

# Memorandum

To The

# **Thirteenth Finance Commission**

Volume- I

**GOVERNMENT OF UTTARAKHAND** 

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## **Contents**

Terms of Reference of Thirteenth Finance Commission

**Chapter 1:** Introduction

**Chapter 2:** Profile of Uttarakhand

**Chapter 3:** Fiscal Situation in Uttarakhand: A Comparative Assessment

**Chapter 4:** Grants- in-aid: Receipts, Expenditures and Deficit Forecasts

**Chapter 5:** The *Inter se* Devolution Criteria – Some Issues

**Chapter 6:** Debt Situation and Debt Dynamics

**Chapter 7:** Local Body Finances

**Chapter 8:** Special Problems and Issues

**Chapter 9:** Summary and Conclusions

Annexure

# **Figures and Tables**

Figures	
Figure 2.1	Map of Uttarakhand
Figure 2.2	Per Capita GSDP (1999-2000 and 2006-07) at current prices
Figure 2.3	CAGR in Real per capita GDP (1993-94 to 2006-07)
Figure 3.1	Key Fiscal Indicators of the State (as % of GDP)
Figure 3.2	Per Capita Debt (2005-06)
Figure 3.3	Per Capita Interest Burden (2005-06)
Figure 3.4	Interest payments as percent to Revenue Receipts (2005-06)
Figure 3.5	Per Capita Own Non-Tax Revenue
Figure 3.6	Per Capita Own Tax Revenue
Figure 3.7	Per Capita Revenue Expenditure (2005-06)
Figure 4.1	Buoyancy of Own Revenues (2010-11 to 2014-15)
Figure 4.2	Buoyancy of Own Tax Revenues (2010-11 to 2014-15)
Figure 4.3	Buoyancy of Own Non-Tax Revenues (2010-11 to 2014-15)
Figure 6.1	Per Capita Debt: Uttarakhand (Rs)
Figure 6.2	Debt/GSDP- of Uttarakhand
Figure 6.3	Debt and Interest Payments- of Uttarakhand
Tables	
Table 2.1	GDP Growth (CAGR 1999-2000 to 2006-07)
Table 2.2	GDP Growth (CAGR -1993-04 to 1999-2000)
Table 2.3	Composition of GDP in Agriculture (% share)
Table 2.4	Pattern of Land Utilisation
Table 2.5	Composition of GDP in Industry (% share)
Table 2.6	Comparative position of per capita flows to States
Table 2.7	Road Availability
Table 2.8	Power Availability
Table 2.9	Tele- density (Telephone per 100 population)

Table 2.10	Population Density and Habitation size: Cost Drivers
Table 2.11	Intra State Disparity
Table 2.12	Index for access to services
Table 3.1	Major Deficit Indicators of State Government (as % of GDP)
Table 3.2 a	Fiscal Summary- of Uttarakhand
Table 3.2 b	Fiscal Summary- of Uttarakhand
Table 3.3	Sources of State's Own Tax Revenue
Table 3.4	Sources of Own Non-Tax Revenue
Table 3.5	Composition of Expenditure
Table 3.6	Committed Expenditures in Uttarakhand
Table 3.7	Per Capita Revenue Receipts
Table 3.8	Per Capita Revenue Expenditure (2005-06)
Table 4.1	Revenue Forecasts (2010-11 to 2014-15) (Rs. crore)
Table 4.2	Buoyancy of major sources of Tax and Non-Tax Revenues (2010-11 to 2014-15)
Table 4.3	Expenditure Forecasts (2010-11 to 2014-15)
Table 4.4	Deficit Projections (Rs Crore)
Table 5.1	The Devolution Criteria of the 12th Finance Commission
Table 5.2	Suggested Devolution Criteria for 13th Finance Commission
Table 6.1	Uttarakhand: The changing Composition of Debt (Rs. crore)
Table 6.2	Terminal value of Debt/GSDP in 2014-15 under alternate assumptions of Growth, Interest Rates and Primary Account Balance
Table 6.3	Terminal value of Debt/GDP in 2014-15 under alternate assumptions of Growth and Primary Account Balance
Table 6.4	Expenditure Increase due to 6th Pay Commission Pay-out (Rs crore)
Table 7.1	Revenue Surplus/Deficit of Zila Panchayats (Rs. 000)
Table 8.1	Spatial Scale of Ecosystem Services
Table 8.2	Annual value of various forests Ecosystem services of Uttarakhand
Table 8.3	Computation of Forest Cost Disability Index for Uttarakhand

