltd. (HPRIDC) headed by Managing Director;” as the implementation agency for this project. The project will be executed through field divisions of Public Works Department. All the financial matters will be dealt in HPRIDC.

5. Sub-Head wise Proposed Breakup of Annual Plan Activities for 2009-2010

An outlay of Rs.47960.00 lakh for Roads & Bridges and Rs. 10.00 lakh for cableways has been proposed during 2009-10. The sub-head wise break-up of this outlay is given as under:

Table -6
Annual Plan 2009-2010, proposed break up of outlay
(Rs.in lakh)

Sr. No.	Sub-head.	Gen Plan	Special Component Plan (SOOS).	Tribal Area Sub-Plan	B.A.S.P.	Total
1.	2.	3.	4.	5.	6.	7.
1.	State Highways	500.00	-	385.78	-	885.78
	(a) Machinery & Equipment.	100.00	-	72.00	-	172.00
2.	Periodical Renewal	-	-	-	-	-
3.	Bridges (Soon)	500.00	100.00	407.00	-	1007.00
4.	Arterial Road	-	-	-	-	-
5.	NABARD (Soon)/RIDF	7000.00	2000.00	500.00	-	9500.00
6.	C.R.F.	1500.00	500.00	-	-	2000.00
7.	Rural Road OTMNP.	1930.00	1950.00	3250.22	800.00	7930.22
8.	Rural Road					
	(i) Land Compensation (V)	-	-	25.00	-	25.00
	(ii) Land Compensation (Charged)	-	-	-	-	-
9.	Staff in Rural road. (Staff Permanent)	-	-	-	-	-
10.	Link road to unconnected Panchayat with Highways.	50.00	50.00	10.00	-	110.00
11.	Training	5.00	0.00	-	-	5.00
12.	Payment compulsory afforstration & NPV / roads of industrial importance/Major Distt. roads	1550.00	-	-	-	1550.00
13.	Road side facility plantation	65.00	0.00	-	-	65.00
	3054-R&B Plan:					
14.	(i) District other Roads Maintenance & Repair (Soon)	9200.00	3300.00	2200.00	-	14700.00
	(ii) World Bank State Rural Road Project	7500.00	2500.00	-	-	10000.00
15.	Sanjauli Bye Pass	0.00	-	-	-	-
16.	Cableways	-	-	10.00	-	10.00
	Total:-	29900.00	10400.00	6860.00	800.00	47960.00

6. Physical Targets

With above-mentioned sub-head wise outlay, the following physical targets are fixed for 2009-10.

Table -7
Physical Target of Annual Plan 2009-10

1.	Motorable road	Kms.	650
2.	Jeepable	Kms.	30
3.	Cross-drainage	Kms.	700
4.	Metalling/tarring	Kms.	760
5.	Bridges	Nos.	30
6.	Villages	Nos.	45
B.	Cableways	Nos.	1

14. Information Technology

The department of Information Technology is taking all possible steps and initiatives in the field of e-Governance and for the promotion of Information Technology in the State for providing better services to citizens. The description of schemes under implementation is under:-

1. Design and implementation of e-Governance Roadmap and Capacity Building

Roadmaps :

(a) Scope of Project:

The wide scope and objectives of the NEGP programme highlights the enormity of the tasks ahead. Considering the nature and scale of e-Governance initiatives planned under NeGP, the role of the State Government in managing these initiatives is envisaged to be very critical. It is also well recognized that for States to play their role effectively, significant capacities need to be built and resources need to be augmented with additional skills. Thus, for the success of NeGP, it is necessary to enhance the capacities in the State Governments and its Nodal Agencies to enable them to handle issues in a competent manner, with a holistic perspective and with better efficiency. Considering this the Planning Commission in the year 2004-05 had incorporated a special budget entry and had allocated funds as Additional Central Assistance (ACA) to all the States for initiating the NeGP programme as communicated by Planning Commission, Govt. of India to State Chief Secretaries. Planning Commission has issued broad guidelines for use of the ACA indicating that the first priority is Capacity Building. The detailed guidelines for use of ACA for Capacity Building have been issued by DIT as indicated in the broad guidelines issued by the Planning Commission. It is in this connection, the State Governments are required to prepare “ Proposals” and sent to the Central Governments providing details on how the Capacity would be built and how the various gaps in terms of technical and managerial capabilities would be addressed. Subsequently, these proposals need to be implemented in the State. The detailed project report has been prepared and sent to GOI for approval. Further, funding to the tune of Rs. 361.00 lakh have been received as of now & work with different departments have been started.

(b) Status of the Project Activities done till now:

- Letters were written to 23 departments and 13 corporations regarding this project on 11th April,2007.
- Draft e- Governance Roadmap was prepared after visiting the departments and corporations.

- Draft e-Governance Roadmap was discussed during the meeting of Committees of Secretaries, where some gaps were found in the report.
- It was decided to discuss the report with important departments and meeting was scheduled with these departments in phases. These meetings were held in the month of July, 2007 and final report was prepared.
- Final document was again sent to all the departments for verification on 22nd February, 2008.
- After receiving the feed back from department, final document has been prepared.
- Action plan for preparation of DPRs and Computerization of line departments, which are important, with the view of citizen centric services, has been discussed with M/s Wipro and they will submit revised e-Governance, Capacity Building Roadmaps and Detailed Project Report (DPR).
- 2 Training Centres (fully equipped with 20 computers and teaching aids) have been set up in Mandi and Dharamshala for training of Government Employees in which basic computer training to about 1500 employees have been provided in last 2 years of operations.

2. HIMSWAN (Himachal State Wide Area Network)

(a) Background and Scope of Project:

The State Wide Area Network (SWAN) scheme is one of three Core Infrastructure Components. It has an estimated outlay of Rs. 79.23 crore for Himachal Pradesh, and was approved by the Govt. of India in March, 2005. The funds received till date are : Rs. 42.73 crore from department of IT, Govt. of India. The expenditure till date in HIMSWAN is Rs. 18.42 crore.

The objective of the scheme is to create a secure close user group (CUG) Government Network for the purpose of delivering Government to Government (G2G) and Government to Citizen (G2C) Services.

The scope of project is to provide connectivity to Government Offices upto Block Headquarters in Himachal Pradesh. HIMSWAN has been designed in such a way that it is expandable in future vertically (i.e down to the Panchayat / Village level) to cover Common Service Centres (CSC) and horizontally (i.e. all offices/ locations within the same location).

(b) Role of the State Government and IT Department:

The department of IT, Himachal Pradesh has designated Society for Promotion of IT and e- Governance (SITEG) as the implementing agency. The State Government through its agency will act as facilitator for implementing the project and subsequently provide horizontal connectivity to various Govt. Departments.

(c) Status of the Project:

1. Total 132 Points of Presence (PoPs) were to be established in HIMSWAN. Status of PoPs is as follows:
 - ❖ 123 PoPs are commissioned.
 - ❖ 8 PoPs sites are non- feasible from BSNL end as on date (i.e. Spiti at Kaza , Hangrang, Sangla, Pangi , Dodra Kwar, Kupvi, Rait, Rohnat). IT department is exploring the possibility of VSAT connectivity at these locations and commercials are being invited from various firms. The same is expected to be finalized by 31st March,2008.
2. At remaining 1 location i.e. Multhan, site preparation of PoPs is going on and the same is expected to be completed by December 31, 2008.
3. Till date horizontal connectivity (only LAN connectivity) has been provided at 627 locations.
4. 117 Wireless Masts out of 132 has been established at PoP locations. Thereafter, horizontal connectivity to remaining offices will be provided.
5. Third Party Audit Agency (TPA) has been short listed and work will be awarded soon to monitor the Service Levels of HIMSWAN Operator during 5 years operation period.

Services/Applications being run over HIMSWAN

Departmental Applications:

- Online HRTC Bus Reservation
- Integrated web interface for Transport services (Vahan & Sarathi)
- e-Registration for Electoral,
- SUGAM (Integrated Community Service Centre) bills payment,
- Weekly prices of essential commodities- Economics & Statistics department
- HP Public Service Commission- Online registration for HP Judicial Services Examination
- Court Case Monitoring Software for divisional Commissioner office
- Factory database for Labour & employment
- Statistical Data of Colleges
- CCMS (Computer Call Monitoring System)

Services:

- Web Server (hp.gov.in) to host web based applications so that the same can be accessed over Internet
- Database Server (SQL Server) to store data of various web based applications, thus saving money of user departments to buy databases for their applications and to hire technical person to maintain their servers.
- Mail Server (hpmail.gov.in) to create email account of officers/officials and departments. User will get email-id as username@hp.gov.in.
- Antivirus Server to protect all the PCs connected with HIMSWAN from virus attacks and relieve user departments to spend money for buying Antivirus software
- Internet Connectivity is being provided over HIMSWAN. Therefore, there is no need to take broadband connection or any other connectivity in government departments for Internet access
- Domain Controller: In order to make efficient use of HIMSWAN, this facility has been created to define various policies for different users/offices connected to HIMSWAN depending upon their requirement (i.e. Internet facility with limited access to avoid misuse, disablement of CD/floppy drives/USB drives in all those PCs which are being used for front-end operations to provide citizen centric services in e-Governance Centers and are being operated by contractual manpower).

Benefits of Government offices/employees/citizens

Major benefits:

- To bring Government departments closer to the masses by offering efficacious and speedy services.
- Better dissemination of information through web portal and online status of applications submitted online or through post or by hand.
- Reduction in response time in addressing grievances by the concerned departments.
- Facilities to the farmers and villagers who make queries about latest techniques, advice for their problems, new technologies etc. from a group of experts pertaining to fields of agriculture, horticulture, animal husbandry, health, fisheries etc. once AGRISNET Portal comes in place.
- Updated and latest information regarding public distribution system, list of beneficiaries under different programmes, information regarding government grants given to PRIs and urban local bodies.
- To provide Internet/ e-mail facilities and links to various departmental websites using SWAN.
- The other key applications envisaged on the network are e-mail, file transfer, broadcast and data communication, intranets, electronic data

interchange services, value added networks, government communication, call centres, information kiosks, data ware-housing, disaster management and maintenance of the wide area network itself.

- More extensive video and tele-conferencing facilities.

Himachal has the distinction of 1st state in the country to commission HIMSWAN project on 5th February, 2008. Further it is only state which has provided horizontal connectivity to maximum govt. offices (CSC) in the country. Recently, Himachal Pradesh has been awarded on National level for good work carried out under HIMSWAN Project.

15. Tourism

Himachal Pradesh is endowed with all the basic resources; geographic, clean, peaceful and beautiful environment, forests, lakes, mountains, rivers and streams, sacred shrines, historic monuments and the most important resource of all friendly and hospitable people and cultural diversity, necessary for achieving tourism activity. Tourism contributes nearly 2% of our state domestic product.

State Government tourism policy was declared in 1991. Since then, many new factors have emerged. The business and activity-oriented tourism has entered the scene alongside the more traditional leisure tourism. Adventure sports have become a major tourist attraction. It has been realised too late that unbridled expansion can lead to ecological damage. At this point, it is crucial that we develop an appropriate regulatory framework to ensure that all tourism activities take place in a safe and orderly fashion, and to make sure that all future development takes place in a manner that will enhance and protect our natural and cultural environment. There is also a tremendous opportunity for the state to act the role of a facilitator, providing an attractive and appropriate environment for new investment in the tourism industry, without being over dependent on incentives.

New Tourism Policy

1. Objectives

- To promote economically, culturally and ecologically sustainable tourism in Himachal Pradesh.
- To promote responsible tourism that will be welcomed as both preferred employer and new community industry.
- To use tourism as a means of providing new employment opportunities in rural, tribal and remote areas.
- To increase private sector participation in tourism, both as a means of generating employment and providing new infrastructure.
- To develop activity-based tourism to increase the duration of tourists visits.
- To develop adventure tourism by providing facilities and safety standards at internationally required levels.
- To devote special attention to the promotion of religious tourism.
- To promote new concepts in tourism, such as time-share.
- To transform the role of the Government as a facilitator.
-

2. Strategy

To achieve the above objectives, new tourism policy will employ the following strategies:

- **Break the seasonality factor:** Himachal has always been a popular tourist destination in the summer. Tourism products must be diversified to attract visitors in other seasons as well.
- **Disperse tourism to lesser known areas of the State:** This includes promoting tourism in rural and tribal areas and developing national parks and wildlife sanctuaries.
- **Develop pilgrimage sites:** These can become important tourism destinations by improving access, internal roads, sanitation and drainage, and pilgrim facilities. In addition, other tourism activities can be developed in nearby areas.

The schematic details are as under: -

1. Professional & Special Services

The department of tourism has few sites available for setting up tourism units in Himachal Pradesh. In order to prepare detailed project reports for these sites, services of the consultants are required. The work under this scheme is a continuous process and funds are required to incur the recurring expenditure on exploring new sites and for the preparation of DPRs.

2. Tourist Accommodation

The department has been improving/constructing the tourist infrastructure like accommodation, wayside amenities, signages, parking places, tourist facilities, entertainment facilities etc. at important tourist places. Major works are required to be undertaken with or without assistance of other funding agencies. The department also has to cater to upkeep of the various facilities like the sulabh shauchalayas, public parks, decorative illuminations and musical fountains etc. The department proposes to create more infrastructure and to upgrade the existing tourist information centres in and outside the State. The Government of India is sanctioning crore of rupees for various works in different parts of the State under centrally sponsored schemes and more funds are expected from the Government of India during the course of Annual Plans. The Govt. of India is also providing funds under matching schemes and in view of above, the funds for the schemes sanctioned by the Govt. of India also require counterpart State share. During the 10th Five Year Plan period, Rs. 10.15 lakh international and 78.75 lakh domestic tourists visited Himachal Pradesh.

3. Training/Trekking

Training plays an important role in developing the tourism sector in the State. The department of tourism has been imparting various training programmes like water sports, trekking guide, tourist guide, entrepreneur development, human resources development etc. for unemployed youths for providing them better employment opportunities in tourism related activities. The department has also been providing training to the police personnel, taxi drivers, bus drivers, pithus and dhaba owners with a view to build capacity.

4. Promotion & Publicity

The department of tourism plays proactive role for the promotion of State by way of releasing advertisements in the print and electronic media, participating in national and international tourism fairs, printing of tourist literature etc. The department also organizes various events during the off season in order to attract more tourists. To attract the tourists, tourism department has been organizing events like apple festival, vintage car rally, mountain biking, marathon, paragliding pre-world cups, rafting cups and golf tournaments etc. In order to organize these events, more professionally and in an efficient manner, it requires publicizing the same in print and electronic media. The budget of this department under this head remains very less which is not sufficient to meet the above requirements and needs to be revised by providing central funding.

5. Hospitality

The department has been provided hospitality to the prominent persons related to tourism and to host meets of travel agents, travel writers, national/international events and road shows etc. for the promotion of tourism. This calls for the provision of hospitality in respect of boarding, lodging and transportation.

6. Others

(i) Surveys

The department has been conducting economic surveys for appropriate planning, adequate and accurate database. The above scheme is a continuous process. Due to lack of adequate and technical staff in the department, it has been decided to get surveys conducted by agencies like the department of Economic & Statistics etc. The survey of heritage properties and monuments are required to be conducted.

(ii) Civic amenities

For the convenience of tourists the department provides basic facilities like toilets, parking places, paths, develops parks and beautifies temples at important tourist places. To undertake activities for providing the facilities the department continuously carries out civil works.

16. Elementary Education

Directorate of Primary Education was set up in 1984 and further renamed as Directorate of Elementary Education on 1-11-2005. This department has been set up with an objective to improve access, quality of education and help in achieving the ultimate goal of universalisation of elementary education. The process of transition from primary to elementary education system in the State is in progress. The policies of the Government in the field of Elementary Education are being implemented through the Deputy Directors posted in every district and Block Primary Education Officers at block level.

In the field of Primary/Upper Primary Education, tremendous progress has been made in expansion of facilities, which have brought down the drop out rates significantly. The access to primary education in the state has substantially increased with the opening of primary/upper primary (Middle) schools within walk-able distance. At present, there are 10732 notified Govt. Primary Schools in the state, 793 primary schools are in private sector, 2287 independent Govt. middle schools and 2058 including middle units of high and senior secondary schools, out of which 10609 primary schools are functional and efforts are on to make the remaining 50 primary schools functional. The enrolment in primary schools has also increased manifolds from meager 8697 in 1948 to 1084235 in 2008 (I-VIII) classes. Accordingly, the number of posts of teachers “CHT / HT / JBT / Para Teachers” has also increased from 278 in 1948 to 29145 as on 30.11.2008.

i) Literacy Rates

Literacy rates in Himachal Pradesh as per Census figures of 1971, 1981, 1991 and 2001 have shown a quite significant increase which have are as under :-

Sr. No	Year	Male Literacy	Female Literacy	Total Literacy
1.	1971	43.20%	20.20%	32.00%
2.	1981	53.19%	31.46%	42.48%
3.	1991	75.36%	52.13%	63.86%
4.	2001	85.30%	67.40%	76.50%

Note: i) Literacy rate for 1971 relates to population aged five year and above.
ii) The rate for the years 1981-2001 relate to the population aged seven years and above.

ii) Drop out Rates**PRIMARY**

Sr. No	Year	Boys	Girls	Total
1.	2003-04	2.25	2.05	2.15
2.	2004-05	0.83	0.95	0.89
3.	2005-06	1.12	0.68	0.90
4.	2006-07	0.10	0.12	0.11
5.	2007-08	0.01	0.01	0.01
6.	2008-09	0.01	0.01	0.01

UPPER PRIMARY

Year	Boys	Girls	Total
2005-06	1.65	0.99	1.33
2006-07	0.34	0.66	0.49
2007-08	0.01	0.01	0.01
2008-09	0.01	0.01	0.01

iii) Enrolment as on 30.11.2008

Elementary Education	Boys	Girls	Total
Primary Schools	249036	243366	492402
Upper Primary Schools	177349	169864	347213
Total	426385	413230	839615

1. Thrust Areas of 11th Plan (2007-12)

1. Minimization of drop out rate to zero level at elementary stage of education (class 1- VIII) in the state.
2. To achieve the targeted level (100%) enrolment of children of the age group of 6-14 years by 2010, as per SSA goal to universalize the elementary education in the State.
3. To improve quality education at elementary level.
4. All District and Block Offices are equipped with required facilities such as Telephone, Fax, Photostat machines, and Computer hardware and so as to introduce web based monitoring.
5. To ensure availability of proper infrastructure for all district /block offices and in all primary / elementary schools of the State.
6. To enhance the capacity of existing teaching man power by imparting better training to improve their teaching skills/ techniques so that they could handle the children more efficiently.

Scheme wise details:-

1. Direction and Administration

This is a staff oriented scheme and outlay envisaged is utilized for meeting out the expenditure on this account.

2. Infrastructure

The provision for infrastructure such as Durri Patti/Bench & Desk etc. is being met out of this scheme.

3. Incentives

For the purpose of providing of scholarships, free writing material, free uniform and free text books provision is being made under this scheme.

4. Teachers Posts (Salary)

Salary of teachers engaged under Primary and Elementary Education is being met out of this scheme.

5. Mid Day Meal

National programme of nutritional support to Primary Education popularly known as Mid Day Meal Scheme is being implemented in Primary Schools of the State w.e.f. 15th August, 1995, with an objective of Universalisation of Primary Education, to increase enrolment, retention and attendance, simultaneously redressing the problem of under-nutrition among students in primary classes.

Presently under this scheme nutritious hot cooked Mid Day Meal is being served to all the students of primary classes of all the Govt./ Govt. aided private primary schools as well as EGS centres (Alternate Schools) of SSA, with effect from 01.09.04, on all working days of the year, by involving the agencies such as Anganwari centres of ICDS, mahila mandals of the department of Rural Development or Primary Education Department.

The State Govt. has decided to extend this programme to upper primary stage to cover all the students (classes VI to VIII) of all the Govt. / Govt. aided middle schools of the State w.e.f. 1st July, 2008.

The existing approximate per child per school day average cost to implement the hot cooked Mid Day Meal programme in all the 15282 Govt. / Govt. aided Primary Schools / EGS centres opened under SSA, in the state has been enhanced by the Govt from Rs 1.76 to Rs 2.50 per child per day , out of which Rs 1.58 per child

per school day is expected to be shared by Central Govt. while the remaining cost of Rs. 1.00 per child per day is borne by the State Government. For upper primary stage per child per school day average cost has been Rs. 3.50. The meal served under this scheme is cooked and served either through Anganwari centres/ mahia mandals or through concerned primary schools by using the services of water carriers in coordination with MTA/ PTA/ NGO's / women's Self – Help Group etc. The cooks engaged are paid honorarium ranging from Rs. 200 to Rs. 1600 per school depending upon the quantum of work. The participation of mothers is being encouraged by forming rosters for supervision and preparation of cooked meal.

The Setting –cum- Monitoring committee at State, District and Block level has been constituted and regular review meetings are being held.

6. District Institutes of Education and Training (DIETs)

The Joint Secretary, MHRD, Department of School Education & Literacy, GOI, New Delhi vide D.O. No. F. 43-5/2005-EE.9, dated 8th November, 2006 has intimated that this scheme will be subsumed in Sarva Shiksha Abhiyan (SSA) and will be eligible for Central assistance on SSA pattern i.e. 50: 50 basis.

7. Sarva Shiksha Abhiyan

Sarva Shiksha Abhiyan (SSA) was introduced in the State during the year 2001-02, to provide useful and relevant elementary education for all children in the age group of 6 to 14 years, by 2010 and simultaneously to bridge social, regional and gender gaps, with the active participation of the community in the management of schools.

The cost sharing between centre and the state was in the ratio of 85:15 till 2001-02 and 75:25 till 2007. It will be 65:35 for the year 2007-08 and 2008-09 it will be 60:40. For the year 2009-10 it will be further revised to 55:45 for the year 2010-11 and thereafter it will be 50:50.

The other schemes being implemented by the SSA society in the state of Himachal Pradesh along with the various SSA activities are NPEGEL and KGBV schemes. Main interventions under SSA are as under:-

1. Opening of new upper Primary Schools.
2. Opening of alternate schools.
3. Free text books to general students.
4. Provision of Education for disabled children.
5. School grant for replacement of school equipments and other requirements.
6. Teachers grant for teaching learning material.
7. Maintenance grant.
8. Construction of BRC, CRC, Classrooms, toilets, boundary walls, provision of drinking water etc.

9. Provision for 20 days training per teacher per annum.
10. Providing of teaching learning equipments.
11. Provision for research & evaluation, development of EMIS etc.
12. Provision for innovative projects etc.

8. Capital Outlay

For the upgradation of physical infrastructure in the Elementary Education plan outlay of General Plan have exclusively been provided to meet out the liability on this account. The revenue component of Elementary Education has been shifted to non-plan.

17. General and University Education

After independence, special attention was given for the expansion of educational facilities to achieve the goal of cent percent literacy. Despite its limited resources, the State Govt. is sparing no stones unturned to improve the standard of education, not only quantitatively but qualitatively as well. Sincere and untiring efforts of the State government have resulted in a phenomenal progress in the field of education. It will not be an exaggeration of facts to say that there has been a revolution in the expansion of educational facilities in the State as would be evidenced from the table given below:-

New Institutions Opened

Sr. No	Plan Period	No. of Institutions opened			
		Middle School	High School	Sr. Secondary School	College
1	2	3	4	5	6
1	1 st Plan (1951-56)	51	15	-	1
2	2 nd Plan (1956-61)	84	42	-	4
3	3 rd Plan (1961-66)	169	35	-	2
4	Annual Plans (1966-69)	229	62	-	3
5	4 th Plan (1969-74)	339	118	-	2
6	5 th Plan (1974-78)	149	77	-	1
7	Rolling Plans(1978-80)	107	44	-	-
8	6 th Plan (1980-85)	147	218	-	2
9	7 th Plan (1985-90)	275	200	150	4
10	Annual Plans(1990-91)	18	19	-	-
11	Annual Plans (1991-92)	1	2	-	-
12	8 th Plan (1992-1997)	164	164	101	14 (Including 3 Evening College)
13	9 th Plan (1997-2002)	928	284	255	04
14	10 th Plan (2002-07)	987	324	454	27
15	11th Plan (2007-12)				
16	Annual Plan (2007-08)	196	189	248	03
17	Annual Plan (2008-09) (Target)	200	-	200	03
18.	Annual Plan 2009-10	No Targets have been fixed to open new institutions			

Details of Schemes

1. Direction and Administration

This is a staff oriented scheme and revenue liability on this account has been transferred to non-plan from the year 2008-09.

2. Infrastructure

For quality education, infrastructure is one of the basic needs. Basic infrastructure buildings, furniture, toilets, play grounds, laboratories and library etc. is needed in every institution. There is a budget provision of Rs. 4500.00 lakh for the construction of new and ongoing college buildings during the current financial year 2008-09. Of this, new college buildings will be constructed and infrastructure in other colleges will be improved.

Similarly, an amount of Rs. 1500.00 lakh has been earmarked for the new and ongoing college buildings under Scheduled Castes Sub-Plan during the current financial year 2008-09.

There is a budget provision of Rs. 4463.00 lakh for the construction of new and ongoing school buildings in the current financial year 2008-09. With this provision additional accommodation for newly upgraded Sr. Secondary Schools will be built and infrastructure of existing high schools will be upgraded.

Similarly, an amount of Rs. 1487.00 lakh has been earmarked for the new and ongoing school buildings under Scheduled Castes Sub-Plan during the current financial year 2008-09.

3. Teachers Training

The teacher training programme is meant for capacity building and strengthening the standard of education. The latest techniques/teaching methods in the elementary and secondary education are the part of training programme. The SCERT Solan is imparting training to in-service teachers where seminars and reorientation courses are organized besides courses are also organized by Himachal Pradesh Institute of Public Administration. During the year 2005-06, total 1553 Dy. Directors /Principals/ Headmasters, teachers and ministerial staff employees were imparted training in office management and administration.

4. Vocational Training

Quality education is the main objective of our education policy for 2007-2012. Education is not just mugging up knowledge but also development of skills, which will help the youngster in earning livelihood and channeling the young workforce.

Vocational courses are to be introduced at the school level. Like IT more optional courses as computer operational knowledge, communication skill development, fashion designing, interior decoration, agro- based courses and secretarial skill development are proposed in the Eleventh Plan. What is urgently needed is introduction of some vocational courses in colleges for up gradation of skills learnt in schools. These courses will be according to the area need based.

The following schemes have been transferred to non-plan from the financial year 2008-09, yet keeping in view their importance the content of these programme is added in this chapter for appropriate use.

5. Mid-Day-Meal Scheme

This scheme was introduced in the Primary Department for 1st to 5th classes in the tribal areas i.e. Kinnaur and Lahaul & Spiti and Bharmour and Pangi blocks of Chamba district in the first phase. The scheme was to be implemented in the entire State in the second phase. The Hon'ble Supreme Court of India in a civil writ petition No. 196/2001 issued directions on 20-4-2004 to chalk out the possibility of further extending the mid-day-meal scheme up to class 10th. With the establishment of Directorate of Elementary Education the scheme up to class 8th has now been shifted to Elementary Education Department.

6. Physical Education

Under this scheme all the state level tournaments for middle, high and senior secondary schools for boys and girls and coaching camps for selected players for the participation in national school games are covered and management also sends teams of various games for the participation in national school games and State Level children day celebration on 14th November every year. Conduct of selection trials for the admission in sports hostel run by the education department is also done under this scheme. All 7 sports hostels are also under the above scheme.

Similarly, Bharat Scouts and Guides training camps and related activities are also covered under this scheme. At present district/state level rallies, jumping caps at state/national level, uniform from class 10+1 to college level, camps for cub bulbul, robbers and rangers, adventure camps and to open new training centre at Rewalsar (Mandi) and other districts are also covered under this scheme. The children (boys/girls) of the age group of 5 to 25 years are trained under this scheme to develop their personality. Bharat Scout and Guides were founded on 7th November, 1950 and this day is celebrated every year in Raj Bhawan.

7. Equipment & Other Items

Under the scheme of elementary, secondary and university education science equipments, jute matting, craft material, library books, sports material, audio-visual

aids, equipment and furniture items are provided to all educational institutions, colleges and offices by the department of education. The above items are being supplied to those educational institutions which were in existence after 01.04.2002 under plan budget and all the newly upgraded institutions/ colleges till date. The financial liability in respect of institutions/ colleges prior to 31.3.2002 has since been transferred from plan to non-plan as they are being covered under non-plan heads.

8. Scholarships/Stipends

This scheme is meant for the students of deprived sections of the society and meritorious students to improve their educational status. The various types of scholarships/stipends are being provided by the State/Central Government at various stages, the details of which are given as under:-

i) Dr.Ambedkar Merit Scholarship Scheme

Under this scheme 1000 students of SCs and 1000 students of OBCs category in 10+1 and 10+2 are being selected from amongst those who have secured 72% marks in 10th and 10+1 H.P. Board of school Examination held in March/April every year provided that they are studying in Govt./Govt. recognized affiliated non-Govt. institutions. The selected candidates are awarded scholarship of Rs. 10000/-per year. During the year 2006-07, total 742 students of SCs category and 617 students of OBC Category & in 2007-08 total 415 students of SCs category and 323 students of OBCs category have been benefited under this scheme.

ii) Swami Vivekanand Merit Scholarship Scheme

Under the above scheme, 2000 students of general category in 10+1 and 10+2 separately are selected from amongst those who have appeared in H.P. Board of School Examination held in March/April every year for metric/10+1 and secure 77% or above marks and are the students of H. P. Govt./ Govt. recognized or affiliated non-Govt. educational institutions. The selected candidates are awarded scholarship of Rs. 10000/- per year. During the year 2006-07, total 2045 students & in 2007-08 total 1146 students of this category have been benefited under this scheme.

iii) Thakur Sen Negi Merit Scholarship Scheme

Under the above scheme, 200 students of STs category(100 boys and 100 girls) in 10+1 and 10+2 separately are selected from amongst those students who have appeared in 10th and 10+1 examinations of H.P. Board of School Education and secured 72% marks and above and who are studying in Himachal Pradesh Govt./ Govt. institutions or affiliated non-Govt. schools. The selected students are awarded scholarship of Rs. 11000/- per year. During the year 2006-07, total 141 students & in 2007-08 total 100 students of this category have been benefited under this scheme.

iv) Maharishi Balmiki Scholarship Scheme

This scheme meant for the children of those families who are engaged in unclean profession and are bonafide Himachalies and studying after 10th class in the H. P. Govt. schools or Non-Govt. recognized institutions. These students are awarded scholarship of Rs. 9000/- per year up to the level of college education or equivalent professional degree courses. During the year 2006-07, total 78 students & in 2007-08 total 95 students of this category have been benefited under this scheme.

v) High School Merit Scholarship

This scheme is meant for those students who have been listed in the first 300 position in the merit list prepared by the H.P. Board of School Education on the basis of middle standard examination held every year and are studying in 9th class in H.P. Govt. schools / Govt. recognized or affiliated non-govt. schools. Under this scheme, every student is awarded a scholarship of Rs. 1000/- per year for day students and Rs. 1500/- for hostliers. During the year 2006-07, total 402 students & in 2007-08 total 346 students of this category have been benefited under this scheme.

vi) Middle School Merit Scholarship

This scheme is meant for the students who have secured first 4 positions in every education block on the basis of 5th class examination held every year provided they are studying in 6th class in H.P. Govt. schools/non-Govt. recognized schools. Selected students are awarded a scholarship of Rs. 800/-for girls and Rs. 400/-for boys per year to the level of 8th class subject to the condition that they pass in the previous class.

vii) Post Matric Scholarship to SCs/STs/OBCs Students

This scholarship is being awarded to the students belonging to SCs/STs/OBCs categories. The students belonging to SC/ST categories whose parents/guardians annual income is up to Rs. 1,00,000/- are eligible for this scholarship. The students belonging to OBCs are only eligible for this scholarship if the annual income of their parents/guardian is Rs. 44,500/-. The scholarship is payable only to those students who are regularly studying in any Govt./Govt. aided institutions.

The rates of scholarship are as under:

up	Course	Month wise Rates	
		Day Scholar	Hostliers
1.	2.	3.	4.
a)	Medical/ Engineering/ BSC/(Agr.)BSc(Forestry)	330	740
b)	Diploma in Engineering/Medical/MSc.	330	510
c)	Certificate in Engineering/Architect/Medical/ Agriculture/Library/M.A./B.Com.	330	510
d)	BA/BSc 2 nd & 3 rd Year	185	355
e)	BA/BSC 1 st Year/ 10+1 & 10+2 Class	140	235

Total number of 11327 (SC=8495, ST=1860, OBC=972) students in 2006-07 and total number of 4331 (SC=2467, ST=1170, OBC=694) students have been benefited under this scheme during the year 2007-08.

viii) IRDP Scholarship Scheme

Under this scheme the students belonging to IRDP families are being benefited as per details given below:-

Sr.No.	Class	Annual Rate	
		Boys	Girls
1.	2.	3.	4.
1.	6 th to 8 th	250	500
2.	9 th to 10 th	300	600
3.	10+1 to 10+2	800	800
4.	College/Universities		
	i) Day Scholars	1200	1200
	ii) Hostliers	2400	2400

During the year 2006-07, total number of 97,800 students and during the year 2007-08 total numbers of 71540 students (tentative) have been awarded scholarship under this scheme.

ix) Scheme for Raising Educational Standard of SCs/STs Students

Under this CSS, 6 SCs and 1 ST (Total=7) students are selected on the basis of merit list of 8th class examination conducted by the HP Board of School Education. The selection is made at the directorate level. The selected students are sent to GSSS Sarahan, district Sirmour for admission in 9th class where the students are imparted free education to increase their educational standard and the following facilities are provided to them:-

- | | | | |
|----|----------------------|---|-----------------------|
| 1. | Fees and stationery | = | Rs. 2000/- per annum. |
| 2. | Boarding and lodging | = | Rs. 500/- per month. |
| 3. | Pocket expenses | = | Rs. 100/- per month. |

For the last two years, no students have been selected under this scheme to avail the incentives.

x) Scholarship to the Children of Armed Forces Personnel Killed/Disabled during action/war

Under this scheme, the provision has been made to award scholarship at different level to the children of armed personnel killed /disabled during action /war. In these cases where disability is less than 50%, the scholarship is awarded at half rate. For awarding scholarship, the eligible students send their applications on the prescribed application form through the Headmaster/Principal/Head of the department to the Sainik Kalyan Board of the district concerned. After scrutiny and completion of other formalities Sainik Kalyan Board sends the application forms of the eligible students to the directorate of education for further action.

Class wise details of Annual Rate

Sr.No.	Class	Annual Rate	
		Boys	Girls
1.	2.	3.	4.
1.	6 th to 8 th	250	500
2.	9 th to 10 th	300	600
3.	10+1 to 10+2	800	800
4.	College/Universities		
	i) Day Scholars	1200	1200
	ii) Hostliers	2400	2400

During the year 2006-07, this facility benefited 2 students only and during the year 2007-08, this facility benefited a total number of 3 students.

xi) Sanskrit Scholarship Scheme

Under this centrally sponsored scheme, the candidates securing first position in Sanskrit subject in his class is only eligible for this scholarship. In addition, it is necessary to obtain 60% marks in Sanskrit and 60% in aggregate in all subjects. This scholarship is payable to those students of 9th, 10th, 10+1 and 10+2 classes who secure 60% marks in Sanskrit in the previous class i.e. 8th, 9th, 10th, 10+1 with above percentages.

The rates of this scholarship are as under:-

Sr. No.	Class	Rate per Month(Payable for 10 months)
1.	9 th & 10 th	Rs. 250/-
2.	10+1 and 10+2	Rs. 300/-

During the year 2006-07, this facility benefited a total number of 12225 students and during the year 2007-08, 12890 students have been benefited under this scheme.

xii) Sainik School Scholarship

This scholarship is only payable to the students studying in Sainik school Sujampur Tihra in Distt.Hamirpur. The Principal of the concerned school makes selection of eligible students as per norms/conditions of the scheme. This scholarship is awarded to classes from 6th to 10+2, the details of which are given as under:-

Sr. No.	Income Status	Annual Rate
1.	Rs.9220/- per month	Rs. 18000/-
2.	Rs.9221/- to 10650/-	Rs. 15000/-
3.	Rs.10651/- to 11470/-	Rs. 12000/-
4.	Rs.11471/- to above	Rs. 8000/-

Under this scheme, 186 students have been given scholarship during the year 2006-07 & 538 students in the year 2007-08.

xiii) National Merit Scholarship (CSS)

Under this scheme, the scholarship for 9th and 10th class will be provided to the students studying in Govt. schools in rural area. However, the scholarship from post- matric to post graduate level will be awarded on the basis of merit of Post Matric and Graduation. The annual income of parents from all sources should not exceed Rs. 100000/-. The details are given as under:-

Sr. No.	Class/Course	Rate per month
1.	9 th and 10 th in rural area only	Rs. 250/-
2.	BA,BSc/BCom./B.Archolog.	Rs. 500/-
3.	Scholarship at Post Graduate level/BE/B.Tech ./ MBBS/LLB/Bed/Diploma in Hotel Management / Diploma Courses	Rs. 750/-

Under this scheme 246 students have been given scholarship during the year 2006-07.

xiv) Indira Gandhi Utkrishtha Chhattervriti Yojna for Post Plus Two Students

This scheme is for meritorious post plus two courses shall be awarded to 150 students at the rate of Rs.10000/- per annum per student purely on the basis of income ceiling. The scholarship awarded to the merit list of 10+2 Art, Science and Commerce of Board of School Education, Dharamshala provided they enter professional stream. The scholarship will also be awarded from the merit list of B.A, BSc and B.Com provided they enter academic /professional stream. Scholarship will be given to the same number of students till they complete the degree or the course. During the year 2006-07, this facility benefited a total number of 186 students and during the year 2007-08, this facility benefited a total number of 11 students.

xv) Pre-Matric Scholarship for Children of those engaged in unclean occupation

Under this scheme, the scholarship is provided to the children of Indian National who irrespective of their religion are actively engaged in scavenging of dry latrines and other unclean occupation i.e. tanning and flying only which are traditionally considered unclean. The scholarship will be tenable only to such institutions and for such courses up to matric stage which has been duly recognized by the concerned State. There will be no income ceiling under this scheme and the scholarships are granted for ten months. The details are given as under:-

Class	Rate per Month	
	Day Scholar	Hosteliers
1.	2.	3.
6 th to 8 th	60	300
9 th to 10 th	75	375

Note: Day scholar and hosteliers are eligible for an adhoc grant of Rs. 550/- and 600/- per student per annum respectively.

xvi) Rashtriya Indian Military College (RIMC)

Draft proposal for State Govt. Scholarship for H.P. Bonafide students studying in RIMC Dehradun has been sent to the Govt. vide letter No. dated 1-12-2005. During the year 2006-07, this facility benefited a total number of 10 students and during the year 2007-08 also 10 students were benefited under this scheme.

xvii) Maulana Azad National Scholarship Scheme for Meritorious Girls students belonging to Minorities

This is a new scheme sponsored by Centre through Social Justice & Empowerment Deptt. of H. P. In this scheme, number of beneficiaries will be identified after following the required procedure.

xviii) National Overseas Scholarship for Scheduled Caste

This is a new scheme sponsored by Centre through Social Justice & Empowerment Department. The beneficiaries will be identified after following the required procedure.

xix) Rajiv Gandhi National Fellowship for Scheduled Caste

This is a new scheme sponsored by Centre through Social Justice & Empowerment Department. The number of beneficiaries will be identified after following the required procedure.

9. Free Text Books

Free text books scheme was introduced in the academic session 1987-88 only in tribal area for SCs/STs students. After that this scheme has been extended to SCs/STs students in non-tribal areas in 1996-97. In the year 1997-98, this scheme has been extended to students of OBCs category and in 1998-1999 to IRDP families.

Under this scheme, the text books are being supplied to the students of 6th to 10th classes and belonging to SCs/STs/OBCs and IRDP categories studying in Govt. schools. The Head of institutions project their requirement of free text books annually to the Deputy Director of Education of the concerned district. The Deputy Director of Education compiles the requirement at his level for the district and place the order for purchase of free text books to the sale depot in-charge of the books being run by the H.P. Board of School Education, Dharamsala. The head of school manages to lift the books from the sale depot and arranges distribution amongst the eligible students of his school. The Himachal Pradesh Board of School Education raises the bills to this department on the basis of actual purchase and lifting of free text books done by the head of institutions. During the year 2007-08, total 1, 35,038 students have been benefited under this scheme. With the establishment of Directorate of Elementary Education the scheme up to class 8th is now being implemented by Elementary Education Department. Free text books for class 9th and 10th students hence forth will be given by the Secondary Education Department. A fresh proposal of free text books for class 11th and 12th students of above categories is being sent to the Govt.

10. Free Education to Handicapped Children (CSS)

Under this scheme, which has been started during 2001-2002, free education to the children having more than 40% disability is being provided up to University level. This scheme is being continued during 11th Five Year Plan. Free residential schools with infrastructure with specific needs for handicapped children will be opened at least in every district in the 11th Five Year Plan.

11. Art & Culture

This is a scheme for funding library under (SCA Head-2205-00-796-04) to be continued in the 11th Five Year Plan.

12. Language Development

This is a State scheme to provide Grant-in-Aid to Sanskrit Academy. The total budget provision of Rs. 3697.73 lakh has been proposed for Language Development during the Eleventh Five Year Plan 2007-2012 which includes Rs. 215.00 lakh for GIA to Sanskrit Academy and Rs. 700.00 lakh for GIA to Non-Govt. Sanskrit Colleges. The Department has proposed to open 2 New Sanskrit Colleges in Distt. Kullu and Kangra.

13. Sainik School

Under this scheme the total budget provision of Rs. 300 lakh has been made for NCC activities. This will be continued during 11th Five Year Plan 2007-2012.

14. Centrally Sponsored Schemes

The department of Secondary Education, apart from implementing general State Plan Schemes, also implementing Centrally Sponsored Schemes of National importance. These Centrally Sponsored Schemes are cent percent funded by the Govt. of India. The name of these schemes is given as under :

1. Vocational Education in Secondary Schools
2. Improvement in Science Education
3. Modernisation of Sanskrit Pathsala

4. Educational Technology Programme

5. Environmental Orientation to School

15. Capital Works

On going capital works and new capital works will be continued in the 11th Plan and plan funds will be exclusively utilised for this purpose.

18. Technical Education

The department of Technical Education, Vocational and Industrial Training plays a vital role in socio-economic development of the country. In this era of liberalization, industrialization and globalization, skilled manpower of world class standard is of utmost necessity.

There has been tremendous growth of industry in Himachal Pradesh in the last few years. There has been consistent demand from industry and also from the service sector for semi-skilled, skilled and highly skilled personnel. There is a need of the opening of more and more technical and vocational institutions to churn out the skilled manpower as per the need of industry and services sector. The department is laying stress to open at least one ITI/ITC in each assembly constituency and one polytechnic in each district. Further to encourage the private sector for opening technical and vocational institutions in the State, the department is extending all possible help to the private entrepreneurs required for this purpose.

In order to maintain quality of technical education in the private institutions, the department is ensuring that the institutions established in the private sector fulfill the requirements and norms/guidelines of regulatory bodies like; All India Council for Technical Education (AICTE), Pharmacy Council of India (PCI), H.P. University, Shimla, National Council for Technical Education (NCVT), Delhi, State Council for Vocational Training (SCVT) etc.

There is a need of skilled manpower both in quantitative and qualitative terms. Realizing this, the department of Technical Education is laying stress in opening more and more technical and vocational institutions on the one hand and strengthening / consolidating the existing institutions on the other.

At present, the department has 6 Engineering Colleges (1 in Govt. sector and 5 in private sector), 10 Pharmacy Colleges (1 in Govt. sector and 9 in private sector), 12 Polytechnics (9 in Govt. sector and 3 in private sector), 3 Diploma level Pharmacy Institution in private sector, 77 ITIs, 51 Industrial Training Centres in private sector and 257 Vocational Training Centres in private sector under SCVT. There is also one National Institute of Technology (NIT) at Hamirpur under the control of MHRD, Govt. of India and Deemed University in the name and style of J.P. University of Information and Technology at Wagnaghat in district Solan, Eternal university Baru Sahib in district Sirmour and Chitkara University, Kallujhanda, Barotiwala.

A World Bank aided project with a total outlay of Rs. 7.24 crore (Revised cost Rs. 7.99 crore) namely Technical Education Quality Improvement Project (TEQIP) is being implemented in 3 Govt. Polytechnics namely: Govt. Polytechnic, Sundernagar, Hamirpur and Kandaghat (Women). In addition 2nd phase of Technical Education Quality Improvement Project (TEQIP) shall be started in other Polytechnics from next year 2009-2010 under centrally sponsored scheme with

Central and State Share in the ratio of 75:25. Similarly, 3 ITIs namely: Rampur, Una and Solan were upgraded into Centre of Excellence in the year 2006-07 with domestic funding and more ITIs namely: ITI Shamshi, Chamba, Shahpur, Nadaun, Mandi, Nahan, Shimla and Rekong Peo have been upgraded as Centres of Excellence under World Bank assistance. Besides, 18 it is have been upgraded under Public Private Patrnership (PPP) mode.

The department is keen to open trades keeping with the demand of the Industry. Further the department is opening and strengthening the placement cells in each institution to promote in-campus placement of the pass-out candidates.

Capital Content

A Plan Outlay of Rs. 2893.50 lakh has been proposed for the Financial year 2009-10. Out of this, a sum of Rs. 1000.00 lakh has been proposed for the construction of buildings of J.N. Govt. Engineering Collage, Sunder Nagar and Rs. 165.00 Lakh for the construction of buildings of Govt. B. Pharmacy College, Rohru. The worh of 4 blocks at J.N. Govt. Engineering College, Sunder Nagar are in progress while the work of main institutional building, hostel and residences etc. at B. Pharmacy College, Rohru will be completed soon.

Out of total budget of Rs. 1070.00 lakh proposed for the construction of Polytechnic buildings, a sum of Rs. 730.00 has been proposed under General Plan and balance Rs. 340.00 lakh under Scheduled Caste Component Plan (SCCP). A workshop building and 5 Nos. type IV staff quarters at Govt. Polytechnic, Sunder Nagar and 60 Girls Hostel building at Govt. Polytechnic Kandaghat (Women) will also be completed during the current financial year. Similarly, computer and I.T. block at Govt. Polytechnic Hamirpur will also be completed during the current financial year. In addition, construction of buildings at Polytechnic, Chamba and Banikhet in District Chamba has been taken up in hand recently for which a provision of Rs. 240.00 lakh and 200.00 lakh respectively has been proposed for the financial year 2009-2010.

Out of total budget of Rs. 620.00 lakh proposed for the construction of Industrial Traning Institute buildings, a sum of Rs. 560.00 lakh has been proposed under General Plan. 8 building i.e. main ITI building Rajgarh, Bhoranj, Una, Nehran Pukhar Phase-II, Boys hostel for ITI Nadaun at Rail, Girls hostel Chamba, including staff quarters at Shahpur and ITI (W) Dharamshala will be completed during the current financial years. Balance budget of Rs. 60.00 lakh has been proposed as State Share for the construction of Industrial Traning Institute buildings at Mandi, Nadaun, Shahapur, Chamba, Shamshi, Nahan, Shimla and Reckong Peo which have been upgraded under Centres of Excellence (COE), buildings at ITI, Rampur, Una and Solan will be completed soon.

An amount of Rs. 38.50 lakh has been proposed for the construction of Industrial Training Institute, building at Udaipur, Pangi, Bharmour, Reckong Peo and Rong-Tong in Tribal Area. Main Institutional building at ITI, Udaipur has been completed and taken over by the Department.

19. Allopathy

The State Government is committed to provide basic health care facilities to the people of the State. Health is a priority area for spending by the State Government. Despite various constraints, the State Government has endeavoured to increase the allocation for health sector from time to time. We have been able to build a vast health infrastructure comprising of 2069 Health Sub-Centres, 452 PHCs, 23 Civil Dispensaries (including E.S.I.), 73 CHCs, 52 Hospitals, one Govt. Dental College and two Medical Colleges with a total bed capacity of 9174 beds. In Himachal Pradesh presently one Health Sub-Centre is serving 2952 people as against the national average of 5111. Similarly, a PHC is providing health care facilities to about 13,524 people against the national average of 33191 whereas a CHC is serving 83,366 people against the national average of 1.83 lakh.

Emphasis by the State Government on the health infrastructure and facilities has resulted in favorable health indicators. According to SRS-2007 and NFHS-III the health indicators of Himachal are better as compared to the national averages. The birth rate of the State is 17.4 per 1000 against 23.11 of the country; crude death rate is 7.1 as against 7.4 at the national level and infant mortality rate is 47 as against the national figure of 55. Total fertility rate of the State is 2.0 against the all India figure of 2.8. In the field of family planning our achievements are high and encouraging. Coverage of eligible couples with family planning methods in the State is around 73%, which is highest in country. The State has achieved near elimination of leprosy with reduction in leprosy prevalence rate to less than 0.31 cases per ten thousand population. Tuberculosis has also been brought under control with more than 88% cure rate. The achievements under the Universal Immunization Programme have also been commendable.

Himachal Pradesh has been included among the 18 State's of the country for the implementation of National Rural Health Mission. The Mission focuses on decentralized implementation of the activities. It sets the stage for direct management of health and active community participation in the implementation of health programmes. The programme also focuses on convergence with IPH, Rural Development and Panchayati Raj, Ayurveda and Social Justice and Empowerment departments.

The State Government has provided MRI and Open Heart Surgery facilities at IGMCH, Shimla besides strengthening the diagnostic services in the Diagnostic Centres at Hamirpur, Solan and Bilaspur. In order to create quality, para-medical training facilities in the State, expression of interest has been invited from interested private parties to set up 2 Nursing Colleges and 15 Nursing Schools.

The Health Department with the support of ICMR has initiated a preventive public health programme for the cancer as a pilot in the three districts of the state : Mandi, Bilaspur & Hamirpur to tackle the three form of cancer : Breast, Cervical and Oral, which are the major disability and burden of disease factors. A population

based surveillance with the collaboration of ICMR along with the preventive and curative efforts will be major focus area.

Medical check-ups of the school children is very important to timely check the disease in the children but this programme has been suffering for want of adequate funds. The department requires funds under this programme for printing of health cards and logistic arrangements for the visit of medical teams and training of teachers.

Strategy for 11th Plan

1. Provision of health care services both in Public and Private Sector.
2. Quality Health Care Services.
3. More scientific and technology advanced health care system.
4. Adequate monitoring and supervision of health institutions.
5. To effectively achieve the national goals and objectives.
6. To work on a State Health policy with a proper time schedule for different activities.
7. To clearly spell out the future health care requirement.
8. Adequate research through primary survey.
9. Higher level of efficient functioning.
10. Special emphasis on preventive measures.
11. Strengthening the existing public health services and widening their work.
12. To develop appropriate strategy to regulate the private sector.
13. Viable health insurance policy.
14. To open more trauma wards.
15. Introduction of telemedicines for appropriate consultations for the treatment of illness.
16. To assess the health needs of the State.
17. Proper computerized health management system.

I. Issues to be addressed during 11th Plan

1. Improvement of Sex Ratio

The sex ratio in the State is reported to be 968 females per thousand males in the year 2001. But, the child sex ratio which was 951 in 1991 has declined to 896 in 2001 which is a matter of great concern and the State has initiated urgent measures to

stop this decline which has now improved to 901 during 2003-2005 period. The State has already formulated an incentive strategy for the improvement in sex - ratio.

2. Provisions of residential accommodation at PHC level

Himachal Pradesh is a hilly State and the Primary Health Centres are located at remote localities where good residential accommodation for the essential health care staff is not easily available. In order to improve the primary health care facilities in the rural areas and to encourage the health staff to live in the health institution premises, we need to construct residential accommodation for the doctors, nurses and other supporting staff in the PHCs. This will not only encourage the willingness of health staff to serve in the rural and remote areas but will also improve the health facilities and help in increasing the institutional deliveries, reducing the IMR and MMR considerably. The State would require sufficient plan funds for the construction of residential accommodation at PHC and CHC level.

3. Provision for appointment and training of Trained Dais in the Tribal and difficult areas

In the tribal and difficult areas of the State especially Kinnaur, Lahaul and Spiti, Pangi, Bharmour, Dodra -Kawar, Chirgaon, Chotta Bhangal, Bara Bhangal and Tissa areas of the State the density of population is very low and the habitations are located very sparsely. Many habitations are far away from the available health facilities. Therefore, in order to improve the maternal and child health facilities in the remote habitations, the State intends to appoint trained Dais. Approximately 500 trained Dais need to be trained and appointed in these remote and difficult areas.

4. Establishment of Trauma Services

This hilly State is prone to recurrent traffic and other accidents. Therefore, there is an urgent need to improve the Trauma Care Services. The State Govt. plans to strengthen the trauma services at R.H. Solan, R.H. Kullu, R.H. Una, R.H. Chamba and MGMSC Khaneri at Rampur. The Govt. of India has already sanctioned Rs. 1.5 Crores for establishment of Trauma Centre at Kullu. The services also need to be extended in Kangra District (Nurpur). The cases for establishment of other places have also been taken up with the GOI. In order to run the Trauma Centres effectively the additional trained staff would also be required at each place for which additional plan support in the Eleventh Five Year Plan would be required.

5. Disposal of Bio-Medical Waste

Proper disposal of bio-medical and hospital waste has now become an important health issue and the health institutions need to be equipped for the proper disposal of bio-medical and other hospital waste. The provision for equipments and disposal procedures need to be supported by the plan.

6. Opening of New Sub-Centres and PHCs in the State

Himachal Pradesh is a hilly State with very difficult geographical terrain and there are many pockets in the State which are still un-served or under served on account of their geographical locations. Presently, there are 2069 health sub-centres and 452 PHCs in the State, whereas the number of inhabited villages is 17,495 in 3243 panchayats. In order to strengthen the primary health care services in the sparsely populated and remotely located habitations the number of sub-centres and PHCs is required to be increased in relaxation of norms.

7. Provision of ASHA under NRHM

Keeping in view the geographical difficulties and low density of the State, Himachal Pradesh requires **ASHA** to be in place for every 500 population. Therefore, about 13,000 ASHA workers would be required by the State for the effective implementation of NRHM.

II. Description of Programmes / Schemes

1. National Vector Borne Disease Control Programme

Under this programme 125 fever treatment depots, 1767 drug distribution centres and 206 malaria clinics are functioning in the State. During the year 2006 (up to November, 2006) 4,29,719 blood slides were collected and 4, 26,119 blood slides were examined out of which 107 slides were found positive. During this period, 105 positive cases were given radical treatment and no death due to malaria was reported.

2. National Leprosy Eradication Programme

Under National Leprosy Eradication Programme the prevalence rate which was 26 per thousand in 1955, has been reduced to 0.28 per ten thousand in 2006-07. The National Leprosy Control Programme was converted in to Leprosy Eradication Programme in 1994-95 by the Government of India and with the assistance of World Bank, Leprosy societies were formed in the districts. During 2006-07, 198 new cases of leprosy have been detected, 217 cases were deleted and 190 cases were under treatment. They are getting MDT from different health institutions free of cost.

3. National TB Control Programme

Under this programme, 1 TB sanatorium, 12 District TB Centres / clinics, 41 T.B. Units and 168 microscopic centers having a provision of 463 beds were functioning in the State. During the year 2006-07, 67719 suspects were examined and 13303 patients were given treatment. Total case detection rate of 207/per lakh population was found during the year 2006-07. Himachal Pradesh is one of the State where all the districts have been covered under this project.

4. National Programme for control of Blindness

Under this programme, during 2006-07 (upto December 2006), 11946 cataract operations were performed against the allotted target of 16000 cataract operations. Out of this, 1096 bilateral cataract operations and 8729 cataract operations were performed with I.O lenses. Besides, 95007 school children were examined against allotted target of 1,73,250 upto December 2006.

5. National Family Welfare Programme

This programme is being carried out in the State as a part of Reproductive and Child Health Programme, on the basis of community needs assessment approach. Under this approach grass-root level workers like multipurpose health workers (both male and female) give an estimate of the various family welfare activities required in the area / population covered by them.

The RCH programme includes the components of child survival and safe motherhood, RTI and STI programmes. It also includes adolescent health education. Under the programme, RCH society has been set up in the State. The funds are provided by the Government of India for implementation of the programme through RCH Society. In addition, there is also a provision of funds in the general budget of the State for 24 hours delivery services scheme being implemented in all the districts of the State. Under this programme, RCH Camps are being organized in the districts of Shimla, Chamba and Kangra. Under the scheme, a composite service package is provided which includes immunization of mothers, infants and children besides health check-up of mothers/ children.

6. National Programme (Iodine Deficiency disorder)

The main objective of this programme is to create awareness among the people about the disorders caused by IDD and to use iodized salt to prevent from the diseases caused by IDD. The salt samples by salt testing kits could not be analyzed due to non-availability of salt testing kits by Government of India during this year.

7. National Rural Health Mission

Recognizing the importance of health in the process of economic and social development and improving the quality of life of our citizens, the National Rural Health Mission (NRHM) was launched on 12th April, 2005 with the objectives of universal access to public health services, prevention and control for communicable and non-communicable diseases, access to integrated comprehensive primary health care, revitalizing local health traditions and promotion of healthy life style.

Under NRHM, following goals have been targeted for 2005-2012:

- Reduction in Infant Mortality rate (IMR) to 30/1000 live births.
- Maternal Mortality rate (MMR) to be reduced to 100/1,00,000 live births.
- Reduction in Total Fertility rate (TFR) to 2.1 by 2012.
- Reduction in Malaria Mortality rate to 50 % upto 2010, additional 10% reduction by 2012.
- Cataract operations increasing to 300 contract operators per lakh of population per year by 2012.
- To maintain existing 85 % cure rate through TB, DOTS services for the entire mission period.
- Kala Azar Mortality Reduction Rate 100% by 2010 and sustaining elimination until 2012.
- Filaria Micro Filaria Reduction 70% by 2010, 80% by 2012 and elimination by 2015.
- Dengue Mortality Reduction Rate 50% by 2010 and sustaining at that come until 2012.
- Leprosy prevalence rate reduce for 1.8 per 10,000 in 2005 to less than 1 per 10,000.

Sustained efforts are being made to meet above goals in the fixed time frame.

III. New Initiatives

1. Decentralization in Himachal Pradesh

Decentralization is one of the main components of Health Sector reforms in Himachal Pradesh. Decentralization is done with the aim of transferring decision making at the field level to increase efficiency and programme performance. Decentralization has taken place at following levels in the department:

- Administrative Decentralization
- Financial Decentralization

2. Administrative & Financial Decentralization at Primary Health Care Level

Medical officers at PHC level are authorized to sanction leave of para - medical staff working under their jurisdiction, approve their tour programmes. They are supervisory authority for all the sub- centres under their PHCs. Medical officers are now disbursing officers for salaries and other payments at PHC and sub- centre levels. All these powers earlier were given to Block Medical Officers. Medical officers also have revolving funds at their discretion to buy medicines and make contingency payments.

3. Hospital Autonomy and Rogi Kalyan Samitis

Rogi Kalyan Samitis (Hospital Welfare societies), were created in the secondary & tertiary health systems in Himachal Pradesh to provide more autonomy to the hospitals in the state. RKS (Rogi Kalyan Samitis) which are broad based in nature are responsible for day to day operations of the hospital, provide strategic direction, improve the functioning of hospitals with focus on patient satisfaction and improved service delivery.

Rogi Kalyan Samitis (RKS) are functional in all the Civil, District and Zonal Hospitals.

- RKS are responsible and accountable to improve the service quality, system efficiency and patient satisfaction.
- Societies have autonomy to carry out the activities pertaining to the welfare of hospitals and initiate measures that result in better and improved service delivery to patients.
- RKS are authorized to use the user charges accrued to spend on the welfare of hospitals and patients on the basis of approval.
- RKS societies, through, user charges have been instrumental in collection of funds and creating an action plan for the expenditure. There are 11 RKS societies functional at regional and zonal hospital levels, while 39 RKS are operating at 39 civil hospital levels.

4. Health Management Information System in Himachal Pradesh

- With all the districts completely computerized up to the block level and, Himachal Pradesh health directorate has access to all the public health data from the field.
- Earlier data was available but no accessibility. Data analysis was done by hand and therefore prone to errors. There used to be long delays to produce reports. Now data from PHCs, CHCs and hospitals is available for reporting, supervision and analysis. Data is accessible at all levels. Reports are produced in time and are used for monitoring and decision support.
- The department will provide second round of computer training to its Statistical Assistants for the use and maintenance of databases, MS-EXCEL and MS-ACCESS. Training is also proposed for middle level health managers in effective use of data for decision making with emphasis on basic statistics.

5. Community Participation & involvement of Panchayats - PARIKAS (PARIWAR KALYAN SALHARKAR SAMITIS)

- Recognizing Panchayats, as symbol of democracy at village level have been instrumental in the development of villages, creation of PARIKAS is an attempt by the state to involve panchayats in provision of basic health care and undertake monitoring & supervisory activities for national health programmes.
- Goal of PARIKAS is to involve and increase community participation and synergise efforts of the department of health in improving the health status of population.
- Training for all health functionaries, is complete. In district Kangra, the pilot district in Himachal Pradesh, all PRIs were sensitized about the functioning of PARIKAS and micro health plans are being prepared by District Kangra. Since NRHM envisages important role of panchayats for decentralized planning, it is an opportunity to integrate PARIKAS into the mainstream and make it sustainable.
- DOH&FW is going to undertake training of all the 3300+ panchayats in the state to build their capacity. From each panchayat five PARIKAS members will be trained with the help of NGOs working in health sector in Himachal Pradesh. A total of 20000 persons will be trained.
- Micro- health plans are required by all the panchayats in 10 districts out of 12 districts by August 2006. NGOs will be awarded training with key outcome defined as micro health plans prepared by panchayats with their assistance.

6. Initiatives to improve Emergency Obstetrics Care in the State

With an objective to strengthen the infrastructure along with capacity building of the staff to promote the institutional deliveries in the state, especially at periphery, department has decided to train the personnel in EmOC with following objectives:

- Capacity Building of MBBS doctors to undertake EmOC in 24 hour operational PHCs.
- Increase in Institutional deliveries and effective handling of complicated cases at periphery.
- Establishing & strengthening State Mother & Child Hospital as training institute to impart the training to the health professionals in Maternal & Child Care.

7. Public Private Partnership in Health Sector in Himachal Pradesh

Government of Himachal Pradesh (GOHP), has decided to implement PPP initiatives on pilot basis in the following areas:

- PPP in Diagnostic Services
- PPP in Ambulances (Emergency Transport)
- PPP in Managing Selected Sub- Centres and Primary Health Centres.

Department of Health & Family Welfare has developed broad operational guidelines for the identified areas of PPP.

1. Finally it will strengthen primary health care in the state, making services available to the people in the places where they need it.
2. Directorate of Health services will fix user charges and monitor to ensure that interest of people are protected and will lead to better regulation of private sector than at present.

8. Availability of Safe & Cheaper Drugs: State Drug Policy & Rational Use of Drugs

State has designed the state drug policy to provide for the safe and quality drugs all the year around at cheaper rates in all health institutions. State has commitment for the procurement of safe, effective, economic and good quality drugs.

- Formation of essential drug list and formulary has been done.
- Standard treatment guidelines have been formulated and training is imparted to health functionaries.
- Prescription audit has been carried out in the state to promote the rational use of drugs and in facilitating the use of generic drugs.

9. Problems faced by the State Govt. for smooth development in Health Sector

- Emergence of life style diseases- the over all burden of communicable diseases like leprosy, malaria has reduced and is not a public health problem. The other communicable diseases like Tuberculosis, Water borne diseases have also shown a declining trend. The occurrence of cutaneous leishmaniasis particularly in Kinnaur district is new problem for the State. The life style diseases like hypertension, coronary artery diseases, diabetes is posing a new threat to the people of the State.
- Irrational distribution of health institutions/ manpower- There are few areas where there is no fair distribution of health institutions and manpower.

However Himachal Pradesh is doing well in terms of Health Indicators as compared to the nation as a whole.

- Shortage of specialists- The State is facing shortage of specialists at Sub-Divisional and Community Health center level especially in the field of Anaesthesia, Gynaecology, Surgery and Paediatrics.
- Deficiencies of infrastructure (building and residences)- Some Health Institutions are functioning in rented buildings. Lack of residences lead to non- attendance of patients some times.
- Lack of causality services at district level- The causality services at district level is still lacking. This is an area of concern.
- Lack of Trauma Centres at Zonal levels- Traffic accidents are on the verge of increase due to increase in vehicular traffic and increase in population. To provide immediate care to needy patients, trauma centers are required to be established at Zonal levels.

10. Improvements in the Health Infrastructure

- DOH&FW, covered one health institution in each constituency of Himachal Pradesh by granting financial assistance to improve service quality so that these centers become more patient and public friendly especially adaptive to women and children needs.
- Total of 64 institutions have been covered under the facility improvement plan to upgrade the facilities and provide better services to the people under the model OPD scheme.
- Additional grants are being made available to upgrade the facilities on the basis of following criteria:

11. Cancer Control Programme in the State

Department has initiated, with the support of ICMR, a preventive public health programme for the cancer control as a pilot in the three districts of the state: Mandi, Bilaspur & Hamirpur to tackle the three form of cancers: Breast, Cervical and Oral, which are the major disability and burden of disease factors. A population based surveillance with the collaboration of ICMR along with the preventive and curative efforts will be major focus area.

12. Strengthening of first Referral Units and Sub -Centres in the State

In next five years, department proposes to create FRUs at all the CHC levels under National Rural Health Mission Programme in a phased manner. Also to deliver the services effectively at the periphery, sub centres are being strengthened and panchayats through PARIKAS will be actively involved. The department has already provided Rs. 10000/- as untied funds to be used at sub- centre level for strengthening of health systems.

Future PNDT Initiatives

To mobilize the community and make it partner in tackling the problem of sex selective abortions and dwindling sex ratio in certain pockets of the state, department has decided to initiate following activities/schemes in the state:-

- The Panchayat which will have the best sex ratio will be awarded cash prize of rupees five lakhs for the developmental activities.
- Female will be given Rupees 25000/- and 20000/-repectively if she goes for family planning method (permanent) after first girl child and second girl child respectively. Informer, who shall inform the department about the sex selection activities will be awarded the cash prize of rupees 10,000/-.
- There will be a regular inter-state meeting and inter -district meeting at the border areas to implement the PNDT Act effectively.

13. Residential accommodation for the staff

With a view to increase the institutional deliveries and make 24 hours functional PHCs , residential accommodation for Medical Officers and supporting staff is essential to be provided at the PHC level. The department will require additional funds for this purpose.

14. IT components

With the implementation of various schemes in the Health sector, IT infrastructure has reached up to the block level and it is being put to various uses. In order to improve the use of IT further, these assets are required to be maintained properly for which adequate plan support is required.

15. Laundry Services

The department proposes to privatize laundry services upto the district level. The private parties are ready to maintain the laundry services including providing of linen @ Rs.3 per bed per- day. The state has installed bed capacity of 8824 .

16. Maintenance of Equipments

With the installation of latest sophisticated equipments in the health institutions the maintenance and running costs have increased manifold. The hospitals below the district levels are not in a position to support these activities even through the funds generated through AKS and as such plan support for improved services are urgently required.

17. Special training to Home Guards in Hospital Security

Presently, the hospital security is being maintained by home guards. They need to be trained and sensitized to handle the hospital security effectively and the department envisages to introduce a training-cum-sensitization programme for the home guards.

18. Bio-medical Waste

With the enforcement of bio-medical waste disposal rules, it has become mandatory for the hospitals to provide for bio-medical waste treatment facilities. These rules provide for mandatory colour coding of dustbins, segregation, disinfection, shredding, autoclaving, deep pit burial or incineration of the hospital waste. Non compliance leads to penalties. Besides this, health institutions are also required to deposit annual authorization fee with the state pollution control board.

19. School Health Programmes

Medical check-ups of the school children is very important for timely check up of the disease in the children but this programme has suffered for want of adequate funds. The department requires funds under this programme for printing of health cards and logistic arrangements for the visit of medical teams and training of teachers.

20. Electricity Charges

Presently, the health institutions are being charged at commercial rates for electricity consumption. There has been a rapid expansion of health services in the state and the quality of services has also improved with the addition of latest equipments. All these facilities and equipments are required round the clock for which electricity supply is needed. Moreover, consumption of electricity by indoor

patients is also very high. The Directorate has been facing great problem in arranging the funds for the payment of electricity charges.

21. Capital Outlay :

For the upgradation of physical infrastructure in Health Sector an outlay of Rs. 5480.25 lakh has been made. The revenue component of allopathy has been shifted to non plan and the outlay kept in plan is exclusively for capital purpose.

20. Ayurveda

The department of Indian Systems of Medicine & Homoeopathy plays a vital role in the health care delivery system of the State. With the passage of time, these systems are becoming more popular amongst the rural as well as in urban population of the State for the treatment of seasonal and chronic diseases. The Department is providing health care facilities to the general public through the following ISM&H Institutions:-

Sr.No.	Institutions	Nos.
1.	Regional Ayurvedic Hospitals (100/50-bedded each)	02
2.	Ayurvedic Hospitals (20 bedded 04, 10 bedded-18)	22
3.	Ayurvedic Health Centres	1122
4.	Homoeopathic Health Centres	14
5.	Unani Health Centre	03
6.	Nature Cure Hospital	01
7.	Amchi Clinics	04
	Total:	1168

The State Govt. has laid special emphasis on the expansion of ISM&H Institution by opening of AHCs / Upgradation of Ayurvedic Health Centers into 10/20 bedded hospitals. Besides, the department has three pharmacies which are manufacturing medicines that are supplied to the ayurvedic institutions of the department and drug testing laboratory for keeping the quality control of medicines being manufactured by departmental / private pharmacies. These institutions are being strengthened from the funds provided by the Govt. of India.

Besides above, the department has laid special emphasis for the opening of herbal gardens in different agro-climatic zones of the State for the promotion, cultivation and propagation of varied medicinal plants. Presently, we have established three herbal gardens.

Similarly, for the same purposes, one Vanaspati Van Society and State medicinal plant board have been established under which activities at Kullu & Chamba are being undertaken and under medicinal plant board, we are educating the farmers, NGOs, GOs to provide know how about the value of medicinal plants by organizing camps at different places, so that they are able to generate extra income by cultivating medicinal plants in their private land. Recently about 150 projects have been recommended under promotional/contractual farming to National Medicinal Plant Board of Govt. of India.

Presently, there are 50 number of seats for BAMS degree courses. The course of study for BAMS degree is five and half year which includes one year compulsory rotary internship and is governed by the rules & regulations of H.P. University to which this institution is affiliated. The post graduate courses in the faculty of Kaya-Chikitsa, Shalya, Shalkya Tantra, Prasuti Tantra, Samhita Sidhant & Ras Shastra is available in the College to provide educational inputs to the students and make them professionally competent as teacher, researcher & specialist in their respective fields. The post graduate course is of three year duration having intake capacity of 24 students. The Govt. of India has provided financial assistance not only to strengthen the College but also for DTL/Pharmacies.

Schematic Description

1. Starting of Panchkarma/Kshar sutra Units

To improve the services being offered by the Ayurveda hospitals, the department intends to introduce specialized services like Panchkarma/Kshar sutra/Yoga & Naturopathy in selected district hospitals where there is a space to accommodate this facility. During 11th Plan period, the department proposes to start these facilities in five district hospitals i.e. one each in annual plan period. To equip these hospitals, the department needs atleast Rs. 22.00 lakh per Unit i.e. Rs. 110.00 lakh during the 11th plan period for purchase of equipments, medicines, salary of staff and other miscellaneous expenditure etc.

2. Training to Para-Medical Staff

To improve the standard of para-medical staff, the department intends to impart training by organizing refresher courses for pre-service and in-service para medical staff, so that the general public could avail the specialized facility at their door step.

3. Organization of Refresher Courses

To improve the skill of in-service AMOs the department intends to organize interaction with outside experts by organizing workshops, refresher courses, conferences etc. to have knowledge in all the fields, so that public could avail better health facilities.

4. Upgradation of AHCs to 10-bedded Hospitals

During 11th Plan period the department proposes to upgrade AHCs to 10-bedded hospitals by rationalizing of institutions where the turn out of patients are high and deserve upgradation and also opening of new institutions in such area/panchayats where there exist no health facilities. The department proposes to

upgrade atleast 5 AHCs to 10-bedded hospitals and opening of 25 AHCs (five in each plan) in needy areas.

5. Starting PG in additional specialties

The department has already submitted project proposals amounting to Rs. 382.13 lakh to GOI for allocating funds for starting PG in additional specialties of Bal Rog, Rog Nidan and Swasthvritta but the State Govt. has to keep budgetary provision to meet out the requirement of salary & stipend to PG students for future in respect of speciality already in existence in the College.

6. To improve the quality and competitiveness of Ayurvedic Medicines

To improve the quality and competitiveness of Ayurvedic medicines manufactured in Govt. & private pharmacies by providing modern facilities for drug testing and research & development of drugs and introduction of modern technology and management techniques, the department needs at least Rs. 2.00 crore during 11th Plan period.

7. Setting up of new Herbal Gardens

The department intends to set up herbal gardens in the left out pockets of the agro-climatic zones i.e. Kinnaur, Lahaul & Spiti, Pangi & Bharmour for which the department needs atleast 25.00 lakh during 11th Plan period to create all infrastructural amenities.

8. Expansion of Ayurveda Tourism

During 11th plan period, the department intends to expand Ayurvedic tourism in collaboration with Public & Private partnership and in all famous religious places and hotel industry by providing rejuvenation packages. Also start such Units in District Ayurvedic hospitals where there is sufficient space Regional Ayurvedic Hospital, Shimla, District Hospital, Chamba, Una and Rohroo in Shimla district where sufficient accommodation is available.

9. Construction works

To complete the on going construction works and clearing the pending liabilities of the executing agencies, the department needs atleast Rs.19.19 crore during 11th plan period. Besides this to reside all AHCs in Govt. building the department needs funds amounting to Rs.34-35 crore approximately.

21. Water Supply

(a) Urban Water Supply

There are 56 towns in Himachal Pradesh, as per classification given below out of which Water Supply schemes for 49 towns are under I & PH Department. The water supply schemes for 6 towns (Yol, Bakloh, Kasauli, Sabhatu, Dagshai and Dalhousie Cantonment) are under Cantonment Boards and WSS for Parwanoo is under Housing Board.

Sr.No.	Name of District	Classification of Towns						
		I	II	III	IV	V	VI	Total
1.	Chamba	-	-	1	-	1	3	5
2.	Kangra	-	-	-	2	4	3	9
3.	Hamirpur	-	-	-	1	1	2	4
4.	Una	-	-	-	1	2	2	5
5.	Mandi	-	-	2	-	1	2	5
6.	Bilaspur	-	-	-	1	1	2	4
7.	Kullu	-	-	-	1	1	2	4
8.	Shimla	1	-	-	-	2	6	9
9.	Solan	-	-	2	-	3	3	8
10.	Sirmour	-	-	1	1	-	1	3
	Total :	1	-	6	7	16	26	56

The water supply schemes for 38 towns namely Sri Naina Devi ji, Nadaun, Rampur, Una, Chowari, Kangra, Jawalamukhi, Nahan, Rohru, Santokhgarh, Mehatpur, Dehra, Chamba, Rewalsar, Arki, Daulatpur, Jogindernagar, Manali, Kullu, Kotkhair, Sujampur, Ghumarwin, Chopal, Sunni, Palampur, Gagret, Nagrota, Hamirpur, Mandi, Nalagarh, Rajgarh, Narkanda, Nurpur, Sarkaghat, Poanta Sahib, Dalhousie, Bilaspur, Theog & Shah Talai have been completed up to 31-3-2008.

Eleventh Five Year Plan (2007-12)

The proposed outlay for eleventh five year plan 2007-12 is Rs. 54717.00 lakh, out of which Rs. 29760.00 lakh have been proposed for major works. For augmentation of water supply, 15 towns have been proposed for the plan period.

Annual Plan (2009-10)

An outlay of Rs. 1000.00 lakh for urban water supply schemes in the annual plan 2009-10 has been proposed which is entirely for works of capital nature. The physical target/financial funds are required for completion of 3 schemes of Chamba, Sundernagar and Palampur.

(b) Rural Water Supply

All 16997 villages in the State as per census 1991 were provided with safe drinking water facilities by March, 1994. Thereafter the focus shifted from village to habitation. As per the survey of 2003, which was finalized during March, 2005, total 51848 habitations have been identified of which 20112 were categorized as Fully Covered (FC) and 31736 habitations as non-covered and partially covered (9389 NC and 22347 PC).

These 31736 habitations have been categorized as slipped back habitations as per revised guidelines of the Central Government.

Eleventh Five Year Plan (2007-12)

The proposed outlay for Eleventh Five Year Plan (2007-12) has been kept at Rs. 72616.00 lakh with a target to cover 3000 habitations (as per 2003 survey and comprehensive Action Plan-1999) under state sector.

Annual Plan (2009-10)

An outlay of Rs. 17169.00 lakh under Rural Water Supply Schemes has been proposed in the annual plan 2009-10 out of which Rs. 14934.45 lakh have been proposed for capital content. A physical target of covering 2000 habitations under state sector has been proposed.

Hand pumps Installation

Drinking water facilities are also being provided through the important programme of hand pumps installation at location of priority in drought prone/acute water scarcity areas. However, the programme is generally supplementing the existing piped water supply schemes in drought prone / water scarcity areas due to limitation that the hand pumps are being installed along road side locations.

A total number of 15463 hand pumps have been installed up to March, 2008. For the year 2009-10, 2000 hand - pumps have been proposed for installation.

22. Urban Development

(a) Urban Development

Consequent upon the 74th Constitutional amendment, the rights, powers and activities of the Urban Local Bodies have increased manifold. There are 49 Urban Local Bodies in Himachal Pradesh including Municipal Corporation, Shimla. The Government is providing grant-in-aid every year to these local bodies to enable them to provide civic amenities to the general public. The following schemes are being implemented by the department under plan:

(i) Jawahar Lal Nehru National Urban Renewal Mission (JNNURM)

The Hon'ble Prime Minister of India launched JNNURM on 3rd December, 2005. The mission aims at creating economically productive, efficient, equitable and responsive cities in an integrated frame work with economic and social infrastructure, basic services to urban poor and strengthening of various municipal organizations and their functioning. Under this mission only Shimla town being State Capital has been covered by the Government of India.

H.P. Housing & Urban Development Authority (HIMUDA) has been nominated as the Nodal Agency for this purpose. The activities like development of roads, sewerage, parking, tunnels & garbage management etc. will be taken up for execution under this programme. A budget provision of Rs. 800.00 lakh under the scheme during the financial year 2009-10 as State share has been proposed.

(ii) Environment Improvement of Urban Slums (EIUS)

Under the Environment Improvement of Urban Slums, a budget provision of Rs. 244.00 lakh has been made for the year 2009-10. The funds under this scheme are meant for providing basic amenities such as community baths, latrines and night shelters to avoid further environmental degradation of the towns.

(iii) Swaran Jayanti Shahri Rojgar Yojana (SJSRY)

This is a centrally sponsored scheme. The main objective of the scheme is to uplift the urban poor by providing employment to unemployed or under employed poor through encouraging setting up of self-employment ventures or by providing wage employment.

(iv) Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT)

The Government of India has restructured the old scheme of IDSMT and renamed it as Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT) for implementation from the year 2006-07. HIMUDA has been declared the Nodal Agency for plan formulation and execution of the scheme. Three towns namely; Hamirpur, Dharamshala and Mandi have been covered under the scheme. Though the project of Chamba town has been approved by the Govt. of India. For the implementation of this scheme, a sum of Rs.50.00 lakh as State Share has been made for 2009-10. Efforts are afoot to cover more towns under this scheme.

(v) Rajiv Gandhi Urban Renewal Facility (RGURF)

Setting up of Rajiv Gandhi Urban Renewal facility for infrastructure and sanitation improvement in all urban areas of the State other than Shimla was launched in the year 2006-07. Under this, car parking, solid waste management, parks and community toilets will be constructed in the ULBs under the scheme. A sum of Rs. 90.00 lakh has been made for 2009-10.

(b) Sewerage and Sanitation

Sewerage programme is being managed & administered by the Urban Development department.

There are total 56 towns in Himachal Pradesh, as per classification given below out of which 49 towns are under I & PH Department. 6 towns (Yol, Bakloh, Kasauli, Sabhatu, Dagshai and Dalhousie Cantonment) are under Cantonment Boards and Parwanoo is under Housing Board.

Sr.No.	Name of District	Classification of Towns						
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8.	Shimla	1	-	-	-	2	6	9
9.	Solan	-	-	2	-	3	3	8
10.	Sirmour	-	-	1	1	-	1	3
	Total :	1	-	6	7	16	26	56

Sewerage schemes for 13 towns namely, Sh. Naina Deviji, Chamba, Mandi, Bilaspur, Palampur, Rohroo, Shimla, Manali, Ghumarwin, Jawalamukhi, Arki, Jogindernagar & Palampur, 2 rural / tribal schemes Sarahan & Reckong Peo respectively have been completed.

11th Five Year Plan (2007-12)

Proposed outlay for eleventh five year plan is Rs. 17060.00 lakh and physical target to complete sewerage schemes of 12 towns during the eleventh five year plan has been envisaged for the five year plan period.

Annual Plan (2009-10)

An outlay of Rs. 3600.00 lakh for sewerage schemes in the annual plan 2009-10 has been proposed.

23. Welfare of Scheduled Castes / Scheduled Tribes / Other Backward Classes

The department of Social Justice & Empowerment is mainly engaged in the socio-economic upliftment of SCs, STs and backward classes in the State. These down trodden sections of the society require special interventions. A large proportion of these sections is still landless in the all-India context whereas in Himachal Pradesh, the number of landless SCs/STs are negligible. The scheduled castes families are engaged in agriculture, artisanal and other self-employment work, such as flaying, tanning, weaving, fishing and quarrying. A sizeable section of the scheduled castes has been traditionally engaged in keeping the environment of towns and cities clean. For the upliftment of these sections of society, the department will not only continue the on-going developmental programmes but would intensify it further.

In addition to the above categories, the department is also looking after the welfare of the women, children, handicapped, aged and other under privileged sections of the society. The main thrust of the departmental programmes is to improve the socio-economic conditions of these categories so as to bring them into the mainstream of the society.

The programmes of the department have been categorized as under:-

1. Backward Classes Sector, which includes Scheduled Castes, Scheduled Tribes, Other Backward Classes and Minorities.
2. Social Welfare Sector which includes Women, Children, Aged and persons with disabilities etc.
3. Supplementary Nutrition Programme, meant for the vulnerable groups amongst the pregnant and nursing women and children below-6 years of age.

Main functions of the department:

- To improve the socio-economic conditions of the weaker sections of the society including improvement of environment in harijan bastis.
- To create awareness for the removal of untouchability by propagating the various provisions of existing laws.
- To promote the welfare & rehabilitation of the persons with disabilities through Govt. and voluntary sectors.
- To provide shelter, educational, vocational training and rehabilitation facilities etc. to orphan/destitute children.

- To provide institutional services to the working women, widow, divorcee and deserted women.
- To provide social security by way of grant of pension to destitutes, poor older persons, widows and disabled.
- To empower the women through various programmes and to protect their rights.
- To provide Integrated Child Development Services through Anganwadis.
- To provide shelter and care to older persons through Old Age Homes.
- To promote Voluntary Action through Voluntary agencies working in the field of children, women, disabled, older persons, Scheduled Castes/Tribes/ OBCs and minorities.

Strategy for 11th Five Year Plan

The strategy for 11th Five Year Plan 2007-2012 will be as under:-

- (i) The strategy for the Welfare SC/ST/OBCs already being followed should be continued and further intensified during the 11th Five-year Plan.
- (ii) The Welfare SC/ST/OBCs will also be provided a judicious mix of beneficiary oriented programmes and human resource development.
- (iii) The Organization and Association of the beneficiary groups will be given preference.
- (iv) The Voluntary Agencies will be suitably associated in various programmes.

Schematic Description

Welfare of Scheduled Castes/STs/OBCs /Minorities

1. Economic Betterment

The persons belonging to Scheduled Castes, Scheduled Tribes & OBCs who are trained or well conversant in the trade are being provided tools and equipments costing up-to Rs. 800/- per beneficiary to enable them to earn their livelihood. This scheme was introduced in the year 1974. Now the department proposes to restructure

the scheme and draft a new scheme “Training/Skill Enrichment & Employment opportunities programme for Scheduled Castes/Scheduled Tribes/Other Backward Classes & Minorities” which has been formulated and is under consideration of the Govt.

2. Award of Inter-Castes Marriages

For the elimination of the practices of untouchability and to encourage the inter-caste marriages between the scheduled castes and non-scheduled castes, this scheme was introduced during the year 1991 under which a cash award of Rs. 25000/- is being provided to the non-scheduled caste spouse.

3. Environment/Improvement of Harijan Basties

With a view to improve the environment in harijan bastis, a scheme named “Minor works” was introduced during the year 1991 for the street pavement, drainage and construction of bowdies/drinking water supply schemes etc. upto the estimated cost of Rs. 1.00 lakh. The grant is to be provided to panchayats for the implementation of the scheme.

4. Housing Subsidy

Since the inception of the department, the scheme for the construction of houses is being implemented. Under this scheme housing subsidy of Rs. 27500/- for the construction of a new house and Rs. 12500/- for the repair of houses is being provided to the persons belonging to SCs, STs and OBCs.

5. Training & Proficiency in Computer Application and allied activities

Previously, the department was implementing a scheme “Maintenance of Proficiency in Shorthand & Typing for the trained candidates belonging to SCs/STs/OBCs”. Now this scheme has been restructured as “Training & Proficiency in Computer Application and Allied Activities” for SCs/STs/OBCs and Minorities. The scheme was approved during the year 2006-07. The main purpose of the scheme is to provide training in Computer application and proficiency. For the purpose of making them eligible for career opportunities available in private/Govt. sector.

6. Ashrams/Gujjar Schools

The department is running Ashrams/Schools at Bharmour, Sahau, Kalsui, Garola (Bharmour) in Chamba district, Lodhwan in Kangra district, Nichar and Kalpa in Kinnaur district and Bharanu in Shimla district for the children mainly of nomadic Gujjar tribes with a view to provide good education to their children. The boarding and lodging expenditure of these schools is also being borne by the department.

7. Labana, Gorkha, Kabirpanthi, SC, OBC & Minority Welfare Boards

The Boards for the welfare of Kabirpanthy, Gorkha, Labanas, SCs, OBCs & Minorities have been constituted by the Government. The expenditure on TA/DA and other miscellaneous expenditure on the members of these Boards is being incurred by the department.

8. HP Backward Classes & Finance Development Corporation

The H.P. Backward Classes Finance & Development Corporation has been set up for the social, economic and educational development of backward classes in Himachal Pradesh.

At present, the corporation is raising loans from NBCFDC and disbursing the same to the eligible persons. The H.P. Backward Classes Finance & Development Corporation is implementing following schemes for the economic and educational enlistment of backward classes :-

1. Self-Employment Scheme
2. Interest Free Study Loan.

9. H.P. Minority Finance & Development Corporation

For the upliftment of minorities, the Department is providing loan through Minority Development Corporation on easy terms. The H.P. Minorities Finance & Development Corporation is implementing following schemes for the economic and educational upliftment of minority communities of Himachal Pradesh:-

1. Self Employment Scheme.
2. Marginal Money Loan.
3. Small Scale Business Loan

10. Publicity Campaign

The Social Justice & Empowerment Department has a number of programmes as mentioned above to improve the social and economic conditions of the neglected sections of the society. Therefore, in order to provide wide publicity & to make more publicity of these programmes campaigns are being launched regularly by the department. Under this scheme pamphlets and small booklets are being distributed and camps are also being arranged in far-flung and interior areas of the State.

Centrally Sponsored Schemes (50:50)

1. Book Bank

Under this scheme, assistance is being provided for the purchase of book sets and almirah etc. for establishing book banks in Medical/Engineering/ Agricultural/ Law Courses/ MBA Polytechnic etc.

2. PCR Act

Under this scheme, the department is getting 50% assistance from Govt. of India for propagation of PCR Act, 1955 and also to organize the awareness camps in rural areas. Under the provisions of this scheme, award money to the tune of Rs. 25000/- is also provided to those spouse contract inter-caste marriage.

3. Compensation to victims of Atrocities

A compensation/monetary relief amounting to Rs. 25000 to Rs. 2.00 lakh is being provided to the members of family of SCs/STs on becoming victims of “Atrocities” committed by the members of other communities due to caste considerations under SC/ST(Prevention of Atrocities) Act, 1995.

4. Girls/Boys Hostel for SCs/OBCs

With a view to provide Hostel facilities for SC Boys and Girls studying in Middle to University level, hostels are being constructed. Under this scheme, 16 hostels have been constructed and further handed over to Education Department and 17 hostels are under construction. Besides, 28 hostels have been sanctioned for SC girls/boys.

5. Coaching and Allied Assistance for Weaker Sections (including SCs/OBCs/ Minorities/New Scheme)

A scheme for providing coaching and allied assistance belonging to Schedule Castes / Other Backward Classes/Minorities is being implemented through H.P. University in the State.

6. Scheduled Castes, Scheduled Tribes Development Corporation

Himachal Pradesh Scheduled Castes & Scheduled Tribes Corporation is implementing schemes for the economic upliftment of SCs/STs with specific emphasis on families living below the poverty line. The share capital of the Corporation is met by the State and Centre Govt. in the ratio of 49:51. The HP

SCs/STs Development Corporation is implementing following schemes for the economic development of the SCs/STs:-

1. Self Employment Scheme
2. Himswavlamban Yojna
3. Interest Free Loan Scheme
4. Dalit Varg Vayvasayik Prashikshan Yojna
5. Hastshilp Vikas Yojna
6. Laghu Vikraya Kendra(Shop & Shed) Scheme
7. National Programme for Liberation & Rehabilitation of Scavengers and their dependents.

24. Social Welfare

I. State Schemes

A. Welfare of Handicapped

1. Marriage Grant to Disabled

It has been felt that the marriage of persons with disability is a big problem to the parents and in order to promote such marriages, incentives @ Rs.5000/ per case were being provided by the department up to 2006. Now as per amended norms, the marriage grant @ Rs.8000/- is admissible to the person having 40% to 74% disability and Rs.15000/- to the person having disability 75 % to 100%.

2. Scholarship to Disabled

The main purpose of the scheme is to assist the disabled students so as to secure such education, academic, technical or professional training as would enable them to become a useful member of the society. This scheme is applicable to all categories of disabled students having disability of 40% or above. This scheme is being implemented from 1988.

3. Assistance to Disabled for Self-Employment

Under this scheme, physically handicapped persons whose disability is 40% or above, are being provided financial assistance of Rs. 2500/- for setting up of small business ventures.

4. Home for Deaf & Dumb/Vocation Rehabilitation Centre for Disabled

There are four home for deaf and dumb and blind (boys)/VRC at Dhalli/Home for other medically challenged children at Skoh (Dharamshala) being run by H.P.CCW for the upliftment of disabled persons/children. Free education/boarding/loading facilities are being provided in these homes.

Home for disabled children (girls) at Sundernagar has been set up to provide free education upto 10th standard and is being run by the department.

5. Welfare Board and State Level Committee (under PWD Act) for Disabled

To review & co-ordinate the activities of all departments of Government which are dealing with matters relating to Persons with Disability and to advise the State Government on the formation of policies, programmes/guidelines with respect to disabled, the above board/committees have been constituted. The committee meets from time to time on the directions of the chairman or as exigency arises. The

expenditure on TA/DA and other miscellaneous expenditure on the members of these Boards/Committee is being incurred by the department.

6. National Programme for Rehabilitation of Persons with Disabilities (NPRPD)

Two District Rehabilitation Centres under National Programme for rehabilitation of persons with disabilities (NPRPD) have been set up in the State at Dharamshala and Hamirpur. The main objective of the DRC is to offer rehabilitation services namely early detection, timely intervention, restorative therapy, rehabilitative therapy, parent counselling and provision of aid & appliances. The Centres is providing rehabilitation services to the persons with disabilities right from the grass root level through the network of CBRWs at Gram Panchayat Level.

7. Home for Mentally Retarded Children

At present, there is no institution for the mentally retarded children in the State with the result that such children have to be sent to other States, where the parents of such children find it difficult and expensive to support them. The mentally retarded children are being sponsored to an institution at Una (Prem Ashram) being run by a voluntary organization and their expenses are being met by the Department.

B. Women Welfare

1. Mukhya Mantri Kanya Dan Yojana

In Himachal Pradesh, in many cases poor destitute women/widows often find it difficult to arrange the marriages of their daughters. Mostly, such cases, where one of the parents(earning member) dies, the department is providing grant up-to Rs. 5100/- in each case for the marriage of their daughter. This scheme has now been revised and grant under this scheme has been increased to Rs.11001/-.

2. Working Women Hostels

A Centrally Sponsored Scheme viz. Working Women Hostel is being implemented by this department in the State. Objectives of the scheme are to provide institutional services to the working women, widow, divorcee and deserted women. Voluntary agencies, public trusts working in the field of women's welfare / social welfare/ women's education are eligible for the assistance under this scheme.

3. Women Awareness Campaign

There are number of programmes in Welfare Department as mentioned above to improve the socio-economic conditions of the women in the society. To highlight the details of such programmes for the benefit deserving women, especially in far-

flung and interior areas, an extensive publicity/women awareness campaigns, are being organized by the department.

4. Nari-Nekatan

The main purpose of the scheme is to provide shelter, food, clothing, education and vocational training to the young girls, widows, deserted and destitute women, who are in moral danger.

The following State Homes are functioning in the state:-

Sr.No.	Location	Capacity
1.	State Home, Mashobra (Shimla)	50
2.	State Home, Chamba(Chamba)	50
3.	State Home cum Protection Home Mandi	25
4.	State Home Nahan (through HPCCW)	20

5. Women Welfare Committee (Now State Level Council for Women)

To review and monitor the effective implementation the “National Policy for the Empowerment of Women” (NPEW) and to advise on policy from time to time about advancement, development and empowerment of women a State level council has been constituted. The expenditure on TA/DA and other miscellaneous expenditure on the members of State Level Council for Women are being incurred by the department.

6. Widow Re-Marriage

The Himachal Pradesh Govt. has approved this Scheme for Rehabilitation of Widows in the year 2004-05 by encouraging men to enter into wedlock with widows by providing grant of Rs. 25000/-.

7. Balika Samridhi Yojna

Balika Samridhi Yojna was introduced as a 100% centrally sponsored scheme by Govt. of India on 15th August 1997 to provide benefits under the scheme to girls belonging to below poverty line families born on or after 15-8-1997. From the year 2003-04, this scheme has been transferred to the State. The amount of scholarship can be utilized for purchase of text books, uniforms etc. for the girl child with due authorization of her parents/guardians.

8. Swablamban

This scheme/programme is partially assisted by the Norvegian Agency for International Development (NORAD). It aims to improve the lives of poor women in

urban slums and rural areas from weaker sections such as SCs/STs by training them in traditional and non-traditional trades viz. electronics, watch assembling, basic advanced computer training, garments making, secretarial practice, embroidery etc. and to ensure their employment in these areas. The scheme may be implemented through public sector undertakings, public sector corporations, women development centers of universities and voluntary organizations registered under Societies Registration Act, 1860 or corresponding State Act. Under the scheme, financial assistance would cover construction of shed for training-cum-production purposes, if required training cost, stipend to trainees and attendance performance incentives wherever eligible, training kit necessary for the working women, if required, seed money as initial working capital, if required, day care centers, management trainings, pre-production activities such as feasibility studies and cost project activities wherever necessary. Stipend is paid @ Rs. 250 per month per beneficiary and cost ceiling is Rs. 8000 per beneficiary. The implementing organization should be working for the development and empowerment of the women and should have at least three years experience in the field after registration. The scheme has been transferred from centre to state w.e.f. 1.4.2006.

9. Nutrition Programme for Adolescent Girls (NPAG)

This programme is being implemented in Kangra District of Himachal Pradesh on pilot basis. Under this scheme 6 kg. of food grains is distributed to the malnourished adolescent girls per month. The eligibility criteria is determined on the basis of weight. Under this scheme, Anganwari Worker weigh all adolescent girls (11-19 years) in the community 4 times in a year and BPL food grain is distributed to them having body weight less than 35 kg. The weighment is done in the presence of panchayat members and the list of beneficiaries as approved in the Gram Sabha. In addition to this female health worker has been assigned the task of providing health education and health check-up.

10. Mother Teresa Asahay Matri Sambal Yojna

Under this scheme, annual grant of Rs. 1000/- per children up to two children (below the age of 14 years) are provided to BPL, widows, divorcee and deserted women belonging to BPL families for upbringing of their children in addition to widow pension. This scheme is being implemented from the year 2006-07.

11. Women Development Corporation

For the upliftment of women, the Corporation is providing loans upto Rs. 50000/- at the normal rate of interest for setting up of small business ventures.

C. Child Welfare

1. Home at Sundernagar under J.J.Act

For the children in conflict with law, observation home-cum-special home has been set up at Una and for the children in need of care & protection, children home at Sundernagar has been set up. Under the provision of J.J.Act,2000.

2. Bal/Balika Ashram (Under Mukhya Mantri Bal Udhar Yojana)

With a view to provide shelter and educational facilities etc. to orphan/destitute children between the age group of 6-18 years, the department of Social Justice & Empowerment is running 19 Bal/Balika Ashrams in Govt./NGOs sector. The inmates in the ashrams are being provided free boarding, lodging, clothing facilities upto 10+ 2 level. During the stay of inmates in the ashram, the department does take care of the subsistence needs of children and attempt to provide an enabling atmosphere. In order to provide all, what is required, for such children, the department has introduced consolidated scheme titled as “Mukhya Mantri Bal Udhar Yojana” w.e.f. 2006-07. As per the provisions of this scheme to rehabilitate the inmates higher education/vocational training facilities are being provided.

3. Shishu Greeh at Shimla

The department is providing grant-in-aid to HPCCW for the running of Nari Naketan at Nahan. In this home, the deserted and destitute women are provided shelter and vocational training to them to enable them stand on their own feet.

4. Grant to Other Voluntary Organisations

(i) Balwaries:

The Voluntary Organizations/HPCCW/State Social Welfare Board is running 140 Balwaries throughout the State. This scheme is serving a useful purpose in performing pre-school education to the children below 6 years of age.

5. State Home Nahan:

For the security of deserted and destitute women and to provide vocational training to them to enable them stand on their own feet, a State Home is being run through HPCCW at Nahan, District Sirmour.

6. Old age Home

The modern society is not paying due attention and care to old parents and in some cases the poor financial conditions of the family force them to leave the aged persons to fend for themselves. These helpless persons have no one to look-after them. Therefore, in such cases they need the institutionalized services. For such aged persons, Aged Homes at Bhangrotu(Mandi), Basantpur(Shimla), Baijnath(Kangra) and Tissa(Chamba) have been set up which are being run through Voluntary Organizations and Social Welfare Board/HPCCW respectively to whom grant-in-aid is being released by the department.

7. Grant-in-aid to Legal Advisory Board

The State Govt. is providing grant-in-aid to Legal Advisory Authority.

8. National Family Benefit Scheme

This scheme was transferred to State Plan during the year 2002. Under this scheme, the whole amount is being reimbursed to State Govt. by the Govt. of India under ACA. Under this scheme, an assistance of Rs. 10000/- is given to the family whose earning hand dies between the age group of more than 18 years and below 65 years.

(D) Welfare of Lepers

1. Colony for Patients of Leprosy

To provide shelter to Lepers, it is proposed to construct a colony for Lepers, at Phagli in Shimla and Chamba in district Chamba.

(E) Social Security & Welfare

1. Old Age/Widow Pension

The Old Age Pension Scheme was originally inherited from erstwhile State of Punjab after re-organization in 1966. The Scheme has been revised and retitled as “Social Security Pension Scheme” to destitute, old age, widows, disabled and lepers. Under this scheme, pension/allowance is granted @ Rs. 330/-PM. Besides, the Government of India is providing National Old Age Pension @ Rs. 330/-PM to the persons of the age of 65 years and above.

2. Annapurna Scheme

Annapurna scheme has been implemented in Himachal Pradesh, w.e.f. 01-04-2000, which was 100% centrally sponsored scheme. This scheme has been

introduced with a view to provide food security to the indigent senior citizen of the society with age group of above 65 years and who are not getting any old age pension under National Old Age Pension Scheme (NOAPS). Under this scheme, 10 Kgs of food grains are provided to the identified persons free of cost. Initially, 3436 numbers numeral ceiling was fixed for this state, which has been, increased to 6373 numbers.

This scheme was transferred to State Plan during the year 2002-03. Under this scheme, the whole amount is being reimbursed to State Govt. by the Govt. of India under ACA. The scheme is being implemented by the department of Food & Supplies, Himachal Pradesh.

II. Centrally Sponsored Scheme

1. Supplementary Nutritions Programme

At present, 76 ICDS projects are functioning in the State under Centrally Sponsored Scheme. Presently, children and expectant/nursing mothers are being provided necessary nutrition from this scheme.