Chapter- 1

General Profile

Uttarakhand which emerged as the 27th State of the country in November, 2000 after bifurcating the Kumaon and Garhwal region, including Hardwar from Uttar Pradesh, has seen through two five year Plans and is now on the verge of new era of faster and inclusive growth and all round development. The State, despite constraints of nascence has made rapid progress and registered one of the highest growth rate in the GSDP amongst the States of the country during the last one decade and now poised to consolidate and sustain the progress during the next Five Year Plan i.e. the 12th Five Year Plan.

While starting a new five year plan it is imperative as a first step to analyze the past performance of the economy; the broad issues that the Plan will focus on; and the underlying philosophy of the Plan. It is an opportunity to ponder upon the past performance and find out the strength and weakness of the State's economy and chalk out the goals and strategies to be adopted during the next five years. It needs to identify the critical areas where existing programmes are not delivering results to restructure and strengthen the same. The Hon'ble Prime Minister while addressing the Planning Commission on the approach of the Twelfth Five Year Plan, rightly remarked, that the 'Twelfth Plan must build on what we have achieved and indeed do better in the next five years. The objectives must be, faster, more inclusive and sustainable growth'. This observation is as relevant in the case of State's Five Year Plan as it is also formulated in consonance with the broader national objectives.

The State

Uttarakhand emerged as the 27 State of the country as a result of bifurcation of hill region including Haridwar and Udham Singh Nagar from the State of Uttar Pradesh on 9th November 2000. Its area comprises of foothill plains to higher snow clad mountain ranges providing almost all major climatic zones conducive for agro-horticulture and related activities and thus making it a land of opportunities.

In spite of being a new and smaller State, Uttarakhand has some peculiar features that make it distinct from other states of the country. The State is rich in natural resources like water and forests with many glacises providing perennial water to downstream rivers including Ganga and Yamuna which are the life line in the Indo-Gangetic plains hosting about one-half population of the country. The diverse geo-physical conditions, the ancient *Char Dhams* -the most sacred religious temples of Hindus which are nestled in the mighty mountains and Hardwar in the plains along with important places of other religions, the rich flora and fauna with 06 National

Parks and 06 wildlife Sanctuaries make it an enviable tourism destination and an area of opportunities.

Uttarakhand also referred to as Dev Bhoomi (Land of Gods) because of temples and holy places spread over throughout the State and its serene beauty and the wealth of the Himalayas.

Although during the medieval period of history the Garhwal Kingdom and Kumaon Kingdom were traditional arch rivals with diverse lingual and cultural influences due to the proximity of different neighboring ethnic groups, after their post independence merger with the State of Uttar Pradesh and the inseparable and complementary nature of their geography, economy, culture, language and traditions created strong bonds between the two regions which was further strengthened by the unified struggle against the problems of economic backwardness, marginalization and political identity commonly faced by them. This struggle of the people eventually led to the creation of a separate state in November, 2000.

The State is spread over 53,483 sq. Km of land, which is 1.67 percent of the country's total area. The population of the State, according to the 2001 Census, was 8.49 million, of which 4.33 million were males and 4.16 million females. The total number of inhabited villages, including forest villages, is 15,761. The decadal growth rate of population during 1991-2001 has been 19.20% {All India - 21.34}, a reduction from 24.23% during the previous decade.

Administratively the State is divided into two Commissioneries,13 districts, 78 Tehsils and 6 sub-Tehsils. From development point of view the 13 district are divided into 95 Development Blocks, 670 *Nyaya Panchayats,* 7541 *Gram Panchayats* and 86 urban units including 3 Nagar Nigams. In view of the difficult topography of the region and efficient administration and delivery of welfare programs the restructuring of administrative units is being intensely felt.

Broadly 17 Development Blocks including Haridwar(6), USNagar(7), Nainital (2- Haldwani & Kashipur) and Dehradun (2- Doiwala & Sahaspur) fall in the plains while rest 78 belong to hill region. Thus 90% area of the State is hilly.

The struggle for statehood, the cherished dream of the people of Uttarakhand for a long time, was based essentially on the conviction that the development of the region required development decisions be taken locally in response to local needs and problems. Only then would the constraints imposed by the difficult geographical conditions of this region be overcome. An allied concern underlying the aspiration for statehood as a means of development was that it should result in all round progress and betterment for the common man. The State of Uttarakhand strives to fulfil this responsibility. Sincere efforts are being made to reinforce the basic infrastructure to provide a solid base for attracting more and more

investment in the private sector. Attention has been paid to bring gradual changes in the traditional fields of horticulture, agriculture, animal husbandry and dairy development to make them more income and employment oriented. Hydro- Power, Tourism, Horticulture and Industry are the backbone of development. To increase the production of hydroelectricity, a collaborative effort with central public sector enterprises and private sector power companies is being made, and several projects that had earlier closed down are being restarted. Master plans have been drawn for the development of tourism, and private sector investment is being encouraged. A new industrial policy seeks to give a boost to industrial development resulting in an influx of projects. Good roads are the bedrock of development. Accordingly, higher priority is being accorded to road and bridge building. The State has identified new areas and has started giving final shape to lay a firm foundation for development.

To accelerate socio economic development in the State through focused initiatives for leveraging identified opportunities in sectors that have an intrinsic comparative advantage, professional assistance of expert agencies is also being utilized.

The suggested focus or driving sectors in which Uttarakhand has comparative advantage which should be leveraged are hydro-power, tourism, agro-processing and horticulture, IT, bio-technology and micro, small & medium enterprises.

It is, therefore important that these focus sectors break away from the inertia of the past at significantly higher rates so that the overall state GDP can grow at a higher pace and developmental aspirations of the state can be realized.

Good governance is possible only with good politics. The State has been committed from the beginning to create a clean, efficient, transparent and responsive administrative system, without which its development goals will remain unrealized. Issues of good governance and optimum utilization of resources through rigorous monitoring mechanism at all levels will be given the top priority during the years to come. During the Eleventh Five Year Plan (2007-12) too, the endeavor of the State has been to provide a clean and responsive administration to ensure sustainable economic growth and to provide more opportunities to ignite the young talent of Uttarakhand and preserving the pristine beauty, for which the State is renowned. It is observed in the UDR that the growth performance of Uttarakhand appears to fully justify its formation as a separate State. The new State is fast closing the gap with national average; It further states that while Uttar Pradesh (the parent State) continues to lag behind the national average in terms of annual economic growth Uttarakhand has demonstrated robust growth on a sustained basis. *

** Uttarakhand Development report, Planning Commission, GOI Pg. 115*

Geography

The State is strategically located and forms part of the Northern boundary of the country, sharing its borders with Nepal and China (Tibet). It extends between 77°34'and 81°02'E Longitude and 28°43' and 31°27'N Latitude. It touches Tibet in the north, Himachal Pradesh in the west and northwest, Gangetic plains of Uttar Pradesh in the south and Nepal in the east. Starting from the foothills in the south it extends to the snow clad mountains in the north.

The high Himalayan ranges and glaciers form most of the northern parts of the state while the lower reaches are densely forested with rich stock of flora and fauna.

Uttarakhand has a total geographic area of 53483 km^2, of which about 90% is mountainous and 64.8% is under forests. Most of the northern parts of the state are part of Greater Himalayas and covered by high snow clad peaks and glaciers, while the lower foothills were densely forested till denuded by the British log merchants and later after independence by indigenous forest contractors. The Himalayan eco-system plays host to diverse flora and faunna. Two of India's mightiest rivers Ganga and Yamuna which are life line of the whole Indo-Gagetic plain originate from Uttarakhand and are fed by many smaller glacial rivers, lakes and other streams.

It lies on the Southern slope of the Himalayan range but multi dimensional hills make the climate and vegetation of multiple variations, suited for growing different fruits and vegetables.

The highest elevations are covered by rock and snow. Below them between 3000 and 5000 meters are montane grasslands (bugyals) and shrub lands. Temperate coniferous forests are found below this line followed by broad leaf forests between 1500-3000 meters elevation. Below 1500 meters elevation lie the Himalayan Subtropical pine forests. The Upper Gangetic Plains moist deciduous forests and the drier Terai-Duar Savanna and grasslands cover the low land along the Uttar Pradesh Border. This belt is known as Terai and Bhabar.

Demographic Profile

The population of the State according to Census 2011 is 1,01,16,752 persons of which 51,54,178 are males and 49,62,574 are females. Thus 19.17% population growth was recorded during the decade against 20.41% in the

previous decade. Further, this growth has been stated to be higher than the all India population growth rate of 17.64%.

However, this growth rate has been largely witnessed in four districts accounting for plain areas and larger urban agglomerations. Udham Singh Nagar district recorded the highest population growth rate of 33.40% followed by Hardwar (33.16%), Dehradun (32.48%) and Nainital (25.20%). Rest of the districts recorded it much below the state average to the extent Almora (-1.73) and Garhwal (-1.51) recorded a negative growth rate and Chamoli, Rudraprayag, Tehri Garhwal, Pithoragarh and Bageshwar depicted less than 6% decadal growth.

District wise population, growth rate, Density and sex ratio is given in the following table 1.1.

Table 1.1 Population/Growth rate, density and Sex ratio in Uttarakhand (Census-2011)

District	Population	Decadal Growth Rate	Density	Sex ratio
1- Uttarkashi	329686	11.75	41	959
2-Chamoli	391114	5.60	49	1021
3-Rudraprayag	236857	4.14	119	1120
4-Tehri Garhwal	616409	1.93	169	1078
5-Dehradun	1698560	32.48	550	902
6-Garhwal	686527	(-) 1.51	129	1103
7-Pithoragarh	485993	5.13	69	1021
8-Bageshwar	259840	5.13	116	1093
9-Almora	621927	(-) 1.73	198	1142
10-Champawat	259315	15.49	147	981
11-Nainital	955128	25.20	225	933
12-US Nagar	1648367	33.40	648	919
13-Hardwar	1927029	33.16	817	879
Uttarakhand	**10116752**	**19.17**	**189**	**963**

The gender ratio (963) as a whole in the State has improved in 2011 with a slender margin as compared to 2001 census (962) but among the districts it has noticeably improved in the four major districts of the plain area, although still they are at the bottom among the districts in the State. But a disturbing trend has emerged in the sex ratio among the 0-6 age group where it has dipped down to 886 with Pithoragarh recording only 812 and thus getting a dubious distinction of one of the bottom 10 districts in the country in this regard. This alarming situation will have to be rectified during the 12th Five Year Plan by taking rigorous steps.

Another visible change has been reflected in the ratio of urban population where it has sharply increased to 31.5 percent in 2011 from 26 percent in 2001.

Measures for controlling growth rate of population will have to be strengthened by providing better health and family planning services. Prevalence of female feticide does not seem to be the plausible reason for declining sex ration in 0-6 age group, however, strict vigil will have to be kept on this and measures to incentives' the birth and rearing of female child will also need to be intensified.

WORKERS' CLASSIFICATION :

The Work Participation Rate (WPR), which is defined as the percentage of total worker to total population is 36.93 percent for Uttarakhand and 39.30 percent for India as per 2001 Census. The data of 2011 are yet to be released, thus, it is evident that the dependence ratio (proportion of non-workers) is higher in Uttarakhand. It is interesting to note that in Uttarakhand there is a perceptible decline in the proportion of main workers and significant increase in proportion of marginal workers: the latter has increased from 5.56% in 1991 to 9.54% in 2001. This fact also has another aspect to it. The youth of Uttarakhand, who are highly qualified, leave the State for better employment/business opportunities. This "Brain Drain" from Uttarakhand is also affecting the State adversely.

The Economic Census 2005 reveals that performance of Uttarakhand has been better than all India average in terms of growth of employment as well as growth of enterprises. Interestingly, in both cases the rural sector has performed much better than the urban sector. (Uttarakhand Development Report, Planning Commission)

Land use

As per latest available land-use statistics, the total reported area is 56.70 lakh hectares. The land use pattern in the State is shown in the table 1.2.

Table 1.2 Land use pattern in Uttarakhand

S.N.	Category	2000-01		2009-10	
		Area (Ha.)	% of Reported Area	Area (Ha.)	% of Reported Area
1	Total reported area	5671698	100.00	5672378	**100.00**
2	Forest	3465057	61.09	3484803	61.63
3	Barren & Unculturable land	310244	5.47	224503	3.96
4	Land put under non-agricultural uses	152247	2.68	216404	3.82
5	Culturable Waste	384928	6.79	309466	5.45
6	Permanent pastures and other	229481	4.05	198432	3.50

	grazing land				
7	Land under misc. tree crops and groves etc.	252351	4.45	383427	6.76
8	Current Fallows	38481	0.68	34009	0.60
9	Other fallows	68965	1.22	80235	1.41
10	Net area sown	769944	13.57	741099	13.07
11.	Net Irrigation area	343608	-	338493	-
12	Net Irrigation Area as % of net area sown	45.67	-	44.63	-

Source : Chief Revenue Commissioner, Uttarakhand.

The net sown area is only about 13.07% of the total reported area. The cropping intensity is about 158 %, and the ratio of net irrigated area to net sown area is only 44.63 %. In the hills the major crops grown include wheat, paddy, mandua, ramdana and potato whereas in the plains the major crops are wheat, paddy, pulses and sugarcane.

Uttarakhand is blessed with rare bio-diversity. Over 175 rare species of aromatic and medicinal plants are found in the State, which gives it a unique opportunity for diversification of activities within the primary sector. Unfortunately existence of some of them is in danger due to unscientific illegal practices and over exploitation. Survival of these species need to be ensured for our rich bio-diversity.

Macro-Economic Indicators

Gross State Domestic Product

The Compound Annual Growth Rate (CAGR) of GSDP at constant prices of 2004-05 is estimated to be about 12.20 percent in the State during the 11th Five Year Plan. The GSDP at constant prices at the end of 10th FYP was ₹ 32260.03 crore which is estimated to be ₹ 55606.40 crore at the end of the Eleventh Five Year Plan i.e. 2011-12. Although figures for 2011-12 are based on advanced estimates and likely to be revised but overall, there has been a decline in the growth rate particularly in agriculture, manufacturing and Trade, Hotels & restaurants sectors. The GSDP of the state along with important sectors is given in the following Table 1.3.

Table 1.3 Uttarakhand GSDP by Industry at Constant Prices

(₹ in lakh)

Sector	2006-07	2011-12^{AE}
Primary Sector	597255 (4.16)	681029(2.84)
of which-		
Agriculture	414962 (5.42)	446820(1.71)
Forestry	143436 (3.02)	173891(5.61)
Secondary Sector	1038848 (22.39)	1859372(9.75)

of which–		
Manufacturing	590603 (28.26)	1310185(7.52)
Construction	402901 (16.25)	460448(15.83)
Electricity, Gas & Water Supply	45344 (8.66)	88739(13.52)
Tertiary Sector	1589900 (13.19)	3020239(9.66)
of which–		
Transport, Storage & Communication	228209 (21.42)	461694(14.20)
Trade, Hotels & Restaurant	602414 (16.61)	1263637(7.19)
Real Estate & Business Services	176023 (5.01)	225951(5.60)
Total GSDP	**3226003 (14.12)**	**5560640 (8.80)**

1- AE - Advance Estimates.
2- Figures in paranthesis denote % growth over previous year

Per Capita Income

State Per Capita income at constant prices (2004-05 base) stood at ₹ 30720 in the base year of the Eleventh five year Plan which has increased steadily during the Plan and as per advance estimates it is expected to be ₹ 47831 at the end of the Eleventh Plan. Thus the State has not only narrowed down the gap with the national average per capita income but has exceeded it.

POVERTY

Although the per capita estimates indicate a rather healthy picture, the fact remains that poverty levels are quite high in the State and sharp regional disparities between different areas of the State, still exists, especially the remote and interior hill areas are economically lagging behind. Thus, Haridwar, US Nagar, Nainital and Dehradun account for a very higher per capita income, while the interior areas of Uttarkashi, Pithoragarh, Chamoli or Bageshwar have stark poverty. Therefore, the per capita NSDP figures do not give a correct picture of the privations that people face.

This last assertion is borne out by the poverty data for Uttarakhand. The Planning Commission has recently released estimates of population below the poverty line in various states and at all-India level based on the 1st Round of household consumer expenditure survey carried out by the NSSO in 2004-05. It has presented two separate estimates – one based on uniform recall period (URP) in which consumer expenditure data for all items are collected from 30-day recall period, and the other based on mixed recall period (MRP) in which consumer expenditure data for five non-food items are collected from 365-day recall period and the rest from 30-day recall period. The comparative figures for Uttarakhand, Himachal Pradesh and all-India in both rural and urban areas are given table 1.4.

Table 1.4 Percentage of Population Below Poverty Line : 2004-05

State	URP			MRP		
	Rura	Urbai	Total	Rura	Urbai	Total
Uttarakhand	40.8	36.5	39.6	31.7	32.0	31.8
Himachal Pradesh	10.7	3.4	10.0	7.2	2.6	6.7
All-India	28.3	25.7	27.5	21.8	21.7	21.8

Note- URP refers to uniform recall period; and MRP to mixed recall period

Poverty levels in Uttarakhand are much higher than those at the all-India level or in Himachal Pradesh in both rural and urban areas. This is true irrespective of the estimate we rely upon – whether based on URP or MRP. According to URP, rural poverty in Uttarakhand is estimated at 40.8%, urban poverty at 36.5% and total poverty at 39.6%. The corresponding figures according to MRP are 31.7%, 32.0% and 31.8% respectively. The all-India poverty estimates are at least 30% lower on both the counts. Poverty levels in Himachal Pradesh, on the other hand, are only a fraction – about one-fourth in rural areas and one-twelfth in urban areas – of the Uttarakhand levels. According to latest estimates (2009-10) of the Planning Commission, there has been some improvement in the poverty level but there results are yet to verified. In Uttarakhand the poverty in absolute terms as well as in percentage had significantly reduced to 18% to 17.9 lakh people reported living below poverty line. This indicate a remarkable improvement against all India poverty percentage of 29.8% for the year 2009-10.

Similar results were obtained in a survey of rural households conducted by the Rural Development Department to identify BPL families. This survey estimated the proportion of BPL families in rural areas of Uttarakhand at 47.42% on the basis of 52 point ranking. These estimates are being adjusted and revised annually. District wise number of BPL families based in 2002 and 2009 are given in the following table 1.5.

Table 1.5 Districtwise distribution of BPL families (Rural) in 2002 and 2009 (No. of Families)

Sl. No	Districts	2002	2009		
			Total	SC	ST
1	Nainital	44394	43785	13568	551
2	Almora	60659	60659	19076	0
3	Chamapwat	20198	20198	4523	271
4	Udham Singh Nagar	70517	70517	15379	9091
5	Bageshwar	26238	26238	807	2
6	Pithoragarh	44129	44129	14845	2053
7	Uttarakashi	28485	28485	8998	335
8	Chamoli	32384	32384	8370	664
9	Rudraprayag	25295	25295	6865	12
10	Hardwar	92430	91927	35355	490
11	Dehradun	55199	55199	11871	10542

12	Pauri Garhwal	61554	60909	14505	331
13	Tehri Garhwal	62308	62308	5910	1334
	Total	**623790**	**622033**	**160072**	**25676**

Source : Rural Development Department, Uttarakhand

These data clearly point to give topmost priority to create even livelihood opportunities for the people, both in rural and urban areas, especially in the hill districts, with accelerating economic growth. Growth clearly has to be an inclusive process.

SOCIAL INDICATORS
Education

The State's literacy rate has gone up remarkably from 71.60 per cent in 2001 to 79.63 per cent in 2011. This is also higher than India's literacy rate of 74.04 per cent. A dark side of Census finding is the existence of a wide gender gap with literacy rate for males being 88.33 per cent as compared to only 70.70 % for females. During the last 10 years the state government has taken effective steps to reduce such imbalances and to further step to enhance overall literacy which has resulted in narrowing the gender gap to 17.63 points from 23.7 points in 2001

As evident from the census 2011 figure the gender divide in rural areas and amongst SCs & STs is strikingly high. These class or region specific gender gaps still a cause of concern.

The State is making earnest efforts to bridge the gap. In fact the education of girl children has been made free up to graduation level. This has resulted in encouraging the girls to pursue continuous education as is amply clear from the fact that number of female student is higher than male students in almost at all levels.

The education infrastructure in the State as on March, 2011 consisted of 15746 Primary Schools, 4379 Senior Basic Schools, 2740 Higher Secondary Schools /Intermediate Colleges, 107 Degree Colleges and 17 Universities (including 2 central Universities, 5 Private sector Universities and 3 Deemed Universities). In addition to this, there are 10 Engineering Colleges (Public & Private), 3 Medical Colleges, 2 Dental Colleges, 2 State Ayurvedic colleges, 35 Govt. Polytechnics, 6 Private Polytechnics and 106 ITI's imparting vocational education in the state.

In order to achieve the national resolve of free, compulsory and universal education for all children between 6 to 14 years of age, the State Government is committed to provide all necessary resources. Free textbooks are being provided to all children at the primary level and free school uniform are also being made available. Mid day meal programme for all the primary children is being implemented effectively in all primary schools in the State. Uttarakhand has pioneered the unique concept of "Bhojan Mata" for this purpose. School meals are cooked by "Bhojan Matas" who are poor and needy women from the villages served by the school and whose children/child attend(s) that particular school. They are paid an honorarium for cooking the daily meal. The system has been working very well and has been appreciated at various national forums. To consolidate the gains of SSA a new centrally sponsored scheme under the name Rashtriya Madhayamik Siksha Abhiyan (RMSA) has been launched in 2008-09 the gains.

Health

The health and family welfare program in the sate is being implemented through primary health care system. In rural areas primary healthcare services are being provided through 1765 sub centre 322 SADs, 250 PHCs and 55 CHCs besides 12 district hospitals and 39 joint hospitals. But human resource for properly manning these hospitals is a key issue in the health sector especially in remote hill/rural areas. Many unserved areas have been covered through Mobile Medical Units. Although these units have done commendable services but given the difficult topography and scattered demography and limited connectivity their reach has limitations. Rural connectivity is detrimental to the objective of equitable access to health services across the geographical expanse of the State and as per norms there exists a gap of 24 CHCs, 60 PHCs, 301 Sub-centres and 7 female Hospitals at the district level.

According to latest available figure issued by the SRS for the year 2010 the Crude Birth rate at 19.3 per thousand in the State is significantly lower than the country's average of 22.1 per thousand. Similarly the Crude Death rate stands at 6.3 per thousand against the all India average of 7.2. Infant mortality rate (IMR) in the State stands at 38 per 1000 live births, which is also much lower than the all-India average of 47 per 1000 live births.

A similar situation exists between Uttarakhand and the all-India average, in regard to death rate as well. In comparison to Himachal Pradesh, Uttarakhand is marginally ahead in total death rate and rural death rate. However, urban death rate in Uttarakhand is higher, than Himachal Pradesh table 1.6.

Table 1.6 Estimates of Infant Mortality Rate, 2010

State	Total	Rural	Urban
Uttarakhand	38	41	25
Himachal Pradesh	40	41	29
All India	47	51	31

Source: SRS Bulletin-December, 2011

Another area of concern is the poor health status of women and children especially in the hill areas. According to NFHS-3 (2005-06) only 44.8% of pregnant women receive ante natal care, only 36% institutional births take place and 61.5% children below 3 years and 47.6% of women suffer from anaemia. Similarly MMR in 2011 existed at 188/ per lakh against the goal of 100/ per lakh in 2012, Institutional delivery at 50 % against the Target of 80% and TFR at 2.55 (NFHS-3) against target of 2.1 by 2012. However the State's is better than the All India average in case of IMR (50/1000), MMR (212/per lakh) and TFR (2.7).

Life expectancy at birth is 62 years for Uttarakhand as compared to 61 years for the country. During past few years we have made a remarkable progress in providing various medical services. Even then, the birth-rate, IMR and Urban death-rate need to be improved to achieve the Millennium Development Goals.

Public health network of dispensaries and hospitals is still inadequate as access to health services in the remote rural areas still remains a challenge. This problem is further compounded by the non-availability of trained doctors, paramedics and diagnostic equipments in the interior areas. To tackle this problem a multi-pronged approach is needed - setting up of medical colleges in public as well as in private sector for increasing availability of doctors, strengthening and setting up of more CHCs, PHCs and Sub-centres, provision of mobile clinics equipped with medical and para-medical personnel and latest-diagnostic equipment (6 such vans are already in operation) to serve the people in remote areas on a scheduled basis and utilizing the opportunities offered by Tele-medicine and Tele-consultation. The State has taken an innovative step in this direction by providing services of pharmacists at the sub-centre level in the remote and difficult areas which are beyond the reach of SAD or PHC.

Another innovative step has been the EMRI emergency transportation service (dial 108) being implemented in the PPP mode, where any resident of State requiring emergency ambulance service can be picked up by EMRI from the road side within half an hour of their contacting the toll free number 108. A fleet of 108 ambulances is providing this free service in all the thirteen districts of the State and has found very encouraging response from the public. For providing otherwise expensive services of MRI, one MRI unit has been established in Dehradun in PPP mode which provides cheaper service to the needy public.

Drinking Water

In spite of the fact that the Ganga and the Yamuna, the two major river systems of the country, have their origin in the State even then it is faced with inadequate drinking water. Although above 95% of the inhabited villages have been provided with safe drinking water facilities in the village itself, as per the status of water supply in rural areas as on 2011 only 75 percent habitations are fully covered and the remaining have it within a distance of 1 Km. Many schemes have become inadequate or defunct due to depleting water sources, natural calamities coupled with population shift etc. Such schemes urgently require re-organization or renovation to cater the ever increasing need.

The main problem lies in the re-organization and maintenance of Water Supply Schemes due to paucity of resources. Inevitably this leads to erratic or failed water supply, fuelling resentment among the people.

The State has 39967 rural habitations of which 2219 are unpopulated According to a survey conducted in 2003, on the recommendation of the

Working Group on Rural Drinking Water Supply and resurvey in following years. The status of water supply in rural areas of the State at different points of time was as table 1.7

Table-1.7 Status of Water Supply at Different Point of Time

Habitations	2003	2007	2009	2011
Habitations fully covered (FCs)	**20748**	**23128**	**26828**	27352
Habitations Partially covered (PCs)	**13892**	**12247**	**9405**	7609
Habitations Not covered (NCs)	**4540**	**3805**	**2947**	2219
Un populated (NN)	**787**	**787**	**787**	**787**
Total	39967	39967	39967	39967

The State of Uttarakhand, due to its difficult hilly terrain and scattered population, has been experiencing acute drinking water problems, especially in the remote areas. The State of Uttarakhand in consonance with the policy of Government of India of Sector Reform, has opted to implement Sector Wide Approach (SWAp) in the Rural Water Supply Sector from the Eleventh Five Year Plan, in which all the single village schemes and multi village schemes are to be implemented in the principle underlined by SWAp in a demand responsive approach by the villagers itself.

INFRASTRUCTURE

Roads

Uttarakhand, a predominantly hill State, is minimally connected through rail and air links which is limited to plain area only. Therefore, roads assume the role of lifeline of the State. As on 31.03.2011, the State has 42,481 Km of road length maintained by the PWD & other departments, out of which more than 19071 Km are painted roads. In addition to the above, there were 12056 Km of bridle roads and 497 Km of border tracks. The details of Roads are as table 1.8.

Table 1.8 Detail of roads in Uttarakhand As on 31-03-2011

S. No.	Item	Under PWD (1-4-2011)	Other Deptt. Roads
1.	Total length of Road	24996	17485.00
2.	Painted Roads	14491.71	4579.29
3.	Kachcha Road	6615.15	4240.71
4.	Bridled Road	3391.33	8665.00
5.	Border Tracks	497.41	0.00

Railway Line		

	Meter Gauge	Broad Gauge	Total
Length in km.	61.15	283.76	344.91

Energy

Uttarakhand has an identified hydro-power potential of approximately 25,000 MW. So far only 3135 MW potential has been harnessed. Main hindrance before the State is getting forest clearances for hydro power projects. Some projects have been stopped in midway. The status of power generation program in the State is summarized table 1.9.

Though Uttarakhand is assumed to be a power surplus State, it is still a power borrowing state. Hence a lot needs to be done to sustain the generated capacity, harness the untapped potential and sell the surplus power to make this a GDP driver for the State. Uttarakhand at present has one 440-KV substation, five 220-KV sub-stations fifteen 132-KV substations, seven 66 KV substations and 138 substations of 33 KV. The total existing 33KV line length in the State is approximately 3881.01 Km. as on March 2009. However, the State lacks a separate grid system and there is no connectivity between Kumaon and Garhwal divisions, which are fed by separate feeders. Evacuation systems for new hydel power projects are also required.

1.9 Hydro Power Potential Status of Uttarakhand as on 31-03-2011

Total Hydro Potential :	25000 MW (approximately)
Installed Capacity:	
a- Before Creation of Uttarakhand	1116.1 MW
b. After Creation of Uttarakhand	2257.64 MW
Total Potential Harnessed	3373.74 MW
Projects Allotted to various agencies (capacity) of which	12145 MW
a. To Central Power Sector Units	7302 MW
b. To State Power Sector Units	2902.7MW
c. Pvt. Developers	1941 MW

The status of rural electrification (as on 31 March, 2011) in the state is as follows:

No. of inhabited villages	15761
Villages electrified up to 31.03.2011	15564 (99%)
By GRID (UPCL)	15298
Non-GRID (UREDA)	266
Energised Pump sets/TWs	21915
Kutir Jyoti Connections	270826

The State, has almost achieved the targets of rural electrification, which is higher than the national average. However, due to the scattered nature of habitations/hamlets in Uttarakhand, extension of LT lines presents a major task. The target date for 100% access to electricity to all rural households by the end of the 11th Plan still far away. In addition, improvement of 11KV/LT system is required to improve the quality of supply and voltage. Hence about one-third of the total households, majority of whom belong to hill area of the State are yet to be benefited.

Plan Expenditure

The Annual Plan expenditure as percentage to GSDP has been on the rising during the previous two five year plans which is evident from the following table 1.10.

Table –1.10 Percentage of Annual Plans Expenditure to GSDP

Year	Uttarakhand	H.P	Total States
2002-03	7.85	10.85	4.08
2003-04	8.21	6.31	3.94
2004-05	8.08	6.40	4.22
2005-06	11.56	6.53	4.76
2006-07	10.36	7.06	5.37
2007-08	10.94	6.51	5.50
2008-09	9.08	6.19	6.06
2009-10	12.38	6.43	4.48
2010-11	13.73	7.14	7.89

Source : - Planning Commission GoI website

Financial Resources The state inherited a huge debt balance from the parent State. It was also deprived of from the benefits of eleventh Commissions recommendation. Further to manage the basic infrastructural and other requirements the state has to resort to borrowings form markets and other funding agencies including EAP.

Under its fiscal reform agenda FRBM Act was implemented from the 10th Plan itself which enabled the State to control its revenue / fiscal deficits. But while appreciating its fiscal management the Thirteenth Finance Commission stopped the non revenue deficit grant to the State which can be termed as punishment for performance.

Hill Specificities

Vulnerability, Fragility & Disaster Proneness

The Himalaya is the youngest mountain chain on the globe and is believed to be still evolving and thereby is not having stabilized due to prevailing active geodynamic conditions. Because of this the Himalayan region is one of the most seismically active regions in the world.

The State of Uttarakhand falls in seismic zone category V & IV which is termed as the most severe seismic zone and referred as Very High Damage Risk Zone. The region has experienced many earthquakes of varying intensities in the recent past (and similar threats remain imminent) causing massive loss of life and property[1].

Through the last millennium a continued process of observation and innovation led the people of this hill region, like other parts of **Himalayas, to**

evolve their economic activities and management strategies, primarily under

References: 1. Natural Resource Management & Development in Himalaya - K.S. Rao, GBPIHED Kosi katarmal-almora

conditions of tough topography, inaccessibility and isolation. With the increasing demand of ever-growing population in and outside the region, the environmental resources are experiencing serious degradation and causing manifold problems. Apart from growing population degradation is also governed by mountain specificities, viz. inaccessibility, fragility, marginality, diversity (heterogeneity) niche characteristics (natural suitability) and adaptability (human adaptation)[2].

This results in limited external linkages and replication of external experiences, slower pace of development, intra-regional imbalances and under utilization of regional potential.

Inaccessibility, marginalization and unsustainable development

The evolution of socio economic patterns of the Himalayas and its growing ecological fragility have to be viewed against the backdrop of issues of accessibility and geo political sensitivity. The political integration and the economic amalgamation have often been said to reduce the autonomy of the local people, with the risk of them being marginalized in the process of competing with the formal market and the economies of the technologically modernized economies outside the region. Over a period of time this led to the creation of a separate State. However, under the consideration of viability, plain districts of Hardwar and Udhamsingh Nagar were also included in it. Plains are inherently in a advantageous position in terms of agricultural, infrastructural and industrial development. Hill region generally suffers from various factors attributed to its geo-physical and socio-cultural peculiarities.

Land Degradation and Agriculture Systems

Being a part of the worlds highest mountain chain, the hill region of the State is characterized by a complex geological structure, snow clad peaks, large valley glaciers, deep river gorges and rich vegetation. A complex interplay of climatic and geological processes, patterns of resource use and economic conditions have led to resource degradation and associated environmental consequences.

Majority of the mountain population in the State depend on farming and agriculture as their primary source of sustenance. Hence efforts to address the problems of poverty, inequality and marginalization must begin with improving the well being of mountain people by addressing the problems of mountain agriculture. Without improvements in the thousands of Small Mountain farms

there will be little positive impact either on poverty or on the mountain environment.

2. *Uttarakhand Perspective and Strategic Development Plan 2009-2027. Watershed Development Directorate, Uttarakhand.*

Since the cropping pattern as well as yield is largely determined by topographical and climate conditions, the problems related to land and agriculture in the Hill region vary with elevation, slope, soil and climatic conditions.

Poverty, Prosperity & gender differentiation

The spread of monetized economy has its positive dimension in terms of providing access to jobs and cash incomes, employment opportunities, access to newer technologies and practices etc. Increasing access to education has also led to positive outcome. However, it was largely the men who benefited. As educated youth out migrated to seek employment away from their homes, the burden of subsistence obviously is transferred to the women and elderly.

The presence of markets and access to cash incomes through money orders has led to loss of capacity and interest to meet their basic consumption requirement locally further compounded by land degradation and diminishing agriculture returns.

Major Problems

1. Uttarakhand is a land locked State, which creates disadvantage in competing with other states, particularly in exportable goods and importing critical raw material. The rural mass has fragmented land with small land holding generating marginal or no income leading to constrained use of innovating methods. On top of that village and smaller town level industrialization is very poor.

2. The Uttarakhand economy, which was growing at about 3.5 percent in the post reform period before attaining statehood, has achieved average growth rates in excess of 10 percent after 2000-01. It is clear that the achievement of statehood has helped Uttarakhand to transform itself from a low growth to a high growth economy. However, most of the growth has been restricted to the plains, while the hilly areas have continued to grow slowly due to a number of structural problems. Thus the challenge for inclusive growth policies is to generate faster development in the hilly areas of the state. The main problem, of course, is the mountainous geography of the state. The soil in these regions is, in general, quite shallow, gravelly and not very fertile. Agriculture takes place mostly in the valleys or scattered pieces of land on the hills that have the requisite fertility. Not surprisingly, the net cropped area is only about 13 percent of the area

of the state. Given the topography and the terrain, irrigation becomes a crucial limiting factor in agricultural performance.

3. Another problem is the population density, which is very low in these areas. The three districts of Uttarkashi, Chamoli and Pithoragarh have some of the lowest population densities in the country. This can be attributed to the fact that a large part of the land in these districts is under forests and uninhabitable snow/glaciers area. If this area is accounted for the population density in hill districts is around 466 per sq. km. Thus, on the one hand, the State is constrained to make alternate use of two-third forest area, on the other hand, it suffers in allocation of Central funds due to so called lesser population density. This paradox needs to be taken into account while making allocation of central funds under different schemes. As per estimates based on watershed atlas of India (2000), out of a total snow/glacier area (1316640 ha.) in the State, 93 percent falls in these three districts. Further, the majority of land under forests is another reason for apparent low density of population.

4. Although about 31 percent population is stated to urban population in the State as a whole, it is distressing to note that more than 82.5 percent of this urbanized population is concentrated in the plains of 4 districts. Rest 17 percent also largely belong to the district headquarter towns of the remaining 9 districts. This speaks of high disparity in this regard and special efforts and earmarked funds are required for the smaller towns of the hill area so that they do not get marginalized due to population norms. Development of such towns will also check out migration from hills.

5. Uttarakhand shares about 625 km. long border with China and Nepal. Five of the 13 districts of the State are border districts. About 18% of the state's population and 47% of state's area falls in these districts. But the condition regarding the physical infrastructure and life amenities has not changed much which is leading to a population vacuum in these areas.

As stated in the succeeding chapter, that the road and communication infrastructure development in the villages and towns of 9 blocks of 5 districts under BADP should be undertaken under BADP to avoid their marginalization on account of population norms. Hence enhancement to allocation under BADP is solicited. Alternatively Government of India should undertake the responsibility of infrastructure development for the sake of the nation.

6. About 84% of the village settlements (nearly 90% in Pauri Garhwal, Pithoragarh, Chamoli, Tehri Garhwal and Almora) have population sizes that are less than 500 and hardly 0.5% of the villages in most districts have population sizes that are more than 2000. The sparse

and scattered population prevents the development of market-based institutions, which need a minimum scale in order to operate. The lack of roads and other means of transportation further compound this problem. Railways and air connectivity is limited to the Terai region. The Hill region is left with only one option i.e. roads. However, the construction of roads in hills itself is costlier than that in plains on the one hand and on the other longer roads are constructed to connect localities/villages due to uninhabited forest lands between them. Further, due to fragility huge amount is required for maintaining these roads in view of the monsoon damages. Thus, in the current scenario, transportation is difficult and costly.

7. Uttarakhand hills offer huge potential for high value tourism, especially adventure tourism. However, to give it a right momentum, following infrastructure urgently needs to be created.

   7.1 Construction of Greenfield Airport : To make Uttarakhand a tourist destination for domestic and foreign tourists, such airports are necessary. The Centre has developed such airports in the North East and Sikkim States. However, Uttarakhand is still denied of such favours. Hence, we seek the help of Planning Commission in forwarding our case to the Ministry of Civil Aviation, GOI. For this purpose land is available at Gaucher (Chamoli), Nani-Saini (Pithoragarh) and Chinyalisaud (Uttarakhashi).

   7.2 To give boost to the high value tourism a professionally trained manpower for different field of tourism is a perquisite. For this, a Tourism & Adventure University at Pithoragarh preferably from Central funding may be considered. This sector has high employability and as such this University would also cater the demand of other States.

8. Although the State in its endeavor to extend medical and health services has opened CHCs/PHCs/SAD but the non availability of doctors and paramedical staff, specially in the remote hills, is with holding the delivery of services. Hence, establishment of two state Ayurvedic colleges, one each in Kumaon and Garhwal division can provide the solution so as to ensure minimum health coverage.

The structural problems described above make these areas completely unsuitable for large scale mechanised, input-intensive modern agriculture. Even smaller scale localized cash crops are not remunerative in the current situation because transportation and transaction costs are prohibitively high for a small farmer. Moreover, these cash crops also require higher levels of investment but the overall backwardness of these places prevents the development of financial institutions that may provide credit to these farmers. Since the return from agriculture is low and remunerative

employment opportunities are not available in the region, the men-folk either join the army and para-military forces or migrate in large numbers from the mountain areas to the cities and towns all over the country in search of employment. A significant consequence of this pattern of migration and male preference for off-farm employment is the lack of quality manpower in the agricultural sector.

In order to change this situation of economic and social backwardness in the rural mountainous regions of Uttarakhand, it is important to adopt a strategy based on long term planning that will take steps to counter all the problems described above. However, given the fiscal and administrative constraints of the state, it is more sensible to identify a few sectors at a time and attempt vigorous development in these sectors before moving on to other sectors. The first step in such a strategy is to identify (a) sectors that are impeding the growth process, and (b) sectors in which this region has a comparative advantage. The current condition of the infrastructure sector is clearly a constraint on the development in this area and must be the focus of the strategy for inclusive growth. As far as comparative advantage is concerned, two sectors that have great potential are horticulture, tourism and Hydropower

Social Development The social development of the State is both a precondition and a component of economic progress and ought to be the primary focus of the Twelfth Five Year Plan.

Another critical measure which could help accelerate the pace of economic development would be to develop long term cooperation with other States in the region for a common programme of development so as to realize fully the potential of Uttarakhand.

Uttarakhand cannot compromise on its environmental and ecological status. These have not only to be protected but also their development has to be so conceptualized and planned that it extends the benefits to the down streams states of the Gangetic basin as well. But in turn these beneficiary states must cooperate and compensate Uttarakhand for delivering such invaluable services.

SWOT Analysis

Based on the above analysis the main strengths, weaknesses, opportunities and threats are summarized in the following chart :

SWOT Analysis for the economy of Uttarakhand

Strength	Weakness	Opportunity	Threats

High Literacy Rate	Hilly, difficult and Land locked terrain	Tourism development (without disturbing social, cultural value and environment)	Vulnerability of Natural calamities seismically the state falls under high risk category.
Good Health indicators	Fragmented marginal and scattered land holdings	High potential for Horticulture (including Tea, Herb, medicinal Plant)	Endangered flora and fauna
Low Population density	Rainfed agriculture	Large hydro power potential	Migration of able bodied workforce
Perennial surface water resources (rivers)	Limited urbanization and thin local market	Climate and location advantage for higher learning and research	Regional disparities
Rich forest cover and biodiversity	Small sized and scattered villages	Available benefits of special category state	Skewed industrializatio n
High Grade natural resources of tourist hot spot	Low access to roads/Low connectivity of rail and air	New State and committed machinery	Emergency of extremist forces across the border.
Growing registered Mfg.	Geo-Physically fragile.	Abundance of solar energy potential	Long international borders with China and Nepal put pressure on security and other offensive activities.
Peaceful social and industrial environme nt	Inadequate infrastructur e to support high value tourists.		International border provides transit route for illegal activities.

Large number of Es-Defence personnel as work force. Pollution free environment	check on mineral resource exploitation due to environmental constraints		Reducing glaciers

This is only illustrative and can be extended and modified further.

Chapter –2

Forestry, Environment & Climate Change

Uttarakhand is a Part of the Indian Himalayan Region (IHR), which plays a strategic role in safe guarding the northern boundary of the country. This region represents one third of the total forest cover of the country and provides vital ecosystem services to the entire nation. The glaciers and high altitude lakes in this region (IHR), numbering over 9000, form an unique reservoir storing about 12000 cubic km. of water.

Himalayan region though considered to be the store house of bio diversity and water tower, feeding the densely populated Indo-Gangetic region down the plains, is suffering from extreme climatic variations. Global warming is affecting ice and glacier cover in the region. The environmental constraints against the exploitation of natural resources also include other natural phenomena like mass wasting, high seismic activity, landslides, glacial lake outburst, floods, erosion and sedimentation. Glaciers play an important role in maintaining ecosystem stability as they act as buffers and regulate the run off of water supply from high mountains to the plains during both, dry and wet, spells.

A study conducted by the International Commission on Snow and Ice (ICSI) has observed that Himalayan glaciers are receding faster than their counter parts and if the present rate continues, the likelihood of them disappearing by the year 2035 is very high. The Gangotri glacier, one of the major and important glacier in Uttarakhand was 25 km. long when measured in 1930, has now shrunk to about 20 KM^2.

The rich biodiversity of Himalayas is now severely threatened and many species of flora and fauna have become extinct or endangered. The loss in bio diversity has been largely on account of habitat losses caused by depletion of forests, over-exploitation of resources, encroachment and population growth.

Other factor for loss of bio diversity include forest fires and natural calamities. Poaching and illegal trade in wildlife are other major threats to specie's survival in the Himalayas as the region is coextensive with international boundaries of China and Nepal which provides transit routes for illegal wildlife trade.

Efforts for environmental protection of the region have been made at various level in the form of popular environmental movements, policy and legislation and research networks. However, despite these efforts, the region continues to face environmental degradation. Sustainable environmental management will have to be based on an understanding of the specific social and economic context, environmental specificities and the critical geo-political role of this region

Uttarakhand State with a total geographical area of 53483 sq.km. has 34651 sq.km (65%) under forests. In other words it comprises approximately 1.63% of country's area but has 4.53% of country's forest cover. Further against a national average of approximately 23% forest area, Uttarakhand has 64.8% of its area under forests (Annexure-I).

Uttarakhand has been alive to the concerns of conservation of forests much before this term became fashionable which is evident from the fact that the country's first effort at conservation of forests the Corbett Park (earlier Hailey Park) came up in 1936 in this region. It was first Park of its kind not only in the country but in the whole mainland Asia. The world famous 'Chipko Movement' launched by Gaura Devi a simple village woman from a remote village (Raini) in district Chamoli, predates the enactment of forest conservation Act 1980. Afterwards 'Maiti' movement came in to being and gained popularity among, hill folks under which the bride at the time of her wedding plants saplings in her 'Mait'- the parental home, as a memory and the girls of the village take the responsibility of grooming it. The 12000 Van Panchayats which manage a sizeable portion of the State's forest through community participation are an institution unique in the country. Uttarakhand is the only State which has increased its forest covered area by 1141 sq.km. during the 10 years of its existence.

Maintenance of ecology and environment of the region, is in the interest of the whole country. Our State and its people are well aware of this responsibility. The Planning Commission in its report on environment has ranked Uttarakhand on the top among all the States in preserving the environment.

Uttarakhand is also known as a repository of water resources. More than 1200 glaciers and major river catchments act as a life line for the entire hydrological system of the Indo-Gangetic plain. Therefore, ESS flowing from Uttarakhand has far more monetary value than other States as they are benefiting about 500 million people living down the Indo-Gangetic plains.

Land use Constraints

In a small State like ours, where our share in terms of country's land area is only 1.6 percent but our share in forest coverage is 4.53%, we have 6 National Parks (4915 sq.km.), 6 Wildlife Sanstuaries (2420 sq.km) and 2 conservation Reserves (42 sq.km) where any other activity is strictly prohibited.

Thus the State has done good in this field but therein lies its paradox. There is seldom any recognition of its contribution rather, its proactiveness in this field has cost it dearly. With the enactment of the FC Act the State has suffered the most. On the one hand it lost revenue from forestry while on the

other the State has been deprived of alternative use of its land resources. The contribution of forestry & Logging sector in the GSDP has dwindled over the years during last two decades. Further the State has to incur huge expenditure from its meager financial resources on the maintance & development of forestry which is evident from the figures of annual revenue and expenditure on forestry & Logging (Annexure-2&3). Even exploitation of minor minerals like sand, gravel and stones from river beds which is confined to surface mining only, has been banned although this activity helps in cleaning of river beds and thus help in controlling the floods and soil erosion alongside the rivers on the one hand and provide useful construction material on the other hand. It is, therefore, logical to study scientifically the quantification of such residual produce, its hydrological effects and environmental sustainability before making any such prohibitory orders.

The Task Force appointed by the Planning Commission at the instance of the Hon'ble Prime Minister, to look into the problems faced by the Hill States, while formulating its vision resolved to recommend only such policies and programs that help strike a balance between the four key natural treasures of the IHR, viz. the snow, water, forests and soil with the developmental aspirations of its people. The Task Force has no hesitation in stating that in case of a conflict between the two, the natural treasure should get primacy. This seems to be a blatant disregard for our efforts. Which urgently needs to be looked in to so that the State and its people do not suffer further

Forest Conservation Act constraints

Since 65% area is covered by forests, very limited area is left for development activities thus, thwarting our efforts for development. Delay in getting clearances under Forest Conservation Act, results in cost & time over run. Apart from this for any transfer of forest land for other essential development activities we have to pay for NPV of land and manage for afforestation in double land even outside the state. For example, the cost of construction of 1km. motor road in hills costs ₹ 46.00 lakh out of which ₹ 12.40 lakh involves on account of compliance of forest mandate i.e. ₹ 5.40 lakh for NPV ₹ 1.00 lakh compensatory afforestation, ₹ 5.00 lakh for muck disposal & ₹ 1.00 lakh for roadside plantation. On the other hand, the States with lesser forest land are enjoying the benefits of alternative land uses and

simultaneously taking benefit of our funds for compensatory afforestation. This gross injustice urgently needs to be looked into in the larger interest of the nation.

Uttarakhand shares international borders with China and Nepal. Five of the 13 districts of the State are border districts. The strengthening of physical infrastructure in these areas is of strategic importance. It is an accepted fact that the populace has to be given good amenities and that they should be happy. However, it is extremely sad that upper regions of the State are being declared as no construction activity zones. This disability is leading the people to migrate from the border areas as is evident from the 2011 census. In fact looking at the State's disability to raise its resources in view of the two-third area under forests, the Government of India should take the responsibility of infrastructure development in this State.

It is also interesting to note that despite clearance of forest land for 2823 development projects during the last decade the forest area has also increased by 20 km^2 in the State which indicates our commitment and concern about conservation of forests, which has also been appreciated by the Planning Commission in its assessment report on the State of environment in the States and the State of Uttarakhand has been placed on top amongst the States.

Similarly, the new State with estimated 30,000 MW hydro-power potential visualized the hydro power generation as the driving sector of the economy. The current generation is only about 3394 MW. Five projects with estimated potential of 735 MW have been rejected so far and 22 projects totaling to 2336 MW are pending for approval. Some projects have been banned after the commencement of work. Hence fast tracking of project clearances is urgently required in case of such critical infrastructure projects. Interestingly the Approach Paper to Twelfth Five Year Plan emphasizing the importance of power states that 'there is a substantial potential of creating hydro -power capacity especially in the NE region and for its development, emphasis should be given to expedite environmental and other clearances, so that the pace of work on these projects can be stepped up, which will, in turn, generate an income stream for the NE States and enable them to accelerate the pace of development'. But it is intriguing that no mention has been made about Uttarakhand where there is abundant hydro power generation potential but projects under construction are abruptly stopped and many projects rejected on the pretext of environmental concerns although the national targets of power generation have remained far behind. Such discriminatory prohibitory restrictions are neither in favour of the State nor the nation as a whole.

Keeping in view the large area under forests and demand of forest land for other developmental activities it would be appropriate to establish a regional office in the State for processing the forest land transfer proposals. Further to minimize the burden and expedite the project clearance it is

advisable to vest the rights of transferring of forest land at least up to 2 hectares in the State.

Valuation of Eco-System Services (ESS)

The State renders eco-system services to the whole country estimatedly to the tune of about ₹ 40,000 crores per annum. There is no mechanism in place for compensating the State for the Eco-services rendered to the rest of the nation, especially to the Green Deficit States with a large Carbon Footprint. There is a clear need for scientific valuation of ecosystem services rendered by the Uttarakhand Forests in order to highlight their contribution to the national economy and quality of life. A natural corollary to this is the principle that the nation must be willing to pay for maintaining such services. A national exchange could be created where green credits can be bought by Green Deficit States or in the alternative, till such mechanisms can be worked out and formalized, our State should be given additional SPA / ACA from the share of the Green Deficit States.

Soil Erosion

Due to geo physical reasons this region is very fragile and prone to many forms of natural disasters. Seismologically it falls under category-IV i.e. a very high sensitive zone. The rate of soil erosion is alarmingly high in the State. In 88 % area of the state, the rate of soil erosion is more than **10** MT per hectare per year. This is two and a half times more than the acceptable limit of 4 Ton/Ha./Year. Moreover, 35% of this area is suffering from very severe soil erosion, which is above 40 Ton/Ha./Year, 25 while the plains down-stream are reaping the benefits of this enriched soil.

The last year's devastating floods and Massive landslides destroyed the infrastructure painfully built over a decade. About 4500 houses were completely damaged and about 20000 houses were partially damaged, 214 human lives were lost. 2300 school buildings 1400 km. power lines and 600 sub-stations 1400 km. motor roads and 1000 km. bridled path were damaged. Besides, 233 habitations were rendered unfit for habitation. The incessant rains this year again aggravated the situation. The CRF as per prevailing norms is grossly inadequate and CRF based on actual damage is required to restore the damaged infrastructure.

Carbon Stock and mitigation potential of forests

Mitigation potential of the State forests is quite high which is a very important tool for carbon sequestration. This potential can be enhanced by afforesting wastelands and increasing the density.

A comprehensive study by Raj and Joshi based on remote sensing data* (as quoted in Uttarakhand State Perspective and strategic Plan 2009-27: Watershed Management Directorate) has reported 266.96 MT. of Carbon in the biomass pool of states forests. As per this study total carbon content in

pools of biomass, forest floor litter and soil is 537.02 MT in the State as given in table 2.1.

The environmental disturbances and the resulting global warming have put a question mark on the existence of life. Under such circumstances, it is imperative to encourage and compensate the states which are contributing to environmental cause for meeting out the cost of opportunity loss, difficulties faced in providing public utilities/facilities and higher cost of construction etc. The standing principle of 'Polluter Pays' must be adhered to and 'preserver be compensated'.

** Ref : Uttarakhand State Perspective Strategic Plan 2009-27 : Watershed Management Directorate, Uttarakhand.*

Table 2.1 Carbon stock in various forest types of Uttarakhand

	Forest type	Area (Km^2)	Carbon (Mt.)		
			Biomass po	Forest floc litter	Soil pool (1 cm)
	2	3	4	5	6
	Tropical conifer (pire)	5418	33.4	1.74	61.71
	Temperate conifer	6017	37.1	1.90	68.54
	Temperate brood leafed	7809	119.3	2.39	111.95
	Moist deciduous	3027	54.4	0.30	15.10
	Dry deciduous	695	12.5	0.07	3.47
	Sub tropical (sal)	562	10.1	0.05	2.80
	Total	23528	266.96	6.48	263.58

In view of the central Government's plan to release green dividends and a green bonus to the states in accordance with their mitigation potential from the coming financial year as a measure for protecting the ecology, it assumes a greater importance from the resources point of view.

Climate Change

There is now wide recognition that emissions of greenhouse gases are changing the climate around the globe. The State of Uttarakhand being a part of the Himalayan Region is more vulnerable to such changes. Impacts are already visible in irregular rainfall, unprecedented increase in temperature, receding glaciers, changes in flora & faunna etc.

With changes in key climate variables i.e, temperature, precipitation crucial sectors like agriculture, horticulture, water supply and rural development seem to be most vulnerable and are likely to be affected in a

major way in the future. Many studies indicate that over 50% of India's forests are likely to experience shift in forest types, adversely impacting associated biodiversity, regional climate dynamics as well as livelihoods based on forest products.

Further with the increase in population and the incidence of poverty, the climate change will have its hard impact mainly on the poors.

Although our track record in the past has been good but the competing development needs may aggravate the situation. Although at the national level our per capita emissions are among the lowest in the world, our envisaged growth rates of economy imply that past is no predictor of future. The recent report of the Inter governmental Panel for Climate Change (IPCC) of World Meteorological Organization (WMO) suggests that India will experience the greatest increase in energy and greenhouse gas emissions in the world if it sustains a high annual economic growth rate. Hence emphasis has to be laid on developing adaptation strategies for vulnerable communities and mitigation strategies in general. Efforts will be made for mainstreaming of Climate Change and specific cognizance of climate change issues will be introduced in the annual plans of the Twelfth Five Year Plan.

Annexure-1

Details of Geographical Area & Forest Area of Uttarakhand

1. Geographical Area	- 53483 sq km.
2. Population	
i - Population (2001)	- 8489349.
ii - Population (2011)	- 10116752.
3. Forest Area under Forest Department	- 24414.804 sq km.
4. Civil Soyam Forest Area under Revenue Department	- 4768.704 sq km.
5. Panchayati Forest under Van Panchayat	- 5449.642 sq km.
i) Area Completed by recorded as Van Panchayat	- 5309.989 sq km.
ii) Area under control of Van Panchayats but recorded in Reserved Forests of Forest Dept	- 139.653 sq km.
6. Forest Area under Private/Other Agencies	- 157.517 sq km.
7. Total Forest Area- 34651.014 sq km.	
8. Per Capita Forest	- 0.004082 sq km.
9. Forest Area under Forest Deptt. as %	

of geographical area - 45.65 %

10. **Total Forest Area as % of geographical area - 64.79 %**
11. Forest cover in 2007 according to Forest Survey of India (2009) - 24495 sq km.
    i) Very Dense Forest - 4762 sq km.
    ii) Moderate Dense Forest - 14165 sq km.
    iii) Open Forests - 5568 sq km.
12. Forest cover area as % of Geographical Area - 45.80 %.
13. **Increase in forest cover after creation of Uttarakhand - 1141 sq km**
14. Total No. of National Parks and area - 6 (4915.44 sq Km)
15. Total No. of wildlife Sanctuaries & Area - 6 (2420.09 sq km)
16. Total No of Conservation Reserves and Land - 2 (4227.90 Ha)

Annexure-2

Table 2.2 Forest Revenue and Expenditure from 1992-93 to 2009-10

Year	Forest Revenue (Rs. in lakh)	Expenditure (Rs. in lakh)			Deficit (5-2)
		Non Plan	Plan	Total	
1	2	3	4	5	6
1992-93	4124.81	2153.60	3520.00	5673.60	1548.79
1993-94	4200.84	2051.83	3569.08	5620.91	1420.07
1994-95	3547.06	2307.33	3584.12	5891.45	2344.39
1995-96	4887.32	2504.59	4241.61	6746.20	1858.88
1996-97	6013.87	2797.69	5142.25	7939.94	1926.07
1997-98	5195.77	3960.64	4903.85	8864.49	3668.72
1998-99	6924.64	3625.53	6660.62	10286.15	3361.51
1999-00	9060.02	5595.16	6587.94	12183.10	3123.08
2000-01	9664.66	6062.74	8335.56	14398.30	4733.64
2001-02	9150.41	6214.28	8732.81	14947.09	5796.68
2002-03	14986.28	7004.30	8760.09	15764.39	778.11
2003-04	12722.55	10066.40	6238.34	16304.74	3582.19
2004-05	12228.81	10656.46	7793.28	18449.74	6220.93
2005-06	15106.43	11185.07	20170.60	31355.67	16249.24
2006-07	17433.92	12386.78	14922.48	27309.26	9875.34
2007-08	20316.68	13181.73	13009.42	26191.15	5874.47
2008-09	20577.92	17433.20	14584.52	32017.72	11439.80
2009-10	27505.02	20670.77	8504.48	29175.25	1670.23

Source: Uttarakhand Forest Statistics 2009-10

Annexure-3

Table 2.3 Contribution of Forestry & Logging in GSDP of Uttarakhand 1999-00 to 2008-09

	GSDP (₹ in Lakh)	Forestry & Logging	
		Value (₹ in Lakh)	Percentage
	1262090	34726	2.75
	1450109	29231	2.01
	1582577	30930	1.95
	1847320	36682	1.99
	2043878	37616	1.84
	2372001	48882	2.06
	2617889	47740	1.82
	3138038	49669	1.58
	3559195	51815	1.46
	4015926	55839	1.39

Source: Directorate of Economics & Statistics, Uttarakhand

Chapter- 3

Economic Profile

State Domestic Product

GSDP of a state and the growth rate of GSDP are the universally accepted indicators of its economic development. During the Tenth Five Year Plan period, Uttarakhand had aimed at a growth rate of 6.83 per cent at constant prices against which the achievement was 9.2%. According to data sheet of the Planning Commission the compound aggregated growth rate during 2004-05 to 2010-11 in the State was 13.19 percent annually. This is the highest growth rate amongst the States. The growth performance of Uttarakhand appears to fully justify its formation as a separate State. While the parent state of UP continues to lag behind in terms of annual economic growth, Uttarakhand has demonstrated sustained robust growth since its birth and is fast closing the per capita income gap with national average. This is even better in comparison to Himachal Pradesh (HP) as also all other special category states. A comparative picture of this is summarized in the following table 3.1.

Table 3.1 Annual growth rates of GSDP (at constant prices)

S. No.	States	Year					
		1999-2000	2002-03	2006-07	2008-09	2009-10	2010-11
1	Uttarakhand	0.82	9.92	14.12	17.84	11.61	9.07
2	UP	5.49	3.72	8.02	6.75	6.99	8.08
3	HP	6.61	5.06	9.09	7.36	4.48	8.98
4	All India	6.40	3.84	9.58	6.76	7.96	8.55

Source : CSO/Planning Commission and Directorate of Economics & Statistics, Uttarakhand.

The average growth rate of better performing States for the period 1994-95 to 2001-02, 2002-03 to 2010-11 and 2004-05 to 2010-11 as gleaned from the data sheet of the Planning Commission is reproduced in the following table.

Table 3.2 Average Growth Rate of selected States & All India.

States	1994-95 to 2001-02	2002-03 to 2010-11	2004-05 to 2010-11
1- Gujarat	6.45	10.42	10.07
2- Maharashtra	4.97	9.98	10.72
3- Sikkim	6.30	11.50	12.62
4- Tamil Nadu	5.54	8.95	10.40
5- Himachal Pradesh	6.81	7.91	8.30
6- Bihar	4.94	9.23	10.91
Uttarakhand	**4.61**	**12.21**	**13.19**
All India	**6.16**	**7.95**	**8.45**

However, buoyancy in growth rates in the early years may also be attributed to the fact that the new state started from a low level of growth and secondly the plain districts of Udhamsingh Nagar and Hardwar were included in the new state and manufacturing, construction and services which accounted for major share in this growth dynamics, has been largely limited to the plain region of the State. The share of major 13 sectors is shown in the following table .

Table 3.3 :- Share of different sectors in Net Domestic Product at current prices (Uttarakhand), 2006-07, 2009-10 & 2010-11

Sl. No.	Sector	Total 2006-07 (₹ in cr.)	% to GSDP	Total 2009-10 (₹. in cr.)	% to GSDP	Total 2010-11^{Q}	% to GSDP
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
A	**PRIMARY SECTOR**	6607.10	20.22	9312.09	16.12	10420.62	15.88
1	Agriculture	4358.60	13.34	6431.27	11.13	6936.43	10.57
2	Forestry & Logging	1834.84	5.62	2345.59	4.06	2894.98	4.41
3	Fishing	10.80	0.03	18.54	0.03	27.05	0.04
4	Mining	402.86	1.23	516.69	0.90	562.16	0.86
B	**SECONDARY SECTOR**	**9870.06**	**30.21**	**16497.02**	**28.55**	**18801.42**	**28.66**
5	Manufacturing	4974.68	15.23	10457.68	18.10	11750.24	17.91
	a) Registered	3886.83	11.90	8945.64	15.48	10060.95	15.34
	b) Unregistered	1087.85	3.33	1512.04	2.62	1689.29	2.57
6	Construction	4488.81	13.74	5038.34	8.72	5918.14	9.02
7	Electricity, Gas & Water Supply	406.57	1.24	1001.00	1.73	1133.04	1.73
C	**TERTIARY SECTOR**	**16193.87**	**49.57**	**31976.60**	**55.33**	**36382.40**	**55.46**
8	Transport, Storage & Communication	2134.88	6.53	4040.84	6.99	4918.31	7.50
9	Trade, Hotels & Restaurants	6663.14	20.40	13940.32	24.12	15641.13	23.84
10	Banking & Insurance	1226.55	3.75	2013.91	3.49	2551.70	3.89
11	Real Estate, Ownership of Dwelling & Business Services	1571.48	4.81	2547.94	4.41	2990.29	4.56
12	Public Administration	1423.27	4.36	4184.90	7.24	4516.75	6.88
13	Other Services	3174.55	9.72	5248.69	9.08	5764.22	8.79
	Total (A+B+C)	**32671.03**	**100.00**	**57785.71**	**100.00**	**65604.44**	**100.00**

QE- Quick Estimates, AE- Advance Estimates.

It may be seen that while the primary sector contributed 20.22 percent of the NSDP and the secondary sector accounted for 30.21 percent, the tertiary sector accounted for 49.57 percent of the state domestic product in the beginning of the 11th Plan. According to quick estimates of NSDP for the year 2010-11, share of primary sector has come down 15.88% and Secondary Sector to 28.66% while the contribution of Tertiary Sector jumped up by 06 points to the level of 55.46%. Decline in Primary sector largely owed to agriculture and forestry while in secondary sector the decline was seen in construction sub-sector. In the primary sector the share of agriculture, which

is the mainstay of the vast majority of the rural population, is only about 13.34% now. In the secondary sector, manufacturing accounted for over 15 per cent of NSDP, with the share of registered manufacturing being 11.90 per cent. The structure of the State's economy thus is largely service sector based, while the majority of the people are dependent on agriculture for their livelihood. Agriculture sector's contribution to the NSDP has witnessed a decreasing trend over the last few years.

Agriculture, for most of the people in the hill districts, remains a subsistence activity. In the hills, land holdings are tiny and scattered, soils are poor, irrigation coverage very low so that much of agriculture is carried out in rain-fed conditions. As a result the majority of hill cultivators are engaged in cultivation for self-consumption. Even then, most of them are not able to meet more than 6 to 8 months need of food grains. It is only in the plain districts of Haridwar, Udham Singh Nagar and Dehradun that cultivators are able to produce marketable surplus.

Per Capita Income: Average per capita income at constant prices of 2004-05 worked out on the projected population over the years, shows regular increase in the State. While it was ₹ 24726 in 2004-05, it rose to ₹ 30720 at the end of the 10th Five Year Plan i.e. year 2006-07 and further to ₹ 38625 by 2008-09. At the end of the 11th Plan it is estimated to reach the level of ₹ 47831.00 Reduction in gap between the national per capita income and states per capita income also indicates the better performances of the State.

Trends in State's Finances

Uttarakhand being a relatively new state, financial data are available only from 2001-02 onwards, including actual data from 2001-02 to 2009-10, revised and budgetary estimates of 2010-11 and 2011-12 respectively. Non-availability of data precludes any meaningful trend analysis. The problem is further compounded by the instability and volatility of data. Notwithstanding these limitations, an attempt has been made in this section to analyze the State's finances, with a view to getting an idea of the trends in the State's revenues and expenditure.

State's own tax and non-tax revenue plays a vital role in determining the budget size of the state. Since formation of the state, its own tax revenue has increased at a CAGR of 21.47 percent. While the tax revenue percentage to GSDP has stabilized around 6 percent. The non-tax revenue has established at around 2 percent of GSDP. Table 3.4 shows trends in revenue and fiscal deficit and debt liability as percentage of GSDP.

Despite the implementation of the recommendations of the Sixth Pay Commission the percentage of non-plan revenue expenditure to GSDP in general showed a downward trend while plan expenditure indicate a step up in the government investment in the State, which indicates good fiscal management. Revenue deficit indicate that the state government is living beyond its resources, from 2001-02 to 2004-05 the revenue deficit and fiscal deficit increased rapidly but from 2005-06 there is decrease in the deficit

figure and is expected to be wiped off by the end of the 11th Plan. In compliance to Twelfth Finance Commission's recommendation the State Government introduced the FRBM Act in October, 2005. According to the Act, the state government had to bring down the revenue deficit to zero and the fiscal deficit to 3 percent of GSDP, which is also likely to be achieved by the end of the 11th Plan. It is also provided in the Act that the State Government shall bring down the ratio of debt to GSDP to 25% by 2015. The State started with a down sized bureaucracy but with the expansion of economic and social activities and effective delivery of services including in medical and health sectors new recruitment has been necessitated. Vacant posts of teachers, doctors, paramedics and other have been filled in the previous year and some are under the process. This has put a great pressure on the already meager resources which has resulted in negative BCR (Balance from Current Revenue).

Table 3.4 Trend of Fiscal Indicators for Uttarakhand (Percentage to GSDP)

S. N	Item	2009-10	2010-11 (RE)	2011-12	2012-13	2013-14	2014-15
1	2	3	4	5	6	7	8
1	Own Tax Revenue	5.62	5.90	5.78	5.96	6.14	6.32
2	Non Tax Revenue	1.00	1.52	2.00	1.53	1.43	1.37
3	Transfer from Central Taxes	2.45	3.36	3.59	3.57	3.55	3.53
4	Plan Grants	4.10	5.27	5.55	5.42	5.30	5.17
5	Non Plan Grants	1.81	2.15	0.86	0.77	0.42	0.41
6	Total Central Transfers (3 to 5)	8.36	10.78	10.00	9.76	9.27	9.12
7	Plan Expenditure	6.01	7.75	7.98	7.79	7.61	7.44
8	Non Plan Expenditure	16.40	15.33	15.55	15.20	14.57	14.24
9	Salary+Pension+Interest	12.04	10.84	10.81	10.60	10.37	10.14
10	Revenue Surplus+Deficit	(-) 1.85	0.78	0.38	0.24	0.44	0.80
11	Balance Debt & Liability	26.88	26.52	26.39	26.93	26.91	26.61
	Capital Outlay	3.37	3.00	3.76	3.67		3.50
	Fiscal Deficit	4.39	2.77	3.18	3.49		2.71

Source : State Budget Document 2009-10 & 2011-2012.

As stated in the Uttarakhand Development Report prepared at the instance of the Planning Commission, "the transfer for state plans are however, arbitrary and subjected to various conditions. The total transfer as percentage of GSDP for Uttarakhand during 2001-2004 was 13.6 percent on an average basis. This was the lowest among the Special Category States."

It states further, "Even the FC12 grants for Uttarakhand when measured in terms of per capita, it works out to be one of the lowest among Special Cateogry States.*

---

* *Uttarakhand Development Report. Planning Commission, GoI.*

This admission of the situation certainly make a case for providing plan assistance generously.

Trends of Revenue Deficit/Surplus

Revenue deficit of the state was recorded ₹ 457.26 crore in 2002-03 which increased to ₹ 731.64 crore in 2003-04, and ₹ 950.14 crore in 2005-06. In the year 2005-06 the situation improved and the actual revenue deficit came down to ₹ 73.95 crore and further in 2007-08 and 2008-09 a revenue surplus of ₹ 636.53 crore and ₹ 239.53 crore respectively was registered. Owing to the liabilities of the Sixth Pay Commission the revenue deficit again jumped up to ₹ 1113.57 crore as per revised estimates. However, in 2010-11 as per revised estimates a surplus of ₹ 568.57 crore is estimated. Budget estimates for 2011-12 stands at a surplus of ₹ 309.29 crore. In view of the States performance the 13th Finance Commission has not recommended any revenue deficit grant to the state which obviously would put pressure on it to maintain the deficit at zero level.

Trends of Fiscal Deficit

The trend of fiscal deficit has remained unstable over the years but overall exhibited a declining trend which is evident from the following table 3.5

Trends of Fiscal Deficit during 2004-05 to 2011-12

Year	% of Fiscal Deficit to GSDP		
	GSDP (At Current Prices)	Fiscal Deficit	% of F D to GSDP
2004-05	24785.67	2171.42	8.76
2005-06	29951.38	1878.23	6.27
2006-07	36795.99	885.77	2.41
2007-08	45855.73	1742.40	3.80
2008-09	56042.43	1844.96	3.29
2009-10	66399.69	2783.31	4.19
2010-11RE	75475.73	2028.14	2.69
2011-12^{BE}	87349.99	2618.24	3.00

It was targeted to bring down the total fiscal deficit to 3 percent of the GSDP but due to implementation of 6th Pay Commission's recommendations, it increased to 4.19 percent in 2009-10. However, efforts were made to bring it down to the desired level of 3 percent by the year 2010-11 and it is estimated to be within 3 percent in 2011-12.

Trends of Capital Expenditure

The Capital expenditure during previous years has overall witnessed a healthy trend as is evident from the following table 3.6.

Table 3.6 Trends of capital expenditure in Uttarakhand *(Rs. in Crore)*

	Head	2001-02	2006-07	2007-08	2008-09	2009-10	2010-11 (RE)	2011-12 (BE)
	Capital Expenditure	308.65	1699.26	2234.82	2016.36	2136.74	2200.34	3094.58
	% of capital exp. to total exp.	8.31	18.49	21.31	17.44	15.05	13.01	15.98

Indebtedness

The State inherited a huge amount of debt at the time of its formation The requirements of infrastructure development, to sustain the pace of development, it further necessitated to manage resources through internal and external debts its further increased over the years. Thus the over all indebtedness that was ₹ 4430.04 crore in 2001-02 to estimated to ₹ 19438.06 crore by the end of 2010-11 and ₹ 21720.33 by the end of the 11th Plan.

In terms of the debt and liability balance as percentage of GSDP has remained almost static around 27 percent during the Eleventh Five Year Plan. However, as stated in the state Budget 2010-11, an amount of ₹ 1300 crore is balance in the Sinking Fund from which repayment of loans will be made in due course and thus the targeted figure of 25% will be achieved in coming years.

Banking and Finance

The financial infrastructure is closely related to all economic, industrial and trade activities of the State. In Uttarakhand, banks are the main source of finance for industries. Many branches of nationalized, commercial, regional, rural and co-operative banks are operating in the State. State level financial institutions such as, State Industrial Investment Corporation also provide assistance to large and medium scale industries. In 1994-95, there were 601 public sector bank branches, 176 regional bank branches, 39 non-nationalized commercial Bank branches totaling to 816. During the first decade there has been rapid expansion of banking services and number of bank branches increased to 1519 in June, 2011. Area wise distribution of the bank branches is as follows in table 3.7.

3.7 Bank Branches up to June, 2011

1	Rural Area	749
2	Semi Urban Area	463
3	Urban /Metro Area	307
	Total	**1519**

The total loans/advances made by these branches as on June, 2011 were ₹ 25465.32 crore against a total deposit of ₹ 48331.75 crore. The total Credit-Deposit ratio thus works out to 52.69. Thus it is fast approaching the

benchmark of 60 as fixed by the Reserve Bank of India and has equalled the national average. However, out of the total advances in the state about 17.94 percent advances were made by the bank branches located outside the state. If this is not taken into account the net C:D ratio comes to 43.24. It needs to be appreciated that the CD ratio in the State has steadily increased from 22.22 in September 2002 to the present level. As in the past, the State is making all-out efforts to raise it further. Although the overall progress seems to be encouraging but the point of concern is that while the C.D ratio in Udhamsingh Nagar is almost 100% the hill district are lagging behind miserably. However, a positive development can be seen in mitigating the C:D ratio gap in rural and urban areas which is now around 50 for both. Semi urban areas have recorded C:D ratio of about 58%.

The share of priority sector in the total advances of banks was 68.90 per cent (₹ 13221.22 crore) which is much higher than the RBI benchmark of 40%. Share of agriculture sector in total advances has been 24.35 percent against the targeted benchmark of 18 percent. Similarly share of weaker section in total advances is 18.60% and share of women is 7.34% which is higher than the stipulated norms of 10% and 5% respectively.

Chapter– 4

Vision & Strategy

The State envisions to ensure its people a respectable quality life with balanced socio-economic and cultural growth and equitable opportunities to all irrespective of caste, creed, sex and region. The 12th Five Year Plan of the State will embark on sustaining the growth momentum of the previous two five year plans, employment generation and balanced economic growth to attain the overall objective of faster and sustainable inclusive growth as set out in the national approach paper for the Twelfth Five Year Plan.

Despite global recession midway through the 11th Five Year Plan, the Eurozone crisis and the Middle East crisis affecting petroleum product prices and general price rise, the state economy progressed satisfactorily. However, there has been strong demand from all sections of society to improve (i) implementation; (ii) accountability; and (iii) service delivery which has to be taken care of during the Twelfth Five Year Plan.

Uttarakhand has certain key features that make it distinct from other states of the country and highlight its potential for development. However, for obvious topographical reasons and stereo type development schemes, development predominately has been limited to plain areas of the state and hills are largely left with subsistence agriculture and allied activities as the main activity. Due to subsistence livelihood and migration of able bodied person, remittance economy operates in the hill districts. Thus the State faces the challenges of livelihood, income and employment locally to enhance the quality of life of the people living in the hill villages.

Besides this the climate change discourse has accorded the Indian Himalaya a very special place, as the 'Water Towers', the hub of precious 'Bio resources' and pristine recreational and ultimate Retreat and Refuge for all species. An environmentally and economically healthy Himalaya has become a sine qua non for a healthy and energetic India (Draft Report of Sub Group on Mountain eco systems and challenges faced by the People living in Hilly Areas).

In its draft report on Uttarakhand Economic Assessment the World Bank has also suggested that to become a preferred state in North India during the next decade, Uttarakhand should aim at :-

i) Investing in production of high value goods in agriculture/horticulture and industry as well as focusing on diversification and branding of its produce.

ii) Livability improvement through improving availability and efficient delivery of services to retain its educated youth and

skilled professionals, for whom opportunities are increasing rapidly elsewhere in India and in the global market.

iii) Good governance through supportive infrastructure and growth conducive regulations.

iv) Laying emphasis on infrastructure development.

v) Greening of the State.

Vision & Strategy For Main Sectors

The suggested focus or driving sectors in which Uttarakhand has comparative advantage are Tourism, Agriculture and Horticulture, Medicinal plants/Herbal wealth, SMEs based on agro-horticulture produce, generation of Hydro Energy, Information Technology and Biotechnology. The challenge is to exploit these optimally so that the overall GSDP can grow at a higher pace and the common man can benefit and have a stake in the system.

Infrastructure

Viewing its importance Infrastructure was given the highest priority in Uttarakhand during the Eleventh Plan period, as the future growth in this state depends critically on the rapid development of this sector. As also highlighted in the draft Report of the World Bank on Uttarakhand Economic Assessment, there is no doubt that our manufacturing competitiveness is adversely affected by weakness in infrastructure especially in energy and transportation. As the emphasis is on inclusive growth - this is even more important, since there is a direct link between the availability of infrastructure facilities in the far flung hilly regions of the state and the standards of living of the masses living there. Clearly, policies for inclusive growth will have to continue to correct the current imbalances in the distribution of infrastructure in the state.

The policies for development of physical infrastructure will continue to focus on roads and transport networks, electricity, irrigation, marketing infrastructure for agricultural produce and financial institutions. Equally important, is the development of social infrastructure with special thrust on health and education, as this will generate the human capital that is a critical input for the overall development process.

Roads and Transport Network

There is a persisting need in Uttarakhand to address problems with regard to connectivity, particularly of remote and inaccessible areas located in the ecologically fragile mid and upper *Himalayan* ranges. Hence the first and foremost requirement to bridge this gap is strengthening of accessibility through better transportation. This is particularly important for the marketing of primary produce, including horticultural crops, tourism and delivery of basic services, which requires a well-developed network of roads

connecting the fields to the markets in the urban areas. However, there is an equally pressing need to conserve the fragile ecosystem of the Himalayas, which are sometimes undermined by road construction. Therefore, infrastructure development must strike a balance between the need for connectivity and the need for environmental conservation. The solution lies in the development of a network consisting of major and minor roads together with low cost ropeways, connecting villages and agricultural areas to the urban areas and *mandis;* The proverb that **'if you want to develop you must build the roads'** is aptly true in our case.

The major roads in Uttarakhand mostly run from the southern plains to the mid and outer Himalayan ranges high up in the north. These roads run along the river valleys, and their location and direction have in most cases been determined by the strategic defence requirements of the Nation, and not from purely developmental considerations. As a result, there are national highways connecting the *terai* region comprising mainly the southern plains to the northern districts, while there is a dearth of major roads connecting the eastern districts of Kumaun region to those of Garhwal division in the west. In this regard, construction of a trans-Himalayan Highway across the state would be helpful. Necessary steps need to be taken to ensure speedy implementation of this trans-Himalayan project. Similarly work on strengthening and widening of NH road connecting the State capital to Delhi needs to be expedited. The national highways in hill region of the state are barely two lane and can be termed as notional highways as they lack the norms meant for national highways.

The State has about 424 km. long international boundary with China and Nepal which makes the region strategically sensitive. BADP is being implemented in the State in 9 blocks of 5 districts. The villages in these areas are thinly populated due to which they are deprived of benefits of general schemes on account of population norms. However, strong connectivity and communication system is pre-requisite for the development of the people as well as from security point of view. It would be in the interest of the nation if all infrastructure development in border district of hill region is taken up by the Centre. The construction of Bejing-Lhasa railway line and its extension to Taklakot, construction of airports and road across the border by the neighbouring country further necessitate fulfillment of this demand before it is too late.

There are still large connectivity gaps in Uttarakhand, which remain to be filled by good quality all weather road links. Connectivity would be a key driver for other sectors also, particularly tourism and for marketing of our agriculture and horticulture produce, ensuring rapid socio economic development by the upgradation of roads to all weather motor roads and providing connectivity to all villages with a population of 250 or more. It would also be our endeavour to upgrade the existing State Highways to

National Highways and major district roads to State Highways. The construction and maintenance of roads has also to be eco-sensitive.

The State is working on a Road Master Plan which aims at to provide appropriate connectivity to different destinations in the State. For this, efforts will be made to dovetail and integrate the priorities of National Highway development, schemes under the Central Road Fund and such other schemes as the Prime Minister's Gramin Sadak Yojana.

Railway network in the State is minimal and limited to US Nagar, Haridwar and plains of Dehradun & Nainital districts. The existing total length of railway lines in the state is 344.91 kms. It would be in the larger interest of the nation if an artery line from Dehradun-via-Karanprayag, Garud Baijnath, Bageshwar & Tanakpur is seriously considered and sanctioned. The work on Rishikesh-Karnprayag railway line has been initiated by the Government of India but progress needs to be expedited.

Civil aviation infrastructure in the state at the time of its formation was almost zero. After creation of the state, the work of strengthening Jollygrant (Dehradun) and Pantnagar airstrips has been taken up. Gaucher, NainiSaini and Chinyalisaur airstrips are also proposed to be developed in the near future.

Given the existing and proposed connectivity, providing safe, affordable, reliable and timely public transport services is an area of key importance. It is necessary to develop an optimal mix of public-private and multi mode transport services.

Electricity

Availability of assured power supply is a necessary pre-requisite for the development of all other sectors. As the State is endowed with perennial sources of surface running water supply throughout the year with mighty rivers like *Ganga, Yamuna, Ram Ganga* and their tributaries viz., *Alaknanda*, *Bhilangana, Bhagirathi, Tons, Kosi, Saryu* etc. spanning the entire region. The rivers and perennial streams provide an ideal opportunity to generate large quantities of hydroelectricity through projects of all sizes – large, medium and small/micro. In the far-flung remote areas of the State, marked by the absence of alternative sources of power, there is tremendous scope for the development of small-scale hydro systems for electrification of the state. In sharp contrast to large dam projects, such small-scale labour-intensive renewable energy options not only involve minimum rehabilitation and resettlement, they also have very low operational costs and are therefore, the most cost-effective option for power supply especially in remote hilly areas.

Despite such significant benefits, only about ten percent of the available hydropower potential has been harnessed so far in the state. The potential had not been exploited and developed in a planned manner till the formation of the State. There is, therefore, considerable scope for further exploitation of the vast untapped potential in this sphere. The State is

committed to commence work on projects at a faster pace. So far projects worth 3168 MW are under operation and work has been started on projects worth 5509 MW capacity, while a further 9663 MW are in the pipe line to be taken up through the State sector, central public undertakings and private developers.

However projects in progress in the upper reaches of Bhagirathi valley have been stopped by the Central Government on environmental considerations which has given a jolt to power development in the State. It is a point for consideration that while China has constructed 4 dams in the first phase on Jinsha River, the upper stream of Yangtze River with a total generating capacity of 40,000 MW our approved projects are being with drawn and money invested on them is being wasted. It needs to be realized by all that power is a national necessity for the development of agriculture, industry and other services as well as to improve the quality of life and hydro-power is the safest from the environmental point of view as compared to nuclear, coal and gas based plants. Hence the priority should be to use hydro-power potential in the State and other resources of energy stated above should be neutralizing the seasonal factor associated with hydro-power

Simultaneous to enhancement of generation facility, it is also needed to put in place modern transmission and distribution systems. In the transmission system, there is a need for grid separation from Uttar Pradesh as also efficient systems are required for evacuation. Loan assistance from the Asian Development Bank (ADB) was sought for power sector development through Govt. of India and now with sanctioning of the projects work is under progress. The State is also conscious about the line losses and has reduced it significantly in the recent years and efforts for further important shall continue.

Irrigation

In a state where more than three-fourths of the workforce is dependent on the farm sector for livelihood, agriculture is evidently the mainstay of the economy. However, this sector is characterized by severe infrastructure bottlenecks, especially with regard to irrigation and marketing of primary produce. Barring the *terai* and *bhabhar* areas covering the foothills and valleys of the south-western plains, the state is by and large hilly, thereby making well (deep, shallow or dug) irrigation unsuitable. Alternative sources of irrigation like pump sets, canals, small tanks, reservoirs etc. too are confined to the former areas. As much as ninety percent of the net sown in the hill area of *Uttarakhand* is rainfed. Even the national flagship programme AIBP has not shown any impact which is evident from the land use figures cited earlier, indicate no increase in net irrigated area during the decade 2001-2010. In order to deal with this situation, focus must be on developing Rainwater Harvesting along with Sprinklers and Drip Irrigation Systems (especially for horticultural crops) in

all such hilly areas marked by the absence of irrigation facilities. Additionally, appropriate steps must be taken for the restoration of defunct canals, particularly in the hilly regions. People in the mountains have traditionally built shallow depressions for collecting rain water (known locally as *chal/khal*). Apart from providing water during the dry season for irrigation and for use by animals, these *chals/khals* also help in recharging springs and streams. Unfortunately, this practice is now gradually disappearing, which has to be revived as a campaign throughout the State.

Institutions for Post Harvest Management

The hill areas have a comparative advantage in the production of horticultural products including fruits and vegetables including off season vegetables and spices. The bottleneck in this regard is the absence of a modern marketing practices and infrastructure. In a broad sense, marketing consists of all post-harvest activities including the collection of farm products from the field, grading, processing, packaging, storing and warehousing of the products, identifying prospective markets where the best price is available and finally transporting the products to these markets. Unfortunately, the small farmers in the hill areas are incapable of carrying out most of these activities on their own for a number of reasons, which renders their cash crops less than remunerative and discourage them from making further investment.

The large capital and informational requirement necessary to carry out the marketing activities efficiently implies that only a large organization is suitable for this activity. This requirement can be fulfilled by setting up a Horticulture Marketing Board preferably in a public-private partnership mode. Some of the necessary activities of such an organization would include (i) setting up of input retail outlets at least at Nyay Panchayat level for better access to inputs (ii) collection of product from the farms and provision of warehousing (iii) value addition by setting up of food processing units and cold chains (iv) strengthening *mandis* and procurement agencies etc. A chain has been developed through some federations up to Mother Dairy. New collection centres are also being developed under the Horticulture Technology Mission.

Financial Infrastructure

In order to make funds available for necessary investment in the state, the deposits in banks and financial institutions have to be mobilized and pumped back into the economy by providing credit to the relevant sectors. The state has developed network of institutional finance considerably but about half of the total bank branches are located in plains only. Clearly, there is a need to set up more bank branches at the district and local levels. Secondly, these bank branches in the remote areas must make sure that the small landowners or other small players in the horticulture or tourism industry get access to the credit necessary for their activities. Extension of organized micro-finance facilities for Self-Help Groups (SHGs) can fill this

gap. Besides innovative banking solutions will have to be further promoted in the next five years.

Social Infrastructure

Education

The Twelfth Five Year Plan of the State would lay strong emphasis on human development, especially through education. The literacy percentage in the state has gone up from 71.6 percent in 2001 to 79.6 percent in 2011 and is well above the national average. At primary level GER has reached to 108 while the NER is 99.7. Gender Gap has also lowered down to 17.63 but still calls for efforts to bridge the remaining gap which is higher than the national average. There has been significant progress under SSA in achieving the goals. However, the State need to formulate explicit policy on opening schools to ensure that all children have access to a neighborhood school in accordance with the provisions of RTE Act.

To consolidate the gains of SSA at primary level during the Tenth and the Eleventh FYP, Rashtriya Madhyamik Siksha Abhiyan (RMSA) has been launched by the GoI. The key issues are to reduce the dropout rate and secondly to improve the quality of education along with creation of adequate infrastructure to accommodate the increasing number of students and provide adequate training through refresher courses to teachers for their capacity building.

In the fields of higher education there has been significant increase in the number of institution during the last decade but quality of education remains neglected. Universities have largely become the knowledge consumer centers while it would have been imperative for them to be a knowledge creator centres. Research part in these institutions is customary and limited to awarding degrees, without ensuring any addition to knowledge. This is a long term issue but beginning has to be made.

Similarly there has been mushrooming growth of institutions providing professional courses. However, the quality of education and practical training coupled with lack of adequate infrastructure and developing synergy with the changing requirement of industry and job market remain the areas of concern which needs to be dealt.

At the time of formation of Uttarakhand State, about a decade ago, education was projected to be one of the major development components of the State. It did become a major centre of activity resulting in a rapid increase in number of schools and higher education institutions which rose roughly from 64 to over 300 during the first decade of statehood. However, over 80 percent universities and private institutions have been concentrated in plains of the State while the state run degree colleges have been in the hill region of the State. Further, it is estimated that 77% of total students are enrolled in the institutions of plains.

Although the growth in terms of number of institutions seems encouraging, the quality of education imparted by them remains an area of

concern. Qualified faculty, well equipped libraries & labs and IET led learning atmosphere are essentials for improving quality. Universities in particulars should act as **'knowledge generator'** rather than a more **'knowledge consumer'** Plurality in faculty and taught needs to be encouraged as the word 'university' signifies. Similarly the institutions which impart technical education need strengthening for developing technological innovations in their curricula. Introduction of Industry-Academia relationship in such institutions is another area which could be helpful in improving employability of students coming out from them.

In Present Computer Education is an important ingredient for our school children. The State Government entered into an MoU with Intel during the 10th Five Year Plan to provide Master Trainers in the schools in order to implement our vision of computer education to all students. All Government Intermediate Colleges as well as Secondary Schools have been equipped with computers and other necessary peripherals and the programme is moving satisfactorily. For the Polytechnics and the ITIs in the State, our effort to introduce industrially relevant course curriculum as well as equip them with machines/equipments and other infrastructure to impart meaning to the training. The training syllabus is being revised after consultation with academic institutions and industry organizations. Linking of Industries with ITI's & Polytechnics and forging partnerships which will benefit all the Stakeholders strategy adopted by the State.

In the field of higher education our endeavour is to develop and build on the existing and inherent strengths of the institutions to develop at least one college in each district as a centre of excellence and generally upgrade the standards in each college. This may include validation and upgradation of courses with the assistance of existing centres of excellence in India and abroad. IT enabled course material and e-libraries development which help overcome the shortage of teachers particularly in remote areas. The HNB Garhwal University has been given the status of Central University hence to run the colleges affiliated with new University has been set up which would be strengthened during the Twelfth Five Year Plan.

There are two fields where Uttarakhand can make a jumpstart and become a leader. These are biotechnology, information technology and IT enabled services. In the field of biotechnology Uttarakhand is fortunate to have extremely rich storehouse of bio-diversity and a wide range of geo-climatic zones. We propose to build the existing and inherent strengths of Uttarakhand to leverage on technologies to bring succour to our farmers and be a leader in the sphere of the research. Towards this end, a world-class research centre is set up at the GB Pant University of Agriculture & Technology.

Medical and Health

Despite substantial progress made on many fronts there are still areas of concern. Maternal Mortality and Infant Mortality rates are still unacceptably high in several areas. IMR during the 11th Five Year Plan has remained static at 41 with some undulation in between. Non communicable diseases like cancer, cardio-vascular disease, diabetes and mental illness are affecting sizeable number of population in the State. The state still lacks adequate number of all categories of health professionals, whether of doctors, specialist doctors, nurses and other paramedics.

Mission- The State is fully committed to strengthen the health status and quality of life of its people. It aims to address inequalities among regions, income groups, social and gender groups. The State launched its first Medical & Health Policy in 2002 and with now is under the revision. Commitment to its people for ensured high quality health services by strengthening health infrastructure, promoting partnerships and alliances with private sector and civil societies, increasing public health investments and reducing gender discrimination. Our policy encompasses to -

- Ensure effective, equitable and rational use of manpower, financial, infrastructural, material and other sectoral resources ;
- Design tailored health strategies for the plains and hilly regions, given that the two regions experience different needs, constraints and availability of resources;
- Promote health equity by improving client satisfaction and reaching under served groups and regions;
- Foster partnerships with the private sector, NGOs, civil society and AYUSH systems of medicine to take full advantage of all resources;
- Operationalize convergence across departments such as education, water and sanitation and women and child development;
- To Strengthen decentralization mechanism by ensure local responsibility, capacity, building, empowering function and implement health services that are responsive to local health needs and conditions; and
- Align policies and programmes with Central initiative such as the National Rural Health Mission (NRHM), blindness central and programmes for Human Immunodeficiency Virus (HIV), tuberculosis and other disease.

Uttarakhand has achieved many of set health goals and committed to sustain there results. Further goals for nine major health issues Viz Tuberculosis, Malaria and Vector borne diseases, HIV & AIDS, Reproductive Tract Infection (RTI), Sexually Transmitted Infections (STIs), non communicable diseases and chronic conditions including blindness, leprosy and polio. Increased use of iodized salt, provision of safe drinking water and sanitation in all villages and urban areas will be emphasized.

Maternal, Infant and Child Health

The goal is to provide ante natal care (ANC), post natal care (PNC) and facilities for safe deliveries. All children will be immunized against childhood diseases. Census 2011 has reported fall in child sex ratio. Hence emphasis will be given to ensure stricter enforcement of Post Natal Diagnostic Act to increase it.

Population Stabilization

The State aims to achieve the replacement level of fertility by 2020. To ensure this efforts will be broadened to reach out to the eligible couples with modern contraceptives and to reduce infant and maternal deaths, reduce crude birth rate, reduce IMR and MMR and increase overall life expectancy.

Health Systems

To ensure delivery of quality service, strengthening of financial management and monitoring systems, procurement and logistics, reduction in human resource gaps and strengthening of training institutions including medical colleges will be taken up.

Key Milestones

Health

i) Complete eradication of polio by 2015.
ii) Maintaining cure rate for tuberculosis above 85 percent.
iii) To achieve zero level of growth in HIV infection and expand treatment and care.
iv) Reduce incidence of blindness to 2.5 per thousand by 2020 from present level of 5/1000.
v) To control statewide leprosy prevalence below 5.14/per lakh population.
vi) Increase use of iodised salt from the current level of 45.9 percent to above 85 percent by 2020.

Infant and Maternal Health

i) Reduce Infant Mortality rate to 29.5 by 2020 from present level of 38.
ii) To reduce MMR to 109 by 2015 to achieve MD Goals.

Population Stablization

i) To bring down replacement level of fertility to 2.1 children per women by 2020.

ii) To increase modern contraceptive prevalence's to at least 68% by 2020.

Access to health care in the rural parts of mountain districts continues to be poor. Given the constraints of terrain and topography and the small and scattered nature of rural settlements, increasing access poses a major challenge. While private sector investment on health facilities has been on the rise, it has its limitations. It tends to be concentrated in curative facilities, often quite expensive ones, mainly in the urban areas. The poor are unable to afford the high cost of private medical care. This makes a strong case for increasing public expenditure on health. Innovative solutions to the problem would also have to be sought. Partnerships with communities and NGOs as well as committed private enterprises could be fruitfully tried, but public expenditure would have to continue to play a leading role. The challenge before the State policy therefore is to develop institutions that can offer cost effective solutions to problems of access and availability of health facilities for the rural mountainous regions.

Improving service delivery in the Social Sector is one of our priority areas. Non availability of doctors especially in hill districts is a challenge before the state, for which alternative means need to be devised which will help the state in manning the rural health centres like PHCs/CHCs. On its part the state has successfully launched emergency mobile van 108 service on PPP mode in all the districts of the State.

Ayush Gram Yojana

As stated earlier, Uttarakhand is a repository of biotic wealth. It is a popular belief from the Epic period of Ramayna that Hanuman collected Sanjeewani But prescribed by the renowned Vaidya (Doctor) Sushain from this Himalayan region to revive Laxman from the deadly unconsciousness.

This rich system lost its significance during the invasion by outside rulers in the medieval period of history. However, in the modern context it is strongly felt that the Indian Medical System of health needs to revived and strengthened as it not only prescribed curatives but also preventives.

Realizing this the State Government has initiated AYUSH Scheme consisting of traditional systems of Ayurveda, Yoga, Unani, Siddha and Homeopathy which will promote research, development and propagation of these systems. It is interesting to note that Indian system of medicine is gradually getting acceptance among people. It is proposed as a first step, to establish such centres on Yatra routes. This will not only be helpful in providing health services but will also generate local employment. As Uttrakhand has rich tradition of Yoga Sadhna and Ashrams, their participation will also be sought apart from other private stakeholders.

Agriculture

Agriculture is a traditional primary source of work although its contribution to State income is low due to poor rainfall in non-monsoon reason and excessive rainfall during the monsoon. For sustainable and more inclusive growth of State's economy we need better performance in agriculture. Agriculture in hills has remained an area of concern. RKVY has enabled convergence and innovation but scattered smaller un-economic holdings and lack of irrigation, farmers are getting disinterested and abandoning agricultural land. Accelerated Irrigation Benefit Programme-a flagship programme launched by Government of India is unable to achieve its objective due to peculiar topography of the State. Thus growth in agriculture has remained unstable over the years in the State. Hence reorganization of farm activity along with consolidation of holdings and reclamation of abandoned land holdings through promotion of cooperative and corporate farming will be emphasized in the 12th Five Year Plan. Land and Water are the critical constraints; therefore, focus will be on the use of modern technology through R & D innovations. Access of farmers to better performing markets relating to both input and outputs would be developed.

The estimated total reported area under plains is about 10% of the State while about 40% of net shown area belongs to the plains region. Similarly out of total net irrigated area in the State about 80% falls under this region.

While percentage of irrigated area to net sown area is 90 percent in plains, only about 10 percent is reported in hill region. This clearly indicates the unfavourable situation of hill agriculture as shown in the following table :

Table 4.1 Districtwise Area sown and percentage of Irrigation

S. No.	Districts	Area Sown (Ha)		% of Irrigation	
		Gross	Net	Gross	Net
1	Uttarakashi	47491	30819	19.50	16.10
2	Chamoli	45440	32560	7.80	5.60
3	Tehri Garhwal	90946	59120	16.40	13.00
4	Dehradun	73679	48508	45.10	46.40
5	Pauri Garhwal	124674	81491	12.40	9.90
6	Rudraprayag	27999	19516	15.40	11.10
7	Hardwar	168066	120581	87.00	89.00
8	Pithoragarh	79992	45902	9.60	9.10
9	Almora	124938	80951	7.80	6.20
10	Nainital	81733	47730	49.50	54.70
11	Udham Singh Nagar	260538	149861	95.70	97.20
12	Chamapwat	39295	23965	10.00	9.10
13	Bageshwar	47576	26567	23.90	21.90
	Total	**1212367**	**767571**	**45.3**	**44.7**

The strategy for the agriculture sector envisions expansion of HYVs as well as changing the cropping patterns. Krishi Vigyan Kendras (KVKs) have

been established in almost all the districts, with the expertise of Pantnagar University & VPKAS for assisting farmers for the rapid growth of agriculture. In addition, efforts are being made to gradually replace the subsistence level crops with high return alternate crops. In order to encourage the implementation of consolidation of holding the State Government is committed to facilitate, encourage and implement voluntary exchange of land.

Sugar cane being the most important cash crop in the State, especially in the plain areas, there is a need to rationalize the pattern of cane management and increase its productivity. Steps will be taken to import/procure early maturing and high yielding varieties and simultaneously increase the crushing capacity of sugarcane. Modernization of State managed Sugar Factories is also on the anvil. Focus shall also be on raising average sugar recovery to 10 percent from 9.45 percent at present.

Fisheries

Uttarakhand has a large wealth of warm and cold water fish which are not only a food supplement for the people and an income generating activity but can also be developed into a potentially very attractive tourism activity. The mahseer and trout fishing spots in Uttarakhand can attract visitors from all over the country and abroad. Through an integrated and multi faceted policy, our endeavour would be to popularise and expand this activity for the farmers as well as stock the rivers with the game fishing varieties. Strict control over undesirable practices such as dynamiting the fish would be exercised.

Forests

As per Forest Survey of 2009, recorded forest area in Uttarakhand is 64.8% with vegetation cover 45.8 percent, this indicating an increase of 1141 sq. km. or 4.9% over the year 2001 More important, about 5568 sq. km. of forest area has been classified as open forest area [1]. Maintenance of this forest cover is important not only for Uttarakhand but for the whole country. Based on scientific calculations Uttarakhand forests are giving free direct and indirect Ecosystem Services (ESS) over worth of ₹ 31294 crore annually to the nation [2]. Obviously in order to maintain about 65 percent of its total geographical area the state has to invest significant amount of its annual budget on the one hand and has to suffer from loss in forest revenue and many other disabilities forced by the Forest Conservation Act. However, vision is not only to maintain and increase this forest cover to the higher levels but also to develop a harmonious and eco-friendly relationship between the people and forests.

---

1. India State of Forest Report-2009/ Uttrakhand Forest Statistics 2009-10.

2. Valuation of Forest Ecosystem Services in Uttarakhand- Madhu verma Professor IIFM, Bhopal (Paper Presented in XIII World Forestry Congress, Buneous Aires, Argentina. October, 2009.

The strategies that the State Government has followed, have actively involved the village communities in protection and management of the forest wealth. Thus, besides the institutions of Van Panchayats (12089), the newly created institution of Joint Forest Management has provided the institutional framework for this interaction. In view of the prominent role of women in agriculture and forestry, an interesting and encouraging experiment has been creation of Women Van Panchayats /Joint Forest Management Committees which consist entirely of women.

The Protected Areas (PA's) Network in the form of National Parks, Wildlife Sactuane and conservation reserves constitutes about 21% of the forest area and a similar protective role is played by the Eco-development Committees in and around the protected areas.

Horticulture

The yield from crops like rice and wheat is not very high in the hilly areas of the state. This is largely due to the mountainous terrain that inhibits the use of modern technology in agriculture. As a result, and given the predominance of marginal and sub-marginal land-holdings, most of the cultivators tend to be subsistence farmers. Many cannot even meet their full years requirement of food grains.

It is important to encourage the farmers in the hilly regions to shift from the cultivation of cereals to horticultural products as this sector has the potential to become an engine of growth. Firstly, the varied climate of the region makes it an ideal location for growing temperate, sub-tropical and tropical fruits that fetch a high value in the domestic urban and international markets. Secondly, the climate also allows the region to grow off-season an exotic vegetable that get a high price in the plains. Finally, and perhaps most importantly, with rising incomes the consumption pattern of the average Indian is shifting towards fruits and vegetables and hence the demand for these products is likely to increase over time. Unfortunately, despite these advantages, horticulture is not providing the farmers with higher incomes, due to the absence of necessary infrastructure, institutions and incentives.

The development of horticulture depends crucially on three types of factors:

(i) Natural conditions
(ii) Infrastructure and institutions
(iii) Incentives for horticultural producers

The natural factors include climate, soil, slope and aspect of the land and the impact of natural calamities. The development of horticulture also depends on various kinds of infrastructure and institutions e.g., irrigation, roads and transport, warehouses, cold storages, financial institutions (for credit and crop insurance on reasonable terms) and last but not the least, marketing institutions. The incentives that the state can give to the small

farmers to shift to horticultural production can also encourage the development of this sector. The most important justification for providing such incentives is that the small and marginal farmers who are dependant on subsistence agriculture have no savings and are not considered creditworthy. This makes it very difficult for them to switch over to horticulture due to the higher input costs involved. Thus the state needs to provide these farmers with subsidized inputs like seeds, fertilizers, insecticides etc. The second reason for providing incentives is to take care of the uncertainties due to market failure and natural calamities. The most common form of market failure is the lack of competition among the purchasers of these products leading to a low price and profit for the farmer. The state should provide minimum support prices in order to make sure that the poor farmers get a remunerative price. Finally the farmers need to be protected from natural calamities with crop insurance. In case the premium is too high for the small farmers, then the state has to subsidize it to make it affordable. The State Government has launched an Apple Insurance scheme, based on weather stations which will encourage farmers to invest in this activity.

There is a lot of potential for the development of horticulture in the state of Uttarakhand. The varied climate conditions make it ideal for the development of diversified horticultural products including fruits and vegetables. However, there are number of constraints and bottlenecks that are currently proving to be a dampener for the development of these crops, particularly in the hilly regions of the state. These are:

- Lack of an effective marketing and storage infrastructure that can enable them to grow fruits and vegetables and sell them at a profitable price.
- Lack of irrigational infrastructure.
- Low returns from horticulture
- Lack of adequate knowledge about the most suitable and remunerative crops and about the scientific practices that can ensure the success and high yields of these crops on the part of small and marginal farmers
- The high acquiring cost of Plant material and high yielding seeds, fertilizers, insecticides, pesticides etc., partly due to their high prices and partly due to their outlets being far off from the villages and farms.
- Vagaries of nature e.g. unseasonal or heavy rains, hailstorms, drought etc.

It is clear that in order to develop the horticultural sector in the state, all the problems listed above have to be addressed with appropriate policies. It must also be clearly understood that the overall policy package must try to solve all the problems simultaneously, as any one set of problem, if not

addressed adequately, can significantly dampen the development of the sector.

The lack of marketing institutions and infrastructure has to be dealt with immediately by the government. The objective of this policy should be to provide the farmers with alternative options to sell their products, so that the portion of the profit going to the middlemen is minimized and the farmer gets a better price for his product. There are three types of institutions that the government needs to create or strengthen for this purpose.

1. A Horticultural Marketing Board that will help, particularly the small and marginal farmers, to grow horticulture crops and market them at remunerative prices.
2. Strengthen the farmer's cooperative associations and encourage them to corporatise, that they can employ professionals to help them market their products.
3. Allow and encourage contract farming between farmers and retailing firms, so that the role of the middlemen can be minimized.
4. Strengthening use of IT enabled services for optimal marketing of produce.

It must be understood that the first institution, i.e. the marketing board, should primarily target the poor and marginal farmers, the medium and large farmers can use the second and third type of institution more effectively. It may be useful at this stage to point out, that though the state has declared itself to be an "Organic State", it will be useful to the farmer only when the product can be marketed at a higher price with the help of organic certification.

The problems faced by farmers regarding inadequate information about best crops and best practices can be solved by a continuous process of scientific and market analysis with the use of IT that will determine the most remunerative crop or group of crops for a particular region i.e. water shed in the context of the hills. The institutions for the dissemination of knowledge about these crops and the scientific methods of horticulture have to be strengthened. There is the related issue of the timely supply of appropriate inputs particularly quality planting material to the farmers so that the best practices can be successfully followed.

The small and marginal farmers need both scientific and financial help for their fight against natural calamities. For calamities that are relatively moderate in impact, small and marginal farmers must be supplied with poly-houses, poly-tunnels, hail nets etc. However, for calamities that are severe, the only protection for farmers can be through crop insurance. The financial infrastructure must be strengthened and encouraged to provide insurance cover for various kinds of horticultural crops.

Given the enormous potential and possibilities in horticulture and floriculture, the following initiatives have been taken:

- KVKs have been set up covering all the districts.
- Progressive change in the rootstocks of fruit and flower plants by bringing in modern and proven cultivars; and emphasis on high yielding, hybrid varieties of off season vegetables.
- A separate University for agro-horticulture management has been set up in Garhwal district; and major emphasis on processing and value addition in the agro-horticulture sector proposed.
- A litchi export-processing zone has been set up in the Ramnagar area.
- A state of the art fruit processing plant, managed by NDDB, set up at Ramgarh.
- A Floriculture Park to be set up with the help of APEDA.
- Regional office of NHB has been established in Dehradun for closer coordination.

Medicinal and aromatic plants are a major thrust area and income generating activity for the local farmers. The State Medicinal and Aromatic Plant Board has been constituted which provide policy guidance. The Herbal and Medicinal Plants Research and Development Institute at Gopeshwar is the apex implementing agency for the preparation of an integrated action plan for conservation, propagation/ cultivation, processing and marketing of herbs, medicinal and aromatic plants. Close linkages will also be developed, in this process, with the tourism sector.

Watershed Development Water, agriculture, forestry and energy, among other issues are central to the State's inclusive strategy for sustainable growth. The people not only in the State but of the whole Indo-Gangetic plain are dependent on the environment conditions prevailing in Uttarakhand. With over a dozen important rivers and glaciers, the State holds a valuable fresh water reserve for the most of the northern India flowing through sub-watersheds. The sub watersheds have been further divided into 1110 micro watersheds (MWS). Out of these, 124 MWS have been identified above 3200 mts. altitude comprising a total area of 14,25,750 ha. with little to no human habitations and mostly are under forest reserves. 537 MWS below 3200 mts. elevation were identified during the 11th FYP as yet to be treated. These MWS are prone to landslides and are under constant threat of mass wasting and soil erosion. To reverse the deterioration of natural resources and support livelihood activities to the inhabitants. A number of watershed management projects are in operation in the State under different schemes under the coordination and supervision of Watershed Management Directorate (WMD), which has been designated as the nodal agency for this purpose with the following vision :-

'To improve the productive potential of natural resources and increase income of rural inhabitants in degraded watersheds of the State

through socially inclusive, institutionally and environmentally sustainable approaches'.

Approach

The guidelines issued by the Department of Land Resources. Government of India will largely act as guiding force in implementation of Integrated Watershed Management Programme (IWMP) in the State. Under this a 20 year perspective plan for the State has been formulated with the following approach:-

Inclusiveness

The poor, small and marginalized farmers, landless households, women headed households and under privileged section like Scheduled Castes and Scheduled Tribes will be mobilized to form Self Help Groups (SHGs) and it shall be ensured that these groups are dependent on the watershed areas for livelihood.

Decentralization

Within the framework of Panchayati Raj Institutions, Water and Watershed Management Committees (WWMC) shall be constituted along with the SHGs, user groups and individual beneficiaries. The WWMC thus formed would be given financial autonomy in implementing the sub projects in their respective areas. These empowered Committees would plan, implement and monitor the Plan at the Gram Panchayat level.

Social Mobilization

The project functionaries will act mainly as facilitators and not as a controllers or regulators. For this purpose professional team including voluntary organization would be selected for social mobilization, community organization and as Project Implementation Agency (PIA) for some projects. Capacity building shall be done for Planning and implementation of the project.

Community Participation

All the stakeholders would be involved in Planning, budgeting, implementing and monitoring of the projects. To inculcate sense of ownership amongst the stakeholder's community contribution in the form of water development fund/user group fund would be generated to ensure the sustainability after the completion of the project.

Tourism Development

The concept of new tourism includes ideas and practices related to responsible, green alternative and sustainable tourism. Tourism revenue can be pushed up by identifying, developing and promoting niche areas in the form of eco-tourism, cultural tourism, business tourism, adventure tourism, health tourism, leisure tourism and so on.

Road, rail and air transport is a key determinant for tourism. However, networking of these services with competitive costs and quality services is a major challenge.

The private sector, local communities and the government have roles in building linkages, creating partnerships and encouraging local participation. The role of the Government is to create a more supportive policy and planning framework enabling participation by the poor. A synergy among the government, private sector and tourism activity poor decision making is an important aspect that has to be kept in mind. The private sector can create pro-poor partnership regarding local needs. Poor people can participate by forming producer associations. There can be other ways to enhance linkages so that tourism makes an increased contribution to poverty reduction. Thus the critical factor is to ensure that the increased benefits are going to the people and make them feel it as their program.

Management crisis and risks is another important aspect for smooth development of tourism. Although the State is peaceful in terms of law and order, however it is vulnerable to natural disasters and road accidents, especially in the hills. Such crises are sudden and often unpredictable. Hence awareness and preparedness in dealing with such situations with quick response is a pre-requisite.

The rapid growth in tourism has a direct impact on employment and human resource development in terms of demand for professionals and smaller entrepreneurs.

However, the policy package in view of the principle of inclusive growth must insure that the forward and backward linkages from this sector ensure growth in the local economy.

The administrative infrastructure has been largely put in place and Uttarakhand Tourism Development Board (UTDB) has been instituted as an apex body to promote, advise, regulate and issuing license for tourism development in the State. Further tourism has been assigned the status of industry for taking benefits available to industry.

The main thrust during the Twelfth Five Year Plan will continue on development of pilgrimage tourism, nature and eco tourism, adventure tourism, leisure tourism, corporate tourism and promotion of tourism related handicraft and souvenir industry. Development of tourism related infrastructure in view of global tourism demand will have to be taken care of during the 12th FYP.

Tourism is an industry that has vast opportunities for inclusive growth. It can give a Philip to the demand for traditional handicraft industry, and create other ancillary jobs for the local people as well.

The State has already constituted a State Tourism Conservation and Preservation Committee which is responsible for preparing sustainable tourism development plan and guidelines to regulate development activities in the STZ.

The existing tourism accommodation in the State, as also pointed out by the WTO is grossly inadequate both quantatively and qualitatively which stands as a bottleneck in promoting 'Brand Uttarakhand". Further attempts will be made to define a specific policy framework for all the tourism accommodation in the State. Focus would also be on smaller resorts and home stay accommodation specially in the interiors.

Land is a critical component as 64 percent of the land is under forest in the state. It needs to spell out a clear cut investor friendly policy for making land available at competitive rates for tourism project with a 'Green' Mandate.

Industry

With a vision to establish Uttarakhand an attractive destination for environment friendly industries, Industrial Policy was made for the state which envisaged that the state shall leverage the strength given by nature to promote food and fruit processing, medicinal & herbal plants a Horticulture, floriculture based industries in the hills and capital intensive and high value addition industries would be encouraged in the plains districts/region of the State.

With the intensive efforts of the State coupled with support from Special Industrial Package (SIP) the state witnessed a sharp rise in industrial growth. As observed in the MTA of the 11th FYP the state industry recorded 15.9 percent growth during the 10th FYP and despite global recession maintained 14.1 percent growth rate in 2008-09.

However, this growth has been skewed and mostly concentrated in the plains. Keeping it in view, the state launched a separate Industrial Development Policy for Hill in 2008. But the withdrawal of SIP has given a jolt to the efforts made by the State. Hence to attract investment in industry strong infrastructure i.e. roads, air/rail services, assured power supply, proper implementation of single window mechanism, strong banking support and fiscal incentives to industrial units in hills needs to be ensured.

Entrepreneurship development and skill development mechanism need to be reviewed and strengthened during the 12th Plan.

IT was presumed to be a GDP driver but the growth in terms of IT based units and investment is far from expectations for which vigorous efforts will be required during the 12th FYP.

Udyog Mitra has been set up in the State under the Chairmanship of the Chief Minister for providing a forum for continuous interaction with the industry associations and to enable timely policy interventions and other measures as may be necessary.

Industrial growth which has been witnessed during the first decade of the State has been mostly concentrated in the plains for obvious reasons of accessibility and connectivity.

Given the constraints arising from geographic and terrain conditions, the need to provide suitable fiscal incentives. This related to income tax, central excise, transport subsidy etc. to offset the comparative disadvantages of high cost of production have been recognized in the Industrial Policy of the State. In the aftermath of withdrawal of CIP this policy is likely to be revised.

In continuation to the above Industrial Policy, the State has also launched Hill Industrial Development Policy 2008 which provide infrastructure facilities and single window facilities to the potential entrepreneurs.

Information Technology

In view of its salubrious climate and potential, specially the manpower, it has been rightly observed in the WB report on Uttarakhand. Uttarakhand has the potential to be the next tier of software hubs as costs escalate in the National Capital Region (NCR). In its survey the ASSOCHAM has also indicated to overcrowding and strangulated civic amenities in the known IT towns. ICT companies are also looking for alternative sites for their operation and expansion. Hence the vision of the State is to create conducive atmosphere for the investors and deploy IT as an effective tool for catalyzing economic growth and efficient governance; resulting in the creation of a knowledge-rich society with a high quality of life and to develop the State as an attractive destination for the IT industry. The key focus areas are:

(a) Development of IT infrastructure (connectivity backbone).

(b) Investing in HRD (Human Resource Development) in terms of IT skills.

(c) Deploying E-governance applications which are citizen focused and which aim at delivering Govt. services to the citizens at a place & time of his choice rather than the other way round.

(d) Promoting IT industry particularly the IT enabled service industry in the State.

The Sectoral investment pattern under two previous plan is given in the following table 4.2.

Table 4.2 Major Sector wise allocation during 10th and 11th FYP in Uttarakhand (₹ in crore)

S. N.	Sector	10th Plan Exp.	%	11th FYP Allocation	As % of Total Plan Allocation
1	Agriculture & Allied Services	1334.14	11.78	2478.50	8.39
2	Rural Development & Panchayati Raj	901.53	7.96	2112.88	7.15
3	Irrigation & Flood Control	782.75	6.91	2590.07	8.76
4	Energy	1363.41	12.04	2195.42	7.43
5	Industry & Minerals	328.09	2.90	121.16	0.41
6	Transport	2021.34	17.85	4048.54	13.70
7	Science, Technology & IT	70.62	0.62	228.77	0.77
8	General Economic Services (including tourism)	278.07	2.45	543.84	1.84
Total A-Economic Services		**7079.95**	**62.51**	**14319.18**	**48.45**
9	Education (School/Higher/Tech./Art & Culture)	1303.68	11.51	3010.85	10.19
10	Medical & Health	633.10	5.59	1468.78	4.97
11	Water Supply & Sanitation	826.56	7.30	1909.15	6.46
12	Housing & Urban Dev. & ohers	308.88	2.73	2344.47	7.93
13	Social Security & Social Services	595.77	5.26	1394.32	4.72
14	Women & Child Development	137.53	1.21	444.74	1.50
15	Labour, Training & Employment	40.70	0.36	225.88	0.76
Total B. Social Services		**3846.22**	**33.96**	**10798.19**	**36.54**
Total C General Services		**400.10**	**3.53**	**522.33**	**1.77**
Extra Budgetary Resources		-	-	3914.74	13.24

(PSE & Local Bodies)				
Grand Total	11326.37	100.00	29554.44	100.00

Chapter- 5

Approach to the Twelfth Five Year Plan

The national economy has witnessed a rapid progress during the first decade of the Millennium Consequently focus of economic policy also shifted from high growth to faster and inclusive growth during the Eleventh Five Year Plan and initiatives were taken to achieve these goals. Viewing the challenges arisen out of this progress and the increasing aspirations of the people the National Planning Commission, after a series of wide consultations with civil society organizations, business associations, state governments, representative institutions and unions and knowledgeable people across the country has finalized the 12th Five Year Plan Approach Paper with a goal of 'Faster, Sustainable and More Inclusive Growth. It has singled out 14 focus areas for achieving the growth targets of the 12th Five Year Plan.

The State's Five Year Plan follows, in general, the national priorities however, a policy framework to generate inclusive growth for the state has to be consistent with its demography and geography. Thus the 12th Five Year Plan of Uttarakhand State would largely be in consonance with the national objectives, with its specific challenges and potentialities in mind. The objective is to provide direction for Faster, More Inclusive and Sustainable Green Growth'. 'Green' is the concept that visualizes our commitment towards the strengthening of ecology and environment which is inevitable for the survival of human race and thus needs to be an integral part of all developmental activities.

Structure of Economy

Uttarakhand is one of the fast growing States in India. The State's economy has exhibited a healthy growth during the previous decade. GSDP at constant prices (2004-05 series) has almost doubled from ₹ 24786

crore in 2004-05 to ₹ 47808 crore in 2009-10 and per capita GSDP grew from ₹ 27497 to ₹ 49074 during the same period. However, as per advance estimates, some slowing down is being witnessed in the last two years of the 11th Five Year Plan.

The structure of the economy has changed remarkably during the decade. Primary sector which includes agriculture, forestry and logging, fishing and mining and quarrying contributed 28.22 % in the GSDP in 2000-01. Which gradually declined to 15.68 % in 2009-10. Secondary sector includes manufacturing, construction and electricity, gas and water supply contributed about 21.82 % in 2000-01, steadily increased to 32.43 percent in 2009-10. The tertiary sector which includes transport, storage and communication; trade, hotels and restaurants; banking and insurances; real estate, ownership of dwellings and business services; public administration; and other services remained almost on the same trajectory and contributing around the half of the GSDP.

Contribution of these broad sectors in the inception year of the State (2000-01), base year of the Tenth Five Year Plan (2001-02), the end year of the Tenth FYP and first three years of the Eleventh Five Year Plan is exhibited in the following table 5.1.

Table 5.1 : Percentage contribution to GSDP by major sectors (At current prices)

Sectors	2000-01	2001-02	2006-07	2007-08	2008-09	2009-10
1- Primary	28.22	25.44	19.82	16.70	15.51	15.68
2- Secondary	21.82	23.45	32.46	34.89	34.35	32.43
3- Tertiary	49.96	51.11	47.72	48.41	50.14	51.89
Total	100	100	100	100	100	100

Source : DES Uttarakhand Report as on February, 2012

Growth of Economy

During its first decade of existence the State's economy has witnessed a robust growth path in macro terms. The State was given to achieve a target of 9.9 percent growth rate for the 11th Plan by the Planning Commission. The progress so far seems satisfactory and it is expected to achieve a double digited growth during the 11th Five Year Plan. The economy of the State maintained the pace of growth set during the 10th Five Year Plan. This obviously leads to expectations of continued high growth rates during the Twelfth Five Year Plan. However, for objective projection of the future growth rates it is imperative to carefully analyse the factors effecting the growth rates in the past years and expected future trends in the economy.

Among the high growth sectors in the State manufacturing electricity, gas & water supply; Transport; trade hotels and restaurant; banking and insurance; and public administration. Construction which exhibited faster growth in the initial years has tended to decline over the years. Growth in agriculture has remained unstable due to its dependence on weather situation. Smallness and scatteredness of agriculture holdings has tended to delineate the farmers especially in the hills from this traditional occupation. Thus reorganization of farm activity along with consolidation of landholdings and promoting corporate or cooperative farming to reap the benefits of economies of scale, need to be emphasized in the coming years to keep the of growth.

The State has been able to record a robust growth rate during the past decade largely because :-

1) It started from a low level of development.
2) Concessions and subsidies received under Central Industrial Package (CIP) and by virtue of getting a Special Category State (SCS) status; and
3) Initial spurt in construction sector.

However, over the passage of time the gradual slowdown in the above is obvious. Central Industrial Package has been already withdrawn; initial requirements of administrative housing and resettlement of population in Urban areas has taken place to a large extent. A large area under forest and stringent provisions of the Forest Conservations Act further restrict the scope of development. Thus capacity to sustain the existing growth will depend upon the relevance given to long term factors like governance which include efficient revenue collection and efficient use of resources, infrastructure support and compensate diminishing revenue from forests by arranging funding for sacrifices and disabilities arisen out of maintaining large forest area and thereby providing invaluable eco-system services to the nation. External factors like Euro crisis, dwindling rupee value in the international market, raising oil prices, effects of climate change etc. can put a catastrophy on our development efforts which need to be handled with utmost care and precaution by the centre and State as well.

Poverty Issues

Poverty is a relative issue and it is difficult to measure it in a manner which is acceptable to all. Although household expenditure levels remain the main measure of living standard by which incidence of poverty is measured, and the HCR (Head Count Ratio) has become the main indicator of poverty, it is advisable to look at other measures as well.

- The UN Human Development Index (HDI) captures the multidimensional nature of deprivation in living standards which

suggests that income should be regarded as a means to improve human welfare, not as an end in itself.

- Women are constrained by traditional social reproductive responsibilities in seeking employment of their choice and ability.
- Casual labour is highly insecure which results in fluctuating poor (those sometimes above, sometimes below the poverty line) may be becoming an increasing large category, never emerging sustainably from poverty. Thus poverty reduction depends on casual work rates and quantity of casual work available.
- In Uttarakhand where literacy is relatively higher people's preference for white collar/technical jobs and not for casual manual labour. This results in income poverty.
- The Planning Commission Poverty survey based on Tendulkar methodology put Uttarakhand among the low ranking States with 37.2% of state's population below the poverty line in 2004-05. Himachal has only 22.9% with All India average of 37.2%.

The latest estimates issued by the Planning Commission indicate comparatively good progress in the State as the number and percentage of population below poverty line has decreased to 18% which has been faster than the national average of 28.8%. These estimates are based on merely subsistence level per capita monthly income estimates.

- At the same time in case of HDI scores for States as per estimates of 2006 Uttarakhand (0:652) is rated well above the national average (0.605) and very close to HP (0.667) leaving behind 16 larger States.
- Similarly IMR which is considered to reflect persistent deprivation in the means of accessing healthcare is lower in Uttarakhand as compared to all India average and Himachal Pradesh as well.

Poverty is the most serious challenge for the development planning in the State. Although the rate of growth seems to be healthy in the State, the reduction in the rate of poverty has not been in tune with it.

Although the measurement of this complex phenomenon is not easy and requires continuous improvement, it is necessary to address issue of poverty with a sense of urgency with the aim of equitably providing opportunity to all citizens to lead a fairly decent life.

In the Liberalization, Privatization and Globalization (LPG) era traditional artisans mainly belonging to SC and STs are left behind in the race of fast changing society and technologies and have lost their traditional jobs and have fallen in to poverty trap.

It is also important to note that growth alone is not sufficient to prevent people from falling back into the poverty trap. Assessing whether economic growth has translated into a high degree of poverty reduction requires more careful investigation of the factors that act variously as incentives and obstacles, whose nature is likely to change in relation to the local political economy.

There appears need to reorientation of established policies and programs through grass root social action to priorities following dimensions.

1- Diversification and the development of physical and social infrastructure to raise agricultural productivity.

2- Public investment in less developed and remote areas where poverty is concentrated.

3- Fiscal reforms and a reduction in inessential expenditure.

4- Active participation of the people in decision making to improve governance and decision making process; and

5- Active participation of the people in programme and policy implementation process.

Last two points need greater devolution of powers to elected Panchayats and more space for NGOs and organization of marginalized groups.

Inequalities in the Uttarakhand Economy

As with the rest of India, there are various forms of social inequalities in Uttarakhand that manifest themselves in the form of unequal opportunities and quality of life for certain social groups. These groups include the schedule castes, schedule tribes, and women. The schedule castes in Uttarakhand, like elsewhere in the country, have suffered due to a deep-seated process of discrimination and exploitation over a long period of time. These problems are compounded by the fact that the hill society of Uttarakhand has traditionally been an upper caste dominated society, in which the dalits were relegated to an extremely low social position. To a large extent, similar problems afflict the tribal population as well (though they constitute only 3 per cent of the population as compared to 18 per cent in the case of the scheduled castes) with the added complication that their social isolation is combined with physical isolation as well. The main tribal groups of Uttarakhand are the Bhotiyas, Tharus, Boxas, Jaunsaris and each of these groups have distinct characteristics and needs. In addition, there is also a very small forest-dwelling tribal group known as Rajis (or Ban Rawats) numbering a few thousand are habited in border of Nepal in Pithoragarh district. Thus, beside geographical marginalisation they also economically and socially marginalized.

More than these social inequalities however, it is the geographical inequality between the hills and the plains of Uttarakhand that divides the state most critically. This geographical inequality manifests itself in the form of inter-district inequality. Four of the thirteen districts, namely, Nainital, Haridwar, Dehradun and Udham Singh Nagar, are in the plains or have large parts in the plains. Compared to the other nine districts, these districts are ahead in terms of various indicators of development.

Enhancing Capacity for Growth

After a decade of relatively good performance the cumulative effects of challenges faced by Uttarakhand in its second decade could result in deterioration in performance. The growth in the initial years was supported by large financial flows from the Plan and the incentives which helped the state to offer generous incentives to firms and farms for investment and production, and it has resulted in high growth.

With the end of incentive regime it is apprehended that Uttarakhand may face a growth crunch. Together with low growth, low revenue buoyancy, and the possible winding down of favourable financing schemes from the Centre, it also faces a revenue crunch. Inclusive growth, including the bridging of spatial inequality, is a massive challenge, requiring new growth strategies as well as generous financing.

This is true too, urgently needed improvements in the delivery of public services. An overarching problem is better governance which could reinforce the popular goodwill that followed the establishment of Uttarakhand State.

There is also a need for reappraisal of the natural endowments of the State and more realistic potential for their sustainable exploitation, while at the same time leveraging environmental preservation as a source of national and international revenue.

Specifically the 12th Plan investment climate actions for identifying the economic potential for remunerative hill eccentric activities, assess government approaches for providing economic and social infrastructure, draw attention to the cumulative effects of current and proposed plans for energy development specially hydropower and infrastructure development and suggest improvements in the financing of the next five years of development, especially public finance and its management.

Approach Towards Inclusive Development

The 12th Five Year Plan will attempt to move on over the succeeding years with the realization that poverty and unemployment are the most serious challenges for the development planning in the State.

The salient points to be adopted in major sectors as the approach in the 12th Five Year Plan are proposed as follows :-

Infrastructure

Viewing its importance Infrastructure was given the highest priority in Uttarakhand during the Eleventh Plan period, as the future growth in this state depends critically on the rapid development of this sector. As also highlighted in the draft Report of the World Bank on Uttarakhand Economic Assessment, there is no doubt that our manufacturing competitiveness is adversely affected by weakness in infrastructure especially in energy and transportation. As the emphasis is on inclusive growth - this is even more important, since there is a direct link between the availability of infrastructure facilities in the far flung hilly regions of the state and the standards of living of the masses living there. Clearly, policies for inclusive growth will have to continue to correct the current imbalances in the distribution of infrastructure in the state.

The policies for development of physical infrastructure will continue to focus on roads and transport networks, electricity, irrigation, marketing infrastructure for agricultural product and financial institutions. Equally important, is the development of social infrastructure with special thrust on health and education, as this will generate the human capital that is a critical input for the overall development process.

Agriculture & Allied Sectors

Agriculture growth is increasingly being recognized as the single most important factor not only for macro-economic growth but also for poverty reduction and inclusiveness. But the growth rate remained fluctuating with overall downing trend after the 1980s.

In view of the post reform development, the Euro crisis, oil and particularly the challenges posed by the climate change it seems pertinent to restructure the agriculture sector. The small and fragmented nature of agriculture holdings is a great impediment. Change in land tenure system does not seem to be practicable but structural changes in farming in the form of group farming is warranted to make small and fragmented farms commercially viable. Otherwise abandoning of farming will continue in a state like ours where people prefer employment outside the agriculture sector to earn a dole. Fluctuation in agriculture production and subsequently in prices can disturb the economy, social safety and polity as has been evident from time to time in the recent years.

Better performance in agriculture and its allied activities is necessary from the point of view of providing food security to all and to control the volatile price situation.

Thus the focus of the Twelfth Plan will be on :-

- Sustaining the momentum of progress of economy achieved during the previous Five Year Plans and to remove the obstacles experienced.
- Emphasis on infrastructure development(rainwater harvesting, poly house culture, assured supply of seeds and scions and development of marketing institutions).
- To create conducive environment for encouraging private sector investment in horticulture and its related activities like Tea, floriculture, medicinal & aromatic plant cultivation etc.
- Improve agriculture performance through transfer of technology.
- To improve effectiveness of programmes directly aimed at the poor.
- Special programmes for socially vulnerable groups.
- Special programmes for disadvantaged/remote backward regions.
- Diversification of hill agriculture in favour of horticulture including tea, Herbiculture, Horticulture etc.
- Target at least 3-4 percent growth in agriculture sector of which for cereals about 2% and rest from horticulture, animal husbandry, dairying, cane development etc.
- Sugar industry is important but he sugarcane production in the new State is growing critical. Hence increasing sugarcane production will need special attention.
- Land and Water are the critical constraints. Focus will be on optimal use of land and water resources and use of technology to increase productivity.
- Improvement of markets for both-inputs & outputs.

Water & Irrigation

Following area will need consideration in the 12th Five Year Plan :-

- Despite considerable investment on irrigation, there seems no improvement in net irrigated land.
- AIBP is not achieving the desired objectives. It needs to be restructured to incentivise irrigation reforms.
- Efforts for mapping of all water resources and their strengthening.
- Develop inter sector linkages for optimal use of water resources.

Industry

- Manufacturing sector growth has slowed down after the withdrawal of CIP. It needs to be checked during the 12th FYP.
- Improvement of business regulator framework needs to be stressed. Transparency, incentives for R & D and innovation will be promoted.
- Land and infrastructure are major constraints. Hence based on past experience emphasis will be laid on developing new industrial areas/zones supported by connectivity and necessary infrastructure.
- Efforts for necessary infrastructure legislative framework to the single window system will be made for fast tracking of new projects.
- The vision of the State is to promote and expedite development of IT industry with private sector participation.
- State's Industrial Policy envisages assistance in establishing SME units for agro parks and food parks. Incentives by MOFPI, GoI will be synergic with state efforts.

Power

- Energy saved is energy produced - energy conservation by minimizing AT and T & D losses will be incentivized.
- Increased role of private sector in power generation.
- To counter seasonality factor in hydro power generation gas/coal based power plants will be set up.
- Efficient use of energy will be incentivised.
- Last but not the least, timely completion of ongoing hydro-power projects will be ensured.
- Promotion of Renewable Energy resources.

Tourism

In the 12th Five Year Plan the State will focus on the development of special tourism zones in the State for which financial support is also being sought from the Asian Development Bank.

The development of these special tourism zones (STZ) integrated tourism development plan is needed which would spell out the following :-

- Policy in relation to land use plan and allocation of land for tourism purpose.
- Policy in relation to the construction area, environment including architectural control and form.

- Strategies towards conserving and strengthening the prevailing natural systems and enhancing the visual qualities of the region.
- Regulations, if required, for the implementation of the tourism development plan.
- Tourism is a fast growing sector in the State which need to continue as thrust sector.
- Apart from traditional tourism, high end tourism in its various forms like adventure tourism, wild life tourism, eco tourism, leisure tourism ect. will be focused on.
- Tourism has overarching linkages with almost all other sectors. Thus coordination with sectors specially urban development and infrastructure related sectors will be ensured.
- Crisis and risk management – developing a quick response to meet any eventuality is a pre requisite particularly in respect of hill tourism.

Education & Skill Development

The importance of education in human development is well established. Education provides access to technology which leads to poverty reduction. Thus there is a positive correlation among education and technological development and economic growth which inter influence each other.

At the time of formation of Uttarakhand State, about a decade ago, education was projected to be one of the major development components of the State.

Although the growth in terms of number of institutions seems encouraging the quality of education imparted by them remains an area of concern. Qualified faculty well equipped research, library and IET led learning atmosphere are essentials for improving quality. Universities in particulars should act as **'knowledge generator'** rather than a more **'knowledge consumer'** Plurality in faculty and taught needs to be encouraged as the word 'university' signifies. Similarly the institutions which impart technical education need strengthening for developing technological innovations in their curricula. Introduction of Industry-Academia relationship in such institutions is another area which could be helpful in improving employability of students coming out from them.

- Aiming at universalization of secondary education by the end of the 12th FYP along with sustaining the success achieved in NER in primary level.

- Focus on improvement of quality of education from primary to higher level of education.
- Reduction in social, regional and gender gap in education.
- Promotion of operationalization of PPP model in school and higher education in accordance with the needs of fast growing economy.
- To encourage research and innovation in higher education with cross linkages between institutions and industry.

Medical & Health

So far our plan efforts have been centralized on curative approach. Most of the health schemes are focused on strengthening of curative methods. It is well known that if a person is healthy he is outside the preview of these programs. Hence health practices needs to be emphasized in our plan efforts. This will be relatively less costly. Further a healthy society is a basic pre-requisite of a healthy economy.

- Ensuring health facilities to all.
- Expansion of health insurance coverage.
- Reduction in IMR, MMR, death rate etc. significantly.
- Emphasis will be on prevention of malnutrition and other causes of diseases by ensuring clean drinking water, improved sanitation, better nutrition habits, childcare etc.
- Encouragement to role of PPP in providing secondary and tertiary health services.
- Creation of institutional capabilities for supply of human resources i.e. doctors, nursing and other paramedic staff with in the State.

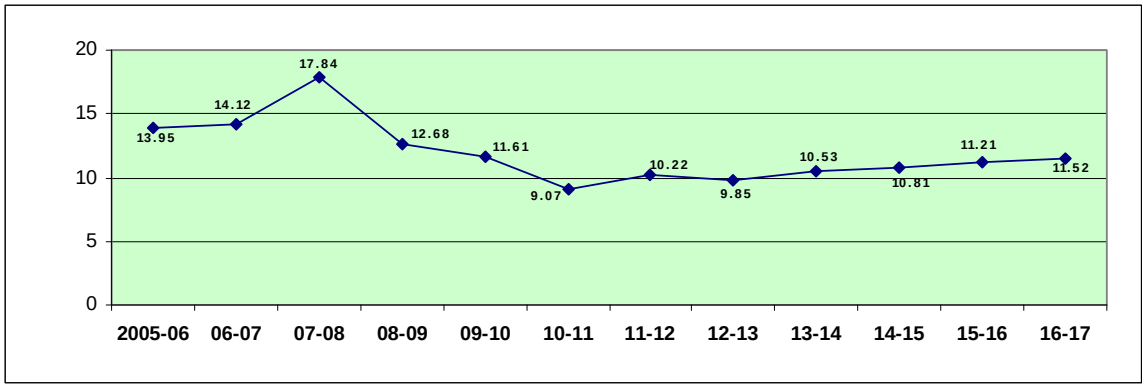
Growth Projections for the Twelfth Five Year Plan

The Uttarakhand economy has been growing at significantly higher rates in the last few years, following its inception as an independent state in 2000-01. This has led to expectations of continued high growth rates during the **Twelfth** Plan period as well. However, any objective projection of the future growth rates has to be based on a careful analysis of the long-term trends in the economy.

The 11th Plan theme of inclusive growth needs to be consolidated further. So far it has been fairly successful from its individualistic point of view but little has been done in mitigating regional disparities at least in our case. Based on the past trends, the prospects of the problems and constraints realizable of projection for growth in major sectors given in the following Sections.

Based on estimates of GSDP (at 2004-05 prices) during the 11th Five Year Plan (2007-08 to 2011-12) as Stated in fig. 5.1 the economy is expected to achieve the Compound Annual Growth Rate (CAGR) of 12.24 percent which is close to the projected optimistic growth rate in the Eleventh Plan Approach Paper of the State.

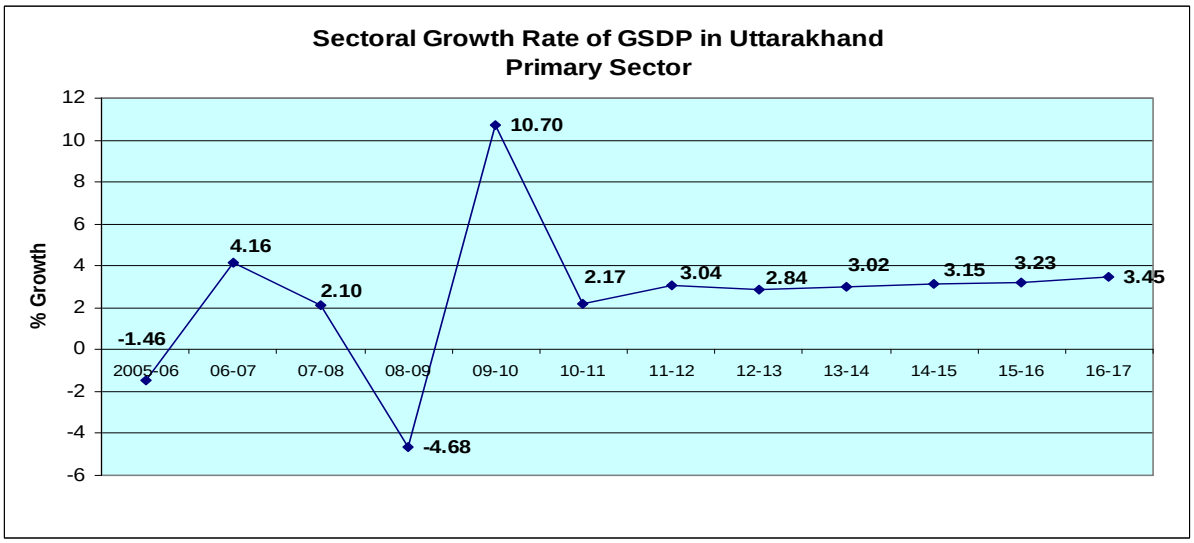
Figure-5.1 Growth Rate of GSDP 2005-06 to 2016-17



Thus average growth rate projected for the 12th Five Year Plan is between 10-11 percent.

Primary Sector :- Primary Sector include agriculture and allied sectors, forestry, fishing and mining. Agriculture production is subject to favour of seasons. During the Eleventh Five Year Plan it has witnessed sharp fluctuations but estimated CAGR for primary sector has been 2.55% and for agriculture it is estimated 1.87%. The 3.43% CAGR is targeted for the 12th Plan of which target for agriculture including horticulture is projected to be 2.54% faster growth of GSDP in forestry, fishing, animal husbandry is expected to achieve CAGR of 3.43% in primary sector. The Graphic projection for primary sector are given below fig 5.2.

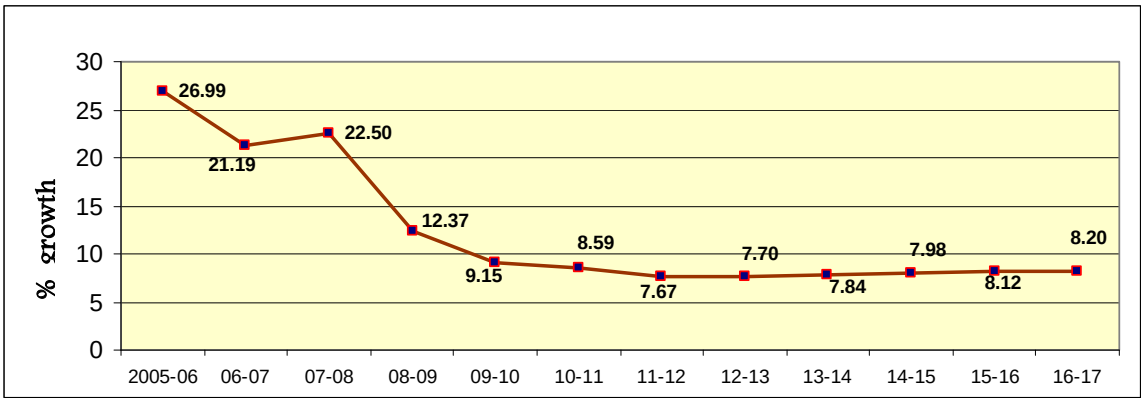
Figure-5.2- Primary Sectoral :- Sectoral Growth of GSDP in Uttarakhand



Secondary Sector :- It includes manufacturing, construction and electricity, gas and water as its sub sectors. This sector witnessed aggregate annual rate

of over 17% during the Eleventh Plan but witnessed a fall in the last three years fig. 5.3. As stated earlier, the withdrawal of CIP and saturation in construction activity resulted this fall. For the 12th Five year Plan it is projected to grow at around 8% as given in the following diagram. Electricity, Gas and water supply sector is expected to grow at a rate higher than manufacturing.

Figure-5.3- Secondary Sector



• As a consequence of with drawal of CIP, the industrial sector growth is expected to stabilize at around 8 %. While electricity, gas & water supply are projected to grow at higher rate.

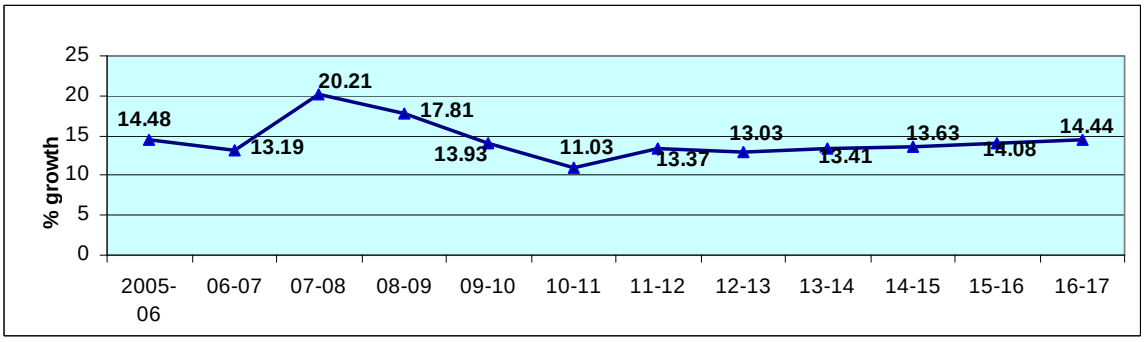
Tertiary Sector :-

It consist of

1. Transport, storage and communication.
2. Real Estate, ownership of dwellings and business services
3. Banking and Insurance
4. Public administration
5. Other services

The overall CAGR in this sector during 11th Plan has been above 15%. However, with the stabilization of the initial spurt in most of the sub-sectors except Real Estate, Dwelling ownership and Business services a decline in the later years is visible fig. 5.4. Keeping all these factors in view the realistic projection for the 12th Plan is estimated to be around 14%.

Figure-5.4 - Tertiary Sector



In all the above figures the data referred to various years has been taken as :

Actual – 2005-06 to 2008-09

Quick Estimate – 2009-10

Advance Estimates – 2010-11

Role of Private Sector

As Stated earlier also that about 60 percent of Plan investment is supposed to come from the Private Sector. In the current milieu of economic liberalization and market reforms, the policies for inclusive growth have to be based on an active participation of the private sector in these areas for which investment friendly atmosphere needs to be strengthened. The policies for the targeted sectors must try to encourage market led growth strategies, wherever possible. However, the private sector is usually reluctant to enter into areas like infrastructure, partly due to the public utility nature of these projects, and partly due to long gestation periods involved. The state has to play an active role in these areas, sometimes through the public sector and sometimes in the form of public-private partnerships to create necessary infrastructure and there by inducing private investment.

There is another very important role that the state needs to play in this whole process. The ecology of the area is already in a fragile state due unscientific management in the past. There is a chance that rapid development without recognition. This problem may lead to the destruction of the natural resources of the area and affect the ecology and economy of the Indo-Gangetic plain states. Since the livelihood of the weaker sections in the hill areas completely depend on these natural resources, their destruction will make the process of inclusive growth more difficult in the long run. Thus the state must ensure that the growth process in general and private participation in particular does not destroy the ecology of the area.

Micro Water Shed based development Approach

Watershed is a geographical expansion denoted a region of the river system, and because its contiguity in terms of water, soil, temperature has a definite relationship. It has been experienced that the watershed based development approach is more appropriate for enhancing productivity of land means of livelihood and conservation of natural resources. The region is divided over 1100 Miro water sheds which have distinct geo physical, economic and social characters. These watersheds are under constant threat of mass wasting and erosion caused by depleting forest cover, unscientific agronomic practices and hydrological imbalances. The ever increasing population, the need to provide a better quality of life to the people and the pressure on natural resources is further compounding the problem. The most of agricultural are in hills is rainfed. The challenges in rainfed areas might be improve rural livelihoods through participatory watershed development approach in sustainable manner.

Watershed Development

Water, agriculture, forestry and energy, among other issues are central to the State's inclusive strategy for sustainable growth. The people not only in the State but of the whole Indo-Gangetic plain are dependent on the environment conditions prevailing in Uttarakhand. With over a dozen important rivers and glaciers, the State holds a valuable fresh water reserve for the most of the northern India flowing through watersheds. The sub watersheds have been further divided into 1110 micro watersheds (MWS). Out of these, 124 MWS have been identified above 3200 mts. altitude comprising a total area of 14,25,750 ha. with little to no human habitations and mostly are under reserve forest. 537 MWS below 3200 mts. elevation were identified during the 11th FYP as yet to be treated. These MWS are prone to landslides and are under constant threat of mass wasting and soil erosion. To reverse the deterioration of natural resources and support livelihood activities to the inhabitants a number of watershed management projects are in operation in the State under different schemes under the coordination and supervision of Watershed Management Directorate (WMD), which has been designated as the nodal agency for this purpose with the following vision :-

'To improve the productive potential of natural resources and increase income of rural inhabitants in degraded watersheds of the State through socially inclusive, institutionally and environmentally sustainable approaches'.

The WMD has already prepared a 20 year perspective Plan (2007-27) for the development of these watersheds.

Approach

The guidelines issued by the Department of Land Resources. Government of India will largely act as guiding force in implementation of Integrated Watershed Management Programme (IWMP) in the State. Under this a 20 year perspective plan for the State has been formulated with the following approach:-

Inclusiveness

The poor, small and marginalized farmers, landless households, women headed households and under privileged section like Scheduled Castes and Scheduled Tribes will be mobilized to form Self Help Groups (SHGs) and it shall be ensured that these groups are dependent on the watershed areas for livelihood.

Decentralization

Within the framework of Panchayati Raj Institutions, Water and Watershed Management Committees (WWMC) shall be constituted along with the SHGs, user groups and individual beneficiaries. The WWMC thus formed would be given financial autonomy in implementing the sub projects in their respective areas. These empowered Committees would plan, implement and monitor the Plan at the Gram Panchayat level.

Social Mobilization

The project functionaries will act mainly as facilitators and not as a controllers or regulators. For this purpose professional team including voluntary organization would be selected for social mobilization, community organization and as Project Implementation Agency (PIA) for some projects. Capacity building shall be done for Planning and implementation of the project.

Niche Characteristics

As also stated in Uttarakhand Development Report (NCAER) Uttarakhand has a long history, with a sustainable civilization that dates back to ancient times and a wealth of landscape with mountains and lakes that evoke a deep sense of spirituality. It has enough to offer to the adventure seeker, spiritual and casual tourists alike. The world renowned Chardham, *Bygyals* for trekking, Valley of Flowers, high snow clad peaks for mountaineering, growing river rafting and other adventure activities provide the region a niche in the development of tourism which need to be developed with a holistic approach.

With distinct geographical features the State is endowed with great bio-diversity. It is uniquely suitable to grow herbal and medicinal plants besides cultivation of variety of fruits, vegetables, flowers, tea etc. Hill

rajma, potato, amaranthus, tea etc. need to be developed as organic brand items with assured market and price.

With high literacy rate and congenial environment for learning and research, the potential for developing educational centers, high end IT centers etc. need to be established and sustained to make it a knowledge hub.Last but not the least, the state has the distinction of maintaining a peaceful law and order situation which is a pre requisite for sound economic development.

Development of the hilly areas for inclusive growth in Uttarakhand-Challenges, Issues and Interventions required :

The State has made rapid strides after its creation on 9-11-2000. The management of State Finances, increase in power production, rapid industrialization in selected areas, setting up of new universities and Medical colleges are some of the highlights. The State is growing at the average annual rate of above 10%. This growth, however, is highly skewed and largely concentrated below the imaginary line of 50-60 kms from Vikasnagar (Dehradun) to Khatima (Udham Singh Nagar). Thus there seems a regional bias in the above growth and achievements. The hill region has lagged behind in most of the Socio-economic development indicators and thus forfeiting the objective of inclusive growth. The State Government is aware of this situation. In order to fulfill the targets and objectives of inclusive growth creation of necessary infrastructure across the State is inevitable. This would require heavy investment which is beyond the capacity of this small new state and can not be managed without the cooperation and generous attitude of the Govt. of India. Some of the issues and possible intervention have been already elucidated in chapter-1 of this draft.

Equitable growth implies overall growth and distribution as whole, to all sections of the population and geographical regions of the state. It is evident that most of the higher growth rates achieved by the State in the initial years, have been limited to the plains, while the hill areas have grown slowly due to infrastructural limitations. Thus, modification and rescheduling of the current schemes, in view of the objective of equitable growth, is needed according to the regional backwardness prevailing in the hill districts of the State, keeping in mind that overall growth does not have any adverse effects.

Although efforts to bridge this gap are being made but despite creation of infrastructural facilities like, roads, electrification, health, education, horticulture and tourism ensuring the delivery of benefits is a challenge and it is compounded by the shortage of committed manpower like doctors, teachers, engineers, technicians etc. for obvious reasons of remoteness and backwardness. To overcome this vicious cycle special plan provisions will be required in the Twelfth Five Year Plan.

The Planning Commission may continue to support the State in its endeavour at least for a decade more to establish a sound, viable, vibrant State, which ultimately will contribute to the growth of national economy.

Chapter– 6

Plan in Outline

Before the creation of the new State of Uttarakhand the practice of treating the hills as a separate unit for 'planning and development' and having a "Sub-Plan" for the same has long been followed in which problems peculiar to the hill areas were always given weightage but, understandably, not to the desired and fullest extent. With the formation of the new State, the old linkages between these areas were gradually redefined and this necessitated more careful planning on the part of the State, to address the issue of regional inequality as with the passage of time the disparities have aggravated and sharpened. The Twelfth Five Year Plan of the State aims at fostering sustained higher growth and improved quality of live by reorienting and prioritizing outlays for setting right the levels of develop whether infrastructural or social to development Uttarakhand into an ideal hill State without endangering its ecology and serenity.

10th Five-Year Plan

The Tenth Five Year Plan was the first attempt by the new State to formulate a Five year plan independently. The annual plan 2006-07 the last year of the 10th year Plan served as the base year for the 11th Five Year Plan. An attempt was made to compensate the shortfalls and to raise the over all growth rate of the State's economy to the extent feasible. This resulted in pushing up the growth rate of the economy significantly. The State Government is taking continuing steps for this purpose, more particularly, for attracting large private investment in various sectors. In fact, the government initiated a series of measures in critical areas to streamline the processes, practices and procedures so that the irritants to development are removed. This resulted in enhancing actual plan outlay of ₹ 11741 crore from the agreed outlay of ₹ 9000 crore for the Tenth Five Year Plan.

11th Five Year Plan

In view of the performance of the State and the rising expectations of the people, while preparing Five Year Plans and subsequent Annual Plans, emphasis has been laid on the formulation of a realistic Plan based on the expected resources and achievable targets. The resources of Public Sector Undertakings (PSUs) and Local Bodies (LBS) were also included in the total plan outlay from the third year of the Eleventh Five Year Plan for broadening the plan size. However, monitoring of such resources and their

utilization is difficult and the actual expenditure made by them did not reflect in the financial performance of the State. To get an idea of the relative priorities attached to various sectors in allocating plan funds, the sectoral distribution of plan outlay during the 10 Five Year Plan is stated in the following table 6.1.

Table 6.1 Classification of Plan Outlay

(₹. in Crore)

Major Heads of Developme	Eleventh Plan (2007-12)	2007-08	2008-09	2009-10	2010-11	2011-12
	Actual Outlay	Outlay	Outlay	Outlay	Outlay	Approved Outlay
Economic Services						**3553.61**
1. Agriculture & Allied Activities	2515.88	371.17	461.98	382.69	532.91	666.48
2. Rural Development & Panchayati Raj	2112.88	317.81	339.83	371.18	470.32	568.74
Irrigation & Flood Control	2590.07	135.87	613.68	690.39	614.16	535.97
4. Energy	2195.42	390.44	223.43	466.48	427.13	403.96
5. Industry & Minerals	121.15	26.55	21.27	20.44	24.61	28.28
6. Transport	4048.54	799.29	607.89	682.71	795.52	1163.14
7. Science, Technology & I T	228.77	97.62	41.03	20.17	27.97	41.98
8. General Economic Services	506.47	148.39	76.59	80.06	93.74	145.06
Social Services	10798.19	1993.03	1805.20	1926.59	2234.05	2696.94
Out of which:-						
Education ,Culture, Sports Youth Welfare	3010.85	646.25	603.12	382.20	588.41	790.87
Medical & Public Health	1468.78	285.65	275.79	180.48	303.10	423.76
Water Supply & Sanitation	1909.15	275.65	362.92	296.61	427.61	546.37
Awas & Urban development	2316.49	391.54	177.88	797.58	458.45	340.67
Social Security Welfare & Other	2092.92	242.67	269.52	269.72	283.53	595.27
General Services	**522.33**	**98.46**	**94.46**	**87.60**	**92.14**	**194.66**
State Govt. Resources	**25639.70**	**4378.63**	**4775.00**	**4728.31**	**5312.55**	**6445.21**
Extra Budgetary Resources	**3914.74**			**1072.50**	**1487.45**	**1354.79**
Total	**29554.44**	**4378.63**	**4775.00**	**5800.81**	**6800.00**	**7800.00**

** Includes resources of PSE's and Local Bodies during 2009-10, 2010-11 & 2011-12.*

The State has been able to enhance significantly the actual outlay from the approved outlay during the 10th Five Year Plan on the basis of better expendability of available funds. Similar trend is visible during the past four years of the Eleventh Five Year Plan. However, it needs to be mentioned here that while the State Government attempted to mobilize the extra budgetary resources during the last three years to enhance the plan size the central assistance has not been up to that level as a result of which there exists a large gap between the proposed outlay and outlay approved during the 11th Five Year Plan. On the persistence of this argument by the State in

the last year of the 11th FYP situation eased to some extent with the enhanced SPA and SCA totaling about ₹ 600 crore still it needs to be enhanced suitably in view of the State's contribution to environment and curtailment of revenue deficit grant to the State by the 13th Finance Commission.

The Planning Commission in its review observed that Uttarakhand's performance has been remarkable among all the states with regard to expenditure of plan funds during the Tenth Five Year Plan. The total expenditure during the Tenth Five Year Plan rose to ₹ 11297.38 Crore against the original approved outlay of ₹ 7630.00 crore (at constant prices) or ₹ 9000.00 Crore at current prices. Year wise approved / revised outlay and expenditure is given in the following table 6.2.

Table 6.2 Approved Outlay and Expenditure during Tenth Five Year Plan and Eleventh Five Year Plan

(₹. in Crore)

Sl.N.	Year	Outlay	Expenditure
11th Five Year Plan (2007-12)			
1	2007-08	**4378.63**	3944.88
2	2008-09	4775.00	3653.57
3	2009-10	5800.81 (4700.00 from Budgetary support)	3514.09
4	2010-11	6800.00 (5312.55 from Budgetary support)	4474.10
5	2011-12	7800.00 (6445.21 from Budgetary support)	5165.83
	Total	29554.44	20752.47
12th Five Year Plan (2012-17)			
1	**2012-13**	8200.00 (7845.00 From Budgetary suppo	

Resource Position

The resource projection for the Annual Plans from 2007-08 to 2011-12 is summarized in the table below. The pre actual BCR for the year 2010-11 was ₹ 341.61 crore. which is estimated to be (-) 1274.92 crore in 2012-13 The decrease in BCR has been eavsed by additional provision for salary and other expenditures of the posts filled up during the previous year.

Table 6.6 Approved Scheme of Financing for Annual Plan 2012-13

₹ in Crores

Items	2007-08 Actual	2010-11 (Pre Actual	2011-12 (Estimates	2012-13 (Estimates
A State Government				
1. State's Own Resources	667.10	(-)201.91	943.40	(-) 713.61
a. Balance from Current Revenues	671.90	(-)341.64	546.26	(-) 1177.73
b. MCR (excluding deductions for repaym loans)	(-)206.05	73.25	47.75	98.11
c. Plan Grants form GOI (TFC)	68.25	66.48	249.38	273.56
d. ARM			100.00	92.45
e. Adjustment of Opening balance	133.00	-	-	
2. State Government's Budgetary Borrowings (i-ii)	1103.11	1734.00	1803.00	3433.00
I) Borrowing (a to i)	1280.76	2141.53	2364.06	3926.46
a. Net Accretion to State Provident Fund	157.90	200.00	240.00	300.00
b Gross small savings	230.16	1000	1000.00	583.20
c. Net Market Borrowings	733.35	975.53	688.06	2598.26
d. Gross Negotiated Loans (i to iv)	150.78	366.00	416.00	445.00
i) NABARD	149.42	350.00	400.00	
ii) REC		-		
iii) HUDCO		-		
iv) Other (specify) (NCDC)	1.36	16.00	16.00	
e. Bonds /Debentures (Non–SLR Based)	_	_	_	
f. Loans portion of ACA of EAPs (old)	_	_	_	
g. Loans for New EAP	8.57	-	20.00	
h. Other Loans from GOI				
i. Other Loans if any (to be specified)				
II) Repayments (a to d)	177.65	407.53	561.06	493.46
a. Repayments to GOI Loans	32.63	45.33	45.33	30.00
b. Repayments to NSSF	34.82	150.00	291.63	234.10
c. Repayments to Negotiated Loans	53.00	155.00	166.90	167.16
d. Others Repayments	57.20	57.20	57.20	62.20
3. Central Assistance (a+b+c)	**2026.82**	**3388.30**	**3698.82**	**5125.61**
a. Normal Central Assistance	924.69	1154.38	1237.05	1372.54
b. ACA for EAP (Old)	122.53	969.52	962.00	1354.31
c. ACA for New EAP	233.10	-	-	
d. Others	746.50	1264.40	1499.77	2398.76
Total: State Government Resources (1-	**3792.41**	**4920.39**	**6445.21**	**7845.00**
PSES				355.00
Total Plan Resources (Estimated)				8200.00

Investment Requirements

At its 56th meeting the NDC it is proposed that the Twelfth Plan of the country should be based on a growth strategy that would accelerate the present 8% average annual growth rate to a level of 9% per year in the 12th Five Year Plan. In order to achieve growth of this magnitude it is estimated that the level of investment in infrastructure would have to be enhanced considerably which will necessitate promotion of private sector and Public Private Partnership (PPP) in this sector. This implies that the level of outlays on infrastructure would have to be raised during the 12th Plan period. In a new and mountainous state like Uttarakhand the investment requirements on infrastructure would be even higher because of the already low base and the relatively higher costs owing to the nature of the terrain and topography. The State will also have to ensure adequate provision for development of rural and urban infrastructure, provision of health services and education including technical education and skill development to ensure faster and sustainable inclusive growth. However, with this the fiscal deficit will also have to be controlled. The issue of resource constraint that this implies is further compounded by the pressing demand from various social sectors on plan and budget resources. Under such constraints, the role and need for harnessing private investment in infrastructure projects through Public Private Partnership (PPP) assumes greater importance.

With the target of 9.9% growth rate that the State is expected to achieve during the Eleventh Plan, it would be our endeavor to target between 10-11 percent growth annually during the Twelfth Plan. To achieve the growth rate of this magnitude estimated requirement of total investment (assuming ICOR of 4.25) would be around ₹ 163000 crore in the Twelfth Plan of which 60 percent is expected to come from the private sector. Thus investment of about ₹ 65300 crore would be required from the public sector including central and state sector investment. As per assumptions of 16% of Five Year Plan's projected quantum for the first year the required annual plan size comes to ₹ 10450 crore. However keeping in view the State's Plan resources supplemented by the reasonable SCA (₹ 2200 crore) and SPA (₹ 200 crore) request from the centre, size of Annual Plan 2012-13 is proposed to be ₹ 8212.60 crore.

Table 6.7 Uttarakhand GSDP by Industry at Constant (2004-05) Prices

(₹ in lakh)

Sector	2006-07	2011-12^{AE}	2016-17^{P}
Primary Sector	597255	677430	801830
of which-			
Agriculture	414962	455130	515921
Forestry	143436	170138	202592
Secondary Sector	1038848	1840504	2645901
of which-			
Manufacturing	590603	1325697	1969229
Construction	402901	425405	504257
Electricity, Gas & Water Supply	45344	89402	172414
Tertiary Sector	1589900	3229168	614107
of which-			
Transport, Storage & Communication	228209	466222	953503
Trade, Hotels & Restaurant	602414	1313168	2096521
Real Estate & Business Services	176023	224763	287486
Total GSDP	**3226003 (14.12)**	**5747102 (12.24)**	**9588748 (10.78)**

AE= Advanced Estimates; P= Projected
Figures in parenthesis denote overall CAGR

Proposed Twelfth Five Year Plan & Annual Plan 2012-13

As stated earlier that the State's economy is proposed to grow at the rate of about 11 percent annually during the 12th Five Year Plan for which the crude estimates of investment requirement have been worked out by multiplying the expected addition in the GSDP during the FYP by the assumed Incremental Capital Output Ratio of 4.25:1. Thus the total required investment during the 12th FYP is worked out ₹ 163270 crore of which roughly 60% is expected to come from the private sector and the remaining 40% which comes about ₹ 65300 crore will have to be met from public sector i.e. plan investment during the 12th Five Year Plan. Broadly the five year plan investment is presumed to be distributed on 16%, 18%, 20%, 22% and 24% basis in the successive five years of the plan. Thus the annual plan investment requirement of ₹ 10450 crore has been arrived at for the annual plan 2012-13.

The State's financial resources for the year 2012-13 have been estimated to ₹ 5812.60 crore excluding the Special Plan Assistance and Central Assistance which was at the level of ₹ 600 crores in the previous year. The States BCR has reduced to negative largely because of the large scale recruitment in the education and medical & health departments in the last year of the 11th FYP. This has increased the salary commitment in the 12th FYP to be solicited from the centre. With this presumption Annual Plan size has been projected at ₹ 8212.60 crore which is only 5.3% higher than the previous year's plan.

It also needs to be mentioned here that during the last three years of the 11th FYP the Extra Budgetary Resources (EBR) i.e. resources of PSUs and Local Bodies (LBs) were also included which inflated the Plan size (17%) but created many distortions. Firstly, this adversely affected the plan expendability as the true picture of expenditure against these resources did not reflect in the overall plan expenditure statements. Secondly, mandatory outlay for SCSP/TSP also increased although the said EBR were to be used by the concerned PSUs / LBs. CSSs like RKVY has the condition of minimum allocation of 7.5% of the total annual plan outlay for receiving funds under the scheme. Keeping in view the above problems, inclusion of such EBRs has not been taken into account in the present plan. Instead it will help in filling the gap between the annual required annual plan investment (₹ 10450 crore) and proposed resource based plan (₹ 8212.60).

The Major sectorwise proposed outlay for the 12th Five Year Plan and Annual Plan 2012-13 is given in the following table.

Table 6.3 Major Head/Sector wise Proposed Outlay for 12th F.Y.P. Annual Plan 2012-13

(Rs. in Lakh)

	Major Heads of Development	Approved Outlay (2011-12)	Proposed Outlay 12th Plan (2012-17)	Approved Outlay (2012-13)
A	**Economic Services**			
	Agriculture & Allied	66648.09	468659.14	69990.42
	Rural Development & Panchayati Raj	56874.03	378214.58	70662.23
	Irrigation and Flood Control/Minor Irrigation	53596.66	442262.69	71199.13
	Energy	40395.68	740642.05	61222.93
	Industry & Minerals	2827.72	21840.00	3546.89
	Transport	116313.62	849578.10	124831.68
	Science & Technology/ Information Technology	4198.50	57539.47	4985.49
	General Economic Services	14506.47	148126.35	21926.78
	Total-A	**355360.77**	**3106862.38**	**428365.55**
B	**Social Services**			
	Education/Sports/Youth Welfare/Art & Culture	79087.40	610286.61	99623.28
	Medical and Health	42375.57	384318.27	56491.22
	Water Supply and Sanitation	54636.66	379605.02	57789.13
	Housing & Urban Development	34067.14	402235.13	59504.29
	Information and Publicity	755.78	3130.75	831.03
	Social Security & Social Welfare	38127.50	304124.72	49139.28
	Nutrition/Women Empowerment & Child Development	15654.00	98124.77	16432.10
	Labour, Training & Employment	4989.57	90898.00	5024.11
	Total-B	**269693.62**	**2272723.27**	**344834.44**
C	**General Services**			
	Revenue/Home/Judiciary/ Estate /Finance Deptt.	19466.61	143405.23	11300.01
	Total-C	**19466.61**	**143405.23**	**11300.01**
	Total State Govt. Resources (A+B+C)	**644521.00**	**5522990.88**	**784500.00**
D.	**Extra Budgetary Resources**			
	Resources of Public Sector Enterprises	131123.00		35500.00
	Resource of local bodies	4356.00		
	Total Extra Budgetary Resources	**135479.00**		**35500.00**
	Grand Total(A+B+C+D)	**780000.00**	**5522990.88**	**820000.00**

It is evident from the above that in the proposed plan emphasis has been laid on infrastructure related sectors under economic services. Overall 54.09 percent of total outlay has been allocated to economic services, 43.81 percent to social services and 2.09 percent to general services in the annual plan 2012-13..

Centrally Sponsored Schemes

The Government of India provides funding across the States in a large number of programmes such as education, health, labour, skill development, agriculture, irrigation, forest and environment, rural development, urban development, rural electrification etc. under Centrally Sponsored Schemes (CSS). During the 11th Five Year Plan 147 such schemes involving Rs 66056.00 crore were in vogue. During the previous 3 Five Year Plans although the number of CSS has reduced from 360 (9th Five Year Plan) to 174 in the 11th Five Year Plan but the percentage of CSS to GBS at the national level has increased from 31.30 (9th Plan) to 38.64 (Tenth Plan) and to 41.59% in the 11th Five Year Plan. This reflects the focus the Central Government has given to the national priorities, Programmes like SSA, NRHM, JNNURM, MGNREGA, PMGSY, AIBP, RKVY, RGGVY, APDRP, ARWSP, BRGF etc. have been designed to meet the key infrastructure gaps in the country and provide adequate resources to the States. Major share of funds under CSS is going to schemes aimed with key policy interventions which are termed as 'Flagship Schemes'.

Table 6.4 CSS Plan Outlay, Budget & Expenditure in Uttarakhand

(₹ in crore)

Plan/Yea	Outlay	Budget	Sanction	Expenditure	% of Exp. to	
					Outlay	Budget
2002-03	635.57	853.83	6333.30	570.73	89.80	66.84
2003-04	577.76	1129.95	771.68	669.17	115.82	59.22
2004-05	642.03	1044.12	725.65	522.29	81.35	50.02
2005-06	654.02	1086.66	697.55	564.40	86.30	51.94
2006-07	448.08	1280.15	704.80	597.74	133.40	46.69
Total 10th Plan	**2957.46**	**5394.71**	**3532.98**	**2924.33**	**98.88**	**54.21**
2007-08	800.05	1269.76	1048.60	815.22	101.90	64.20
2008-09	1329.72	1712.45	1285.81	892.56	67.12	52.12
2009-10	1358.44	1794.23	1373.17	939.28	69.14	52.35
2010-11	1634.45	1854.99	1235.48	1089.18	66.64	58.72
2011-12	1926.12	2547.90	1393.88	1098.54	57.03	43.12
Total 11th Plan	**7048.78**	**9179.33**	**6336.94**	**4834.78**	**68.59**	**52.67**

Outlay consist of the State's share as well as central funds of those flagship programmes which are part of the state plan while budget include the central funds as well as state funds of the schemes which route through the state budget. It is evident from the above figures that percentage expenditure against budgeted amount was 54.21 and 52.67% during the two five year plans of the State. Sanction of funds and percentage expenditure against budgeted amount indicates towards obstacles in utilizations of funds.

On the basis of last 10 year's experience it is felt that the current system of administration of the scheme needs reforms. Concerns were raised by almost all the States about lack of flexibility in CSSs; adverse implications of forced state share requirements; utility of increasing number of CSSs with thinly spread resources at the field level etc. To enquire into the concerns raised by the States and to suggest reforms, the Planning Commission constituted a sub committee under the Chairmanship of Sri B.K. Chaturvedi, Member, Planning Commission.

The Committee observed that the current system of administration of the schemes needs reforms. One of the most important gaps is the way distinction is being made between CSS and ACA based schemes. While generally ACA based schemes are 100% centrally assisted schemes, particularly Flagship Schemes, in several of these schemes contribution from the States is required in varying degrees. The CSS also prescribe different shares for different categories of states. States with limited resource base face difficulties in accessing the funds.

The Committee has recommended for the new Flagship CSS, that the State share will be 25% for states other than NE where it is proposed to be 10%. It is a discrimination against other Hill/SCS States. We have been approaching the Planning Commission for parity in CSS with NE States as our State is geographically more difficult, naturally more disaster prone and topographically more fragile than most of the NE States.

It also needs to be considered that the CSSs although largely funded by the Central Government have implications for States in terms of higher expenditure commitments to meet the State share. In certain schemes like SSA/RMSA there has been an incremental pattern of state share which means an increase in the matching contribution by states in succeeding years. Here too, relaxation in the case of NE States has been provisioned while other SC States have been deprived of such relaxations although the literacy level in NE States is not less than the other states. It may also be mentioned here that while the centre has levied direct education cess for arranging funds to finance the SSA/RMSA, we have no alternative source to meet out the burden of increasing matching share. Hence in our case 90:10 will be legitimate demand.

Under some CSSs direct funding is made to PRIs/ Urban Local Bodies for creating assets. However, when the schemes run through their life, the burden in the form of maintenance of assets and salaries of staff under the scheme ultimately falls on the State as the PRI/ULB have no adequate finances to shoulder the financial burden.

Further direct funding to local bodies make it difficult to properly monitor the progress. Hence it is suggested to route the funds through, the State budget so that it can be properly monitored or in society mode.

It is a welcoming step that recommendation regarding change in physical and financial norms has been made. However, the procedure suggested to introduce such changes looks somewhat cumbersome and more

time consuming. More decentralization in powers perhaps, would be more helpful. Uttarakhand as a state has always suffered due to absence of differential norms. The chief secretary should be allowed to head the committee to allow changes in physical as well as financial norms where GoI nominee can also be placed as is pattern in RKVY.

Cost of construction is much higher in Uttarakhand because of remote location and difficult terrain, so the financial norms for construction of buildings (schools, toilets, panchayat ghar and hospitals) should be according to the state schedule of rates.

While framing physical norms relating to admissibility and financial norms relating to unit cost the distance from rail head and height (msl) must be taken in to account specially in case of the hill states and other difficult areas to ensure the quality norms. At the stage of framing the guidelines states should also be consulted to avoid problems in the future.

In Annexure VI of the report, the mechanism for the additional allocation of Incentive Grant for the states has been defined where it says that the Incentive grants will be given to those states who have (a) Increased the budget allocation for the concerned scheme as a proportion of the total budget (50%).(b)Effectively developed funds, functions and functionaries to PRIs/ULBs/Other local bodies, which will be ascertained on the basis of a Management Development Index (50%).

As regards to (a) it is submitted that the states with a low infrastructure base and low resource base has to give priority to infrastructure development schemes. Again the most of the plan resources are tied to CSS matching grants, EAPs, other mandatory provision etc, they find it difficult to increase allocations in other sectors. Under the suggested mechanism they would loose further. Thus it needs to be reviewed.

The state has to abide by FRBM act which has a very narrow window to increase in capital expenditure outlays on the plan side for SC state like Uttarakhand which also suffers from low resource base. This operates as perverse incentive for the state.

Border sensitivity due to International borders should also be considered for the national interests. The state should be provided all kinds of infrastructure and support for the people living there, so that migration of the people can be avoided and in case of any border issues, people can be mobilized. Specific border area scheme should also be deviced for meeting these ends.

Our closeness to China and Nepal makes us prone for aggression and maoist attacks. Remoteness of locations and poor development may further worsen the situation. We have to retain people near and around our borders to check any inward movement from China and Nepal. Massive infrastructure deficit fuels migration from border areas where dangerous demographic vacuum is being created.

In case of NE States, separate ACA Schemes namely North Eastern Council and Bodoland Territorial Council have been recommended to be

continued. Hence other SC States like Uttarakhand deserve to be treated at par with NE States for other CSSs as well.

Special category within the Special Category States does not seem to be justified as the special category status is given on the basis of harsh terrain, backwardness, low resource base and other social problems. All CSS (Other than 100% CSS) should be funded on 90:10.

Unrest in NE States is, manmade whereas we have been able to maintain peace and tranquil in our state. Thus, it seems that the former are being rewarded for the unrest and we are being punished for living peacefully under the same or even more difficult natural conditions.

Disaster relief for the state should be given for the restoration of infrastructure rather than only repair because state is much more prone to natural disasters than lot many states.

Fund should be released in one or two installments as in Our State, Capital expenditure constitutes 50-60 % of the total Plan Expenditure and as is known, catipal heads of the Plan entail lump sum expenditures. Besides, in a mountainous state like Uttarakhand, implementation gets hampered with the invent of monsoon and winter

Green bonus as untied fund should be given to the state as the state has more than 65% of forests which absorbs carbon emission of the other developed states but at the same time hinder the development of the state as well.

The state should be compensated for dropped hydro power projects which were major source of revenue for the state and the rights of the upper riparian state.

Schemewise Specific Comments

- Under some schemes like PMGSY which are stated to be 100% centrally funded the State like ours in practice has to contribute about 35% of the project cost, firstly for land acquisition, NPV, afforestation and secondly to meet the escalated costs. It is worth considering that 65% area of the state is classified as forest area. Hence to execute any infrastructure development program, especially roads, forest land is required for which clearance has to be sought from the GoI. The cumbersome forest clearance procedure delays the project and hence time and cost overrun occurs. As per the guidelines of PMGSY the increased cost and land compensation has to be borne by the concerned state. Thus in spite of 100% centrally funded scheme it becomes a 65:35 CSS in our case
- JNNURM- restructuring of the scheme is required as per the state specific demands and norms, periurban areas should also be included for the development. New scheme for the areas along the highways to chardhams should also be started as lakhs of pilgrims move through these areas and use the meager civic amenities of the area. At the same

time, population criterion should be based on the basis of fixed + floating population and not only fixed population.

- Beneficiaries' selection criterion for some of the CSS should be modified for the state e.g. IAY (in Uttarakhand houses are built with stones and slates so they are not considered as 'Kachcha' while they are not 'Pucca' house.)

- Irrigation schemes in hills are prone to recurrent damages due to heavy monsoon rains, cloudbursts, landslides etc and require massive funds for maintenance and restoration. Due to small and scattered landholdings especially in hills it is difficult to meet B:C of 1:1. Hence it may be revised to 0.5:1 for hills in the larger interest objectives of the programme. In hilly areas where no other water sources is available, construction of mini tube wells may be permitted.
- Norms of construction of School building under RMSA / Model school are uniformly fixed. Looking at the cost increase due to height and distance the actual soct goes up manifold. According to SOR prevailing in the State the State share rises to 50%. Hence change in norms is solicited Under SSA the SOR prevailing in the State were permitted. But in case of RMSA / Model Schools this relaxation is not permitted. Thus either SOR in the State may be permitted or change in the prescribed design as per the conditions and need of the State may be granted.

Externally Aided Projects

External assistance is an important component of plan funding. State Government has been seeking financial assistance from different sources including international donors as it is still struggling hard to create necessary infrastructure and thus requires heavy investment for development of infrastructure which is vitally important for overall development of the region. Based on recommendations of the 12th Finance Commission, the Central Government decided to pass on the external assistance on back to back basis to the States. Such scheme of borrowing would have put the smaller and special category states like Uttarakhand in a rather difficult position. However, on the persuasion of the State Government has thankfully relaxed this condition in the case of SCS.

The progress of EAPs during the Tenth and Eleventh Five Year Plan is summarized in the following table 6.5.

Table 6.5 Outlay, Budget, Sanction & Expenditure of EAPs.

Year/Plan	Outlay	Budget	Sanction	Expenditure	% of Exp. to Sanctions
2002-03	186.13	195.16	127.43	116.46	91.39
2003-04	160.67	171.09	105.42	102.36	97.10
2004-05	154.86	137.37	91.95	73.86	80.33
2005-06	245.68	187.48	80.86	66.67	82.45
2006-07	312.89	313.71	94.82	83.10	87.64
Total 10th Plan	**1060.23**	**1004.81**	**500.48**	**442.45**	**88.44**
2007-08	613.17	314.90	172.35	144.61	83.90
2008-09	831.43	889.55	340.61	246.58	72.39
2009-10	1152.50	1004.39	503.64	393.60	78.15
2010-11	1077.24	999.71	601.67	519.43	86.33
2011-12 (29-2-12)	962.61	973.03	447.95	314.49	70.21
Total 11th Plan	**4636.95**	**4181.58**	**2066.22**	**1618.71**	**78.34**

During the Tenth Plan continuing EAPs were in progress. New initiatives were started to access the external assistance from Asian Development for investment in Power, Road, Tourism and Urban Development sectors which got matured during the Eleventh Plan. These Projects are likely to continue during the 12th Five Year Plan. In all there are 09 projects under implementation for which an outlay of ₹. 5410 crore is proposed. Besides new proposals will be initiated afresh.

Growth with Social Justice

Growth with social justice has been the prime objective of planning in India. The scheduled castes and scheduled tribes belong to the poorest of the poor sections of the society and, therefore, priority has been assigned to their rapid development.

The scheduled castes have, for historical reasons, remained socially and economically backward for generations. Uttarakhand is no exception in this respect. The representation of SCs in the secondary and tertiary sectors of the economy is extremely low. Though they are mainly engaged in agriculture and allied activities, most of them are landless agricultural labourers who own meager land holdings. This fact is brought out clearly in the table given below. In the entire State of Uttarakhand SCs, who constitute 18 per cent of the population, own 14 per cent of the holdings accounting for only about 8 per cent of the area.

Table 6.8 Land holdings of Scheduled Castes

	District	Population of SCs (%) 2001	No. of operational holdings owned by SCs (%)	Area under holdings owned by SCs (%)
1	Almora	22.30	16.65	10.74
2	Bageshwar	25.90	16.06	10.45
3	Chamoli	18.20	12.19	6.83
4	Rudraprayag	17.70	11.22	6.22
5	Dehradun	13.50	10.99	9.27
6	Nainital	19.40	17.85	11.00
7	Pauri Garhwal	15.30	12.10	5.72
8	Pithoragarh	23.00	17.00	11.34
9	Champawat	17.00	15.53	10.98
10	Tehri Garhwal	14.40	10.06	5.22
11	U.S. Nagar	13.20	6.50	2.96
12	Uttarkashi	22.90	24.05	17.77
13	Haridwar	21.70	16.44	9.51
	State	**17.89**	**14.15**	**8.02**

Source: Agriculture Census, 2000-01 & Census 2001

In view of the constitutional provisions contained in the Directive Principles of the State policy under Article 46 enjoining on the state the duty of promotion and protection of the interests of SCs, concerted efforts have been made under the various Plans to raise their social and economic status.

Scheduled Caste Sub-Plan (SCSP)

In the first four Five Year Plans, welfare programmes were drawn up and implemented for improving the educational and economic status of the scheduled castes. By the end of the Fifth Five Year Plan, however, was realized that the strategy for their development would have to be based on intensive social and economic efforts so that they could acquire the ability to reap the full fruits of programmes of economic development. As a result the approach of Special Component Plan (SCP) – now renamed the Scheduled Caste Sub-Plan (SCSP) – was adopted in the Sixth Five Year Plan (1980-85) in the form of earmarked allocations. Accordingly, development of Scheduled Castes was made an integral part of various sectoral programmes of the plan and emphasis was laid on the enhancement of their welfare. Based on past experience it was decided to give focused attention to the implementation of SCSP. A paradigm shift

was made during the Tenth FYP with regard to formulation and monitoring of SCSP and Tribal Sub-Plan (TSP). The Social Welfare department of the State was made the nodal department for this purpose. Previously the development departments earmarked a proportionate amount from their allocated outlays as the share of SCSP & TSP. Now, on the basis of sectoral compositions, priorities, previous performance and other norms, the Department of Social Welfare selects the schemes under the SCSP and TSP in various departments and allocates the outlay among them. A separate

committed planning unit has been established within the social welfare department in the State to formulate and monitor SCSP and TSP.

The general principles that guide schemes under SCSP are:

- Outlay for area oriented schemes directly benefiting villages having majority Scheduled Castes population would be allocated under SCSP.
- Priority is given to basic services like primary education, health, drinking water, rural housing, roads, rural electrification and nutrition.
- General wage component schemes would not be included in the SCSP.

The total outlays and allocations under SCSP in the various years of the Ninth and Tenth Plans and proposed outlays during the Eleventh Plan and Annual Plan 2007-08 and onwards are as Table 6.9.

Table 6.9 Plan wise Earmarking of Outlay and Expenditure under SCSP

(₹. in lakh)

	Plan Period	Total Plan Outlay	SCSP Allocation	Percentage
1	2	3	4	5
1	Tenth Plan (2002-07)	1174135	190672	**16.24**
2	Annual Plan (2007-08)	437863	74982	17.12
3	Annual Plan (2008-09)	477500	85473	17.90
4	Annual Plan (2009-10)	580081	104415	18.00
5	Annual Plan (2010-11)	680000	122400	18.00
6	Annual Plan (2011-12)	780000	140400	18.00
7	Total 12th F.Y.P.	2955444	527670	**17.85**
8	Annual Plan (2012-13)	8200.00	147600	18.00

During *Ninth Five Year Plan period about 15 per cent of the total outlay was earmarked under the SCSP which is broadly commensurate with the percentage of Scheduled Caste population in the

State. As is evident from the above table the share of SCSP gone up during the Tenth Plan to about 17 per cent. However, there was a decline in the percentage share of SCP in 2005-06 to 12.33 mainly because the total increased outlay was resource linked and allocated for specific schemes by the Planning Commission. In the Annual Plan 2006-07 the allocation for SCSP was ₹ 720.00 crore out of the total outlay for ₹ 4,017.46 crore (18.00 per cent of the total). Despite several constraints SCSP outlay has been ensured in accordance with the SC population in the state. However, in view of the scatteredness of the SC population difficulty is experienced in formulating SC specific schemes. To overcome this difficulty villages have been listed according to prevalence of SC population. To ensure funds meant for SCSP and TSP separate budget heads have been opened in the State Budget to avoid any misappropriation.

** Uttarakhand Development Report, Planning Commission, GOI. page 119*

Tribal Sub Plan

The major tribes living in Uttarakhand are Tharus, Buxas, Bhotias, Jaunsaris and Rajis. Most of them are closely linked with forests and have lower than average standard of living. Some tribes like the Rajis, also have a primitive mode of life. Majority of the tribal groups are living below the poverty line, and exclusively depend on wage employment linked to forest produce crafts and agriculture. Therefore, there is an urgent need to uplift them from their present level of subsistence living. Many of these tribes live in strategically important and sensitive border areas. For the upliftment and welfare of the tribal population the Tribal Sub-Plan (TSP) approach has been adopted. The Social Welfare Department is the nodal department for planning and monitoring of TSP in the State. The following objectives and strategies for development of these tribal groups have been laid down:

- Earmarking of funds for TSP in proportion to the percentage of scheduled tribe population in the State is being ensured. Higher percentage may have to be earmarked to bridge the gap between the development levels of scheduled tribes and the general population so that the two groups can be brought at par.
- The funds allotted under TSP should be utilized on such schemes/ programmes as would serve the specific needs of the target groups and should, as far as possible, be beneficiary oriented.
- Increased emphasis will be given to the schemes of Basic Minimum Services i.e. safe drinking water supply, primary health care, public housing assistance, link roads, nutrition, streamlining of public distribution system, universal and primary education etc.
- While preparing Tribal Sub-Plan, it should be ensured that the proposed development programmes are based on employment generation/income generation and the potential of increased income of scheduled tribe families should be estimated while formulating the programmes.
- Plan schemes which benefit the scheduled tribe families exclusively would be continued with the condition that the physical targets be fixed against the respective plan outlay. In addition to this, clear physical and financial targets would also be fixed for new schemes proposed.
- Proper and adequate rehabilitation of tribal population displaced by major development projects shall be done in such a way as to ensure that there is an improvement in the standard of living of the affected persons after rehabilitation.
- Since majority of tribals are unskilled and traditional artisans, increased emphasis shall be given to their training in handlooms,

carpet weaving, carpentry, black smithy and other allied and hereditary trades.

- Within the broad framework of the Forest Conservation Act 1980, the tribal people should be accorded priority in Joint Forest Management.

In accordance with the above objectives, a separate outlay was allocated and a separate Tribal Sub Plan was formulated during the Ninth Five Year Plan (1997-2002). Allocation for the TSP in the Tenth Plan, proposed outlay for the Annual Plan 2007-08 and onwards are presented in the following table 6.10.

Table 6.10. Allocation under Tribal Sub-Plan

(₹ in lakh)

	Plan Period	Plan Outlay	TSP	Percentage
	2	3	4	5
	Tenth Plan (Actual)	1175700	38788	3.30
	Annual Plan (2007-08)	437863	13409	3.15
	Annual Plan (2008-09)	477500	14300	2.99
	Annual Plan (2009-10)	580081	17402	3.00
	Annual Plan (2010-11)	680000	20400	3.00
	Annual Plan (2011-12)	780000	23400	3.00
	Total 11th F.Y.P.	2955444	88911	**3.01**
	Annual Plan (2012-13)	8200000	24600	3.00

District Sector Plan

In order to mitigate regional disparities, involve decentralized participation in plan formulation, implementation and monitoring to assess and incorporate local needs and resources and to give broader dimension to planning process the district plan approach was introduced in 1982-83 in Uttar Pradesh. This decentralized system has been continued in the new state.

Under the existing system of decentralized planning, District Plan Formulation and Monitoring Committees have been set up in each district under the chairpersonship of a Minister nominated in charge of the district. All MPs and MLAs from the district and the Chairman of the Zila Panchayat are its members. This Committee is responsible for preparation of the Annual District Plan. Reconstitution of this Committee as per provisions of 73rd & 74th Amendments of the Constitution is under way. Another committee named District Plan Coordination and Implementation Committees under the Chairmanship of District Magistrate looks after the implementation of the District Plan.

The size of the Annual District Plan, within the overall State Plan, for each district is indicated by the State Planning Commission. Based on this

outlay the District Plan Formulation and Monitoring Committee assesses the local resources, private investment and funds available form State sources and formulates its annual plan as per conditions and requirements of the distinct.

Table 6.11 District Wise Approved Outlay of District Plan

(₹ in Lakh)

District	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Nainital	2808	3159	3510	3510	3510	5265
Udham Singh Nagar	2968	3339	3710	3710	3710	5565
Almora	2990	3364	3738	3738	3738	5607
Pithoragarh	2873	3230	3589	3589	3589	5384
Bageshwar	2385	2684	2982	2982	2982	4473
Champawat	2334	2626	2918	2918	2918	4377
Dehradun	3980	4477	4974	4974	4974	7461
Pauri	4800	5400	6000	6000	6000	9000
Tehri	3809	4285	4761	4761	4761	7141
Chamoli	2971	3343	3714	3714	3714	5571
Uttarakashi	3062	3445	3828	3828	3828	5742
Rudraprayag	2326	2617	2908	2908	2908	4362
Haridwar	2694	3031	3368	3368	3368	5052
Total	**40000**		**50000**	**50000**		**75000**

Besides the above outlay, certain schemes like Backward Region Grant Fund (BRGF), AIBP etc. are operating through the district level committees and hence may be treated as district plan investments in the districts.

However, it is evident from the above table that district sector plan funding has remained blow the norms since the major portion of the State's approved annual plans is resources tied i.e. funding of EAPs, CSSs NABARD projects and a limited free float amount is left for making other allocations. Out of the total proposed allocation under district plan in 2012-13, 76.62 is proposed as capital investment.

Monitoring & Evaluation

In order to ensure utilization of plan resources and proper implementation of plan schemes with quality it is necessary to regularly review the progress and make specific scheme studies to identify the bottlenecks. As the State is allocating more than 60 percent of plan outlays for construction based projects, it is imperative to keep a strict supervision from the project formulation level. Major projects with involving investment of ₹ 5.00 crore and above are appraised and scrutinized by high level Expenditure Finance Committee. During the implementation the monitoring is carried out by the respective administrative departments and the Planning Department of the State in order to ensure timely completion of the projects/schemes.

To ensure quality, specially in the construction related works an effective quality control mechanism has been put in place in the State under which a panel of senior retired engineers of proven integrity has been created. Besides this, Third Party Quality assessment is also being done through the specialized agencies of national level. The coordination is being done by the State Planning Commission which also carries out evaluation studies on its own for socio economic related schemes. Prominent 14 NGOs have also been empanelled for this work. So far 16 in house studies have been completed 9 studies have completed by the NGOs.

Funds are being provided through the Planning Department. Findings of these reports are sent to the concerned departments and corrective measure are taken by them which again are review at the higher level.

ANNEXURE - 1

Infrastructure related indicator in some selected Stat

Sl. N	States	% of electrifiec villages tc total villages	Teacher Pupil Rate		Length of Roads	
				SBS	Per lakh populatior	Per thousand sq. km
1	Punjab	100.00		19	83.5	628.7
2	Haryana	100.00		41	120.9	605.1
3	U.P.	88.27		35	103.9	755.6
4	Chhatisgarh	95.61		38	179.4	289.7
5	Jharkhand	31.07		60	13.6	47.9
6	Uttarakhand	97.02		24	288.4	478.1
7	Himachal	98.22		34	286.6	322.5
8	India	83.62		34	142.3	464.2

Source : Statistical Diary, 2009-10, DES Uttarakhand

ANNEXURE - 2

Percentage of Net Area Sown to Total Reported Area, percen net Irrigated Area to New Sown Area and cropping intensity i States (2007-08)

Sl. Nc	States	% of Net Sowı Area to total reported area	% of Net irrigated area to net sown area	Cropping intensity
1	Punjab	83.2	98.2	188.0
2	Haryana	82.2	84.2	179.7
3	U.P.	67.9	79.7	151.8
4	Chhatisgarh	34.60	9.7	103.5
5	Jharkhand	26.70	21.8	104..4
6	Uttarakhand	13.3	45.2	158.3
7	Himachal	11.90	19.2	179.0
8	India	46.1	44.2	139.0

Source : Statistical Diary, 2009-10, DES Uttarakhand

ANNEXURE - 3

Productivity of main Agriculture Crops in Selected States (2008-09)

Sl. No	States	Crop K (Qtl./Ha)			
		Rice	Wheat	Potato	Sugarcane
1	Punjab	40.22	44.62	186.98	576.54
2	Haryana	27.26	43.90	176.98	570.00
3	U.P.	21.71	30.02	219.70	523.26
4	Chhatisgarh	11.76	10.40	42.11	23.96
5	Jharkhand	20.31	15.41	120.06	611.93
6	Uttarakhand	19.66	20.02	92.33	526.91
7	Himachal	15.23	15.20	91.03	230.87
8	India	21.78	29.07	183.31	645.53

Source : Statistical Diary, 2007-08, DES Uttarakhand

ANNEXURE - 4

Land Utilization in Plains and Hills of Uttrakhand (Ha)

Sl. no	Region	Total Reported Area	Forest	Net Area Sown	Net Irrigated
1	Dehradun	124034	68231	16660	7475
2	Hardwar	231078	72431	120237	103103
3	Nainital	135481	99445	16003	9810
4	US Nagar	279447	93738	149006	145226
	Total Plains	**770040**	**333845**	**301906**	**265614**
	Total Hill	**4901664**	**3134073**	**456883**	**75147**
	Grand Total	**5671704**	**3467918**	**758789**	**340761**

For Dehradun 2 Blocks Saharanpur and Doiwala and 2 blocks of Nainital i.e. Ramnagar and Haldwani have been taken as plains.

Net Irrigated area percentage to Net Sown area.

Plains	88%
Hill	16%
Total	**45**%

ANNEXURE - 5

The comparative performance of Productivity before implementation and after implementation of Horti. Techno Mission (HTM)

Sl. N	Name of the Crop	Productivity 2001-02 (MT/Ha.)	Productivity 2005-06 (MT/Ha.)
1	Fruits	1.61	4.41
2	Vegetables	6.33	11.00
3	Spices	2.96	6.10
4	Flowers (Area I	250.00	713.00

Source : Progress of Horticulture Technology Mission Department of Horticulture, Uttarakhand.

Chapter-7
Public Private Partnership

Public Private Partnership (PPP)

PPP is now assuming a vital role in infrastructure development plan of the governments world over. Uttarakhand State needs to develop its infrastructure faster in order to catch up with other States and the country as a whole.

PPP involves a long-term relationship between the public and private sector, while this collaboration may be taken in many forms, the most stable partnership is in the form of contract binding on both the parties.

Projects / programmes under PPP may broadly be classified under three heads namely, (1) Service contract (2) Operations and maintenance (Management) contract and (3) Infrastructure (capital) projects with operations and maintenance contract.

PPP Scenario

Uttarakhand had embarked on PPP journey as early 2003 with its first project of Inter State Bus Terminus (ISBT) in Dehradun. First few experiences have brought mixed results and have provided valuable learning for all the stakeholders.

In order to bring systematic approach and procedures in PPPs Uttarakhand joined GOI-ADB PPP Initiative "Mainstreaming of PPP in States" program with DEA, Government of India in 2007. Uttarakhand has received services of 2 experts from ADB under this scheme and Uttarakhand PPP Cell has been formed under the Department of Planning. This has helped the state in.

- Developing a pipeline of PPP Projects
- Successfully closing 25 projects in past four years.
- Formulating draft PPP Policy for the state
- Creating PPP Handbook for government employees
- Capacity building of various departments in PPP process
- Developing a bid documentation process
- Developing appraisal framework for PPP projects

Government of Uttarakhand has taken steps to create a PPP enabling framework. Apart from taking part in the GOI-ADB PPP Initiative "Mainstreaming of PPP in States" program, state has also introduced:

- PPP cell as an independent society
- Competitive and Transparent Procurement Process for PPP Partner selection by adding a clearly laid down process in Uttarakhand Procurement Rules 2008.
- Adoption of panel of Transaction Advisors of DEA, GoI with addition of state's two joint venture transaction advisors. This has been done to ensure quality at the project development stage.

- State Viability Gap Funding Scheme under which the viability gap funding shall be provided over and above the GoI's VGF scheme (if required). State VGF scheme also brought social sector like health and education into the purview of VGF and also has made extra funding provisions for projects in SC/ST areas and hill areas.
- Uttarakhand Project Development Fund.

Uttarakhand PPP Projects

Various government entities have made reasonable progress in formulating PPP projects in last few years as a result of government's sustained efforts to create PPP enabling environment in the state. Up to March, 2012 in all 09, 6 in social (health) sector, and Two from transport and one from urban development departments are under operation and 09 project agreement have been signed and projects are now under construction of these 3 projects belong to health, 1 tourism, 1 road(PWD), 2 energy, and one to urban development with a total value of ₹ 529.00 crore. Besides 7 projects are ready for signing agreement, 29 projects are under bidding and 40 project proposals are in the pipeline. The total value of all these projects is ₹ 5135 crore. So far only 17 projects have been cancelled for valid reasons.

40 projects are currently at various stages of development. These projects have been termed as projects in pipeline. At project development stage concept notes, pre-feasibility, detailed project reports are prepared after in-principle approval from the government. These 40 projects are worth approximately INR 2690 crores on the basis of project cost. Many of these projects require government to finance project development cost and annual grants (specially for social, agriculture, rural development projects). It is beyond the financial capacity of the state to meet some of these financial commitments through its own resources. As Uttarakhand is a "special category" state, at par with North-eastern states and Sikkim, Government of India is requested to give special support funding for PPPs as outlined in "Road Ahead" section.

Table1: Sectoral Snapshot of PPP Projects (as on March, 2012)

Project Pipeline (Numbers)							
Sector	Total	Operational	Agreement signed / nder construction	Bid Process complete Agreement to in be signed	Under Bidding	7 Pipeline	8 Cancelled
Energy	15	0	2	4	6	3	1
Tourism	24	0	1	0	12	11	2
Transport	8	2	0	1	1	4	0
Agriculture	8	0	0	0	2	6	3
Social	30	6	3	1	7	13	2
IT	0	0	0	0	0	0	2
Roads	2	0	1	0	0	1	0
Urban	**7**	1	2	1	1	2	7
Total	**94**	**9**	**9**	**7**	**29**	**40**	**17**
Investmer (₹ crore)	**5168**	**18**	**526**	**696**	**1075**	**2690**	**461**

Road Ahead

In the Year 2012-13 projects in bidding stage and pipeline stage are expected to mature into contract awards. This can be made possible with a few small changes in government's approach to infrastructure. Uttarakhand PPP Cell has summarized a few lessons learnt in the past and suggestions for the future road map for Infrastructure and PPPs.

- **Improving PPP Enabling Framework**
  - Releasing PPP Policy for the state (draft framed)
  - Creating Infrastructure regulatory systems and institutions
- **Infrastructure Mapping of the state would be done which would result in :**
  - Identify as is situation of physical and social infrastructure with special focus on "Hill Development Deficit"
  - Identify gaps and inter-linkages of infrastructure
  - Develop Infrastructure Indices for each sector which then could be used for measuring performance of infrastructure delivery periodically.

- Provide overall and sectoral strategy for developing infrastructure keeping in mind current gaps and future needs.

– **Training & Capacity Building**
  - Creation of PPP cell in departments & at the State level under Planning Department.
  - At the government level, political functionaries also would be sensitized regarding concept and processes of PPP
  - In the Administrative Department, up to the level of section officer would be made familiar with PPP process and their roles
  - At the Departments / Directorates PPP Cell or equivalent personnel trained for PPP need to be nominated
  - ULBs should also be provided training for PPP
  - State's administrative training Mechanism also would be made part of National PPP training capacity building program

– **Financing**
  - Awareness and communication among potential PPP partners to attract private investment
  - Investor meets based on overall and sectoral strategies emerging from infrastructure mapping exercise suggested earlier.
  - Inviting Financial Institution for Participation

– **Consumer / Citizen**
  - Communication of benefits of PPP like improved service quality and availability of services
  - Communication regarding user charge requirements for sustainability of infrastructure and services
  - Communication regarding job creation aspect of PPPs
  - Communication regarding Public Monitoring Service Levels of PPP Projects

– **Employees**

- It is important to educate employees of various Departments regarding the positive impact of PPPs for job growth in the state

In order to realize the potential of PPPs and enacting abovementioned programs Uttarakhand would need to create "Uttarakhand Infrastructure Development Fund" (UIDF)with following objectives:

- Funding of technical and financial pre-feasibility and feasibility studies, preparation of reports and bid documents and any other activities that need to be undertaken prior to offering proposed infrastructure projects for private sector participation including facilitation to select projects to assess viability gap

funding and other such schemes from Government of India.

- To provide direct financial support to the projects for enhancing project viability as considered by the Government on recommendation high level committees (Institutional mechanism proposed in draft PPP policy of the state)
- For capacity building and training**.**
- For the activities like multi-sector infrastructure mapping etc.

State has already brought projects worth ₹ 1500 crores to bidding stage with its own resources and funds are needed to finance at least project development cost of projects worth ₹ 3640 Crore which are at the pipeline stage. Even at a modest estimate of 3% of project cost for project development cost around ₹ 100 Crore would be needed to keep the momentum going.

It is important to mention here that due to smallness of business, private partners do not feel encouraged, there haven't in many PPP projects in important sectors like Road, Rail, Civil Aviation and Energy. Government of India, like in the case of North Eastern state, Centre may initiate some projects in such important, sectors in PPP mode with state also as a party.

Considering the precarious financial situation of the state and also pressure of adherence to FRBM act, it is requested to Government of India to give special grant allocation of at least ₹ 100 crore as a corpus fund of the Uttarakhand Infrastructure Development Fund (UIDF). This is very critical to maintain the momentum of the PPP in the state which was kickstarted with the efforts of DEA and the state.

As mentioned earlier, Uttarakhand has taken many initiatives in social sector PPPs where value for money is being realized by way of engaging private sector to deliver services in the health, education and social welfare department projects. These projects cater to both paying and non-paying customer segments and hence leading to performance related grant component for the private sector operator. This creates additional annual funding requirement, spread over the concession period of the project. This funding is different from the viability gap funding, which is essentially designed to provide a grant for capital components of the project.

(Figure ₹ in Lakh)

	Estimated Project cost	**Project**	**Estimated Grant Value**				
Sectors		**Development Cost**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Health	10,950	380	2,505	2,505	2,505	2,505	2,505
Education	18,800	940	457	457	457	457	457
Social Welfare	235	12	238	238	238	238	238
Rural Development	100	5	30	30	30	30	30
Water	80,000	800	200	200	200	200	200
Grand Total	**1,10,085**	**2,136**	**3,430**	**3,430**	**3,430**	**3,430**	**3,430**

12th Five Year Plan

As stated in earlier chapters that the estimated requirement of plan funds for the 11th FYP was about ₹ 42000 crores against which actual outlay has been ₹ 29554 crore leaving a gap of over ₹ 12000 crore. Similarly tentative requirement for the 12th Five Year Plan is projected to be ₹ 65300 crore. But keeping in view the trends of States finances a huge gap may take place. Hence to fill up this gap in plan investment the role of PPP is of vital importance. However, this would essentially require sensitization of people in change and capacity building of the departments for which PPP cell under the Planning Department would be reinforced.

At the Beginning of the Plan there are 40 Projects in the pipeline for which feasibility studies and concept notes have been prepared and EOI for many of them have been submitted. The Total project cost of these projects is about ` 2690.00 crore. The bid sanctioning process of these projects would be expedited so that they are in place during the first year of the Plan. Simultaneously infrastructure mapping would also be done in potential sectors like transport, energy, roads, education, urban development-including water supply, sanitation, solid waste management, parking and commercial complexes and necessary provisions would be made in successive annual plans with in the 12th Five Year Plan.