## **Annex Tables**

Table A.2.1	Composition of GDP (current prices)
Table A.2.2	Composition of Service Sector GDP
Table A.2.3	Per Capita consumption Expenditure Per Month and its Distribution
	(2004-05)
Table A.2.4	Per Capita GSDP
Table A.2.5	Sex Ratio
Table A.2.6	Dependency Ratios
Table A.2.7	Households with Pucca Houses and Access to Toilet Facility (2003-04)
Table A.2.8	Percentage Distribution of Population by their source of drinking water
Table A.2.9	Literacy Rates
Table A.2.10	Gap in Literacy Rates
Table A.2.11	Education Attainment (2004-05)
Table A.3.1	Composition of Revenue Expenditure of Uttarakhand (per cent share)
Table A.3.2	Per Capita Estimates (2005-06)
Table A.3.3	Fiscal Parameters 2005-06 (as per cent of GSDP)
Table A 3.4	Fiscal Indicator : Percent Growth Rates (y-o-y)

## **Abbreviations and Acronyms**

ATR Action Taken Report

CRF Calamity Relief Fund

DMMC Disaster Mitigation and Management Centre

FC Finance Commission

NIC National Informatics Centre

NN Nagar Nigam

NP Nagar Panchayats

NPP Nagar Palika Parishads

MC Municipal Corporation

PRI's Panchayati Raj Institutions

SFC State Finance Commission

TFC Tenth Finance Commission

TOR Terms of Reference

ULB's Urban Local Bodies

UPSFC Uttar Pradesh State Finance Commission

ZP Zila Panchayat

SIDCUL State Infrastructure & Industrial Development Corporation of

Uttarakhand Ltd.

FRL Fiscal Responsibility Legislation

BE Budget Estimate

CAG Comptroller & Auditor General

CAGR Compounded Annual Growth Rate

C&P Circumstances and Property (tax)

EFC Eleventh Finance Commission

FRBM Fiscal Responsibility and Budget Management (Act)

GSDP Gross State Domestic Product

KP Kshetra Panchayat

O&M Operation and Maintenance

## **Abbreviations and Acronyms**

SFC State Finance Commission

TFC Twelfth Finance Commission

UPCL Uttarakhand Power Corporation Limited

VAT Value Added Tax

PHC Primary Healthcare Centre

GFD Gross Fiscal Deficit

RD Revenue Deficit

FD Fiscal Deficit

PD Primary Deficit

SCT Share Central Taxes

GIA Grant-in-Aid

LFC Loan from Centre

RE Revised Estimate

NPS New Contributory Pension Scheme

NFHS National Family Health Survey

NSS National Sample Survey

NSSF National Small Savings Fund

NCCF National Calamity Contingency Fund

CRF Calamity Relief Fund

## Introduction

- 1.0 In pursuance of Clause (1) of Article 280 of the Constitution, the 13th Finance Commission was set up in November 2007 to make recommendations on the transfer of resources from the Centre to the states. In line with past practices, the Finance Commission (hereafter called FC) solicited views of the state governments on various aspects of the terms of reference, henceforth referred to as TOR. It has further listed out the topics on which notes are required from the state governments.
- 1.1 Uttarakhand was born on November 9, 2000. Given the specificities of its terrain, economic structure, etc, it was carved out of Uttar Pradesh as the 27th state (11th Special Category state) of the Indian Union. While its creation from Uttar Pradesh allowed the state to start on a clean slate in some respects, the challenges before it, as we shall see later in this memorandum are still daunting.
- 1.2 The Special Category states have received differential treatment in our system of intergovernmental transfers. While designing transfers to these states, both the Planning Commission and Finance Commission have given due consideration to these states due to their hilly and difficult terrains, low population density, economic and infrastructural backwardness and their weak fiscal capabilities. The Planning Commission transfers to the Special Category states a higher proportion of grants (90 percent) vis-à-vis non-special category states (30 percent) and the norms for maintaining assets are more liberal for them. The treatment of the Special Category states in the Finance Commission transfers is summarised in Box 1.

## Box 1: Special Category States and Finance Commission

### Grants-in-Aid

- The 5<sup>th</sup> FC gave special consideration to the lower income of Scheduled Tribes in Nagaland. It also assigned grants to border states like J&K for strategic purposes.
- The 7th FC gave a grant to Assam for creating a new capital following its separation from Meghalaya.
- The 11th FC observed that a substantial amount of grants-in-aid would go the Special Category states and by 2004-05 only these states would receive grants-in-aid to meet the deficit on their non-Plan revenue accounts.
- The 12<sup>th</sup> FC gave Uttarakhand a grant of Rs. 200 crore to develop infrastructure at its state capital and Rs 35 crore for promoting tourism.

## **Sharing of Central Taxes**

• While using the 'area' criteria for tax devolution, the 12th FC assigned a minimum two percent share for those states having an area smaller than two percent. This benefited the Special Category states.

#### **Debt Relief**

- The 5<sup>th</sup> FC gave debt relief to Assam, J&K and Nagaland on interest to be paid on the loans taken for unproductive purposes.
- The 6<sup>th</sup> FC converted the loans taken by the newly-formed states of Himachal Pradesh, Manipur and Tripura, and also of the Union Territories into a single loan repayable in 20 years.
- The 8<sup>th</sup> FC wrote off 85 per cent of the reassessed non-Plan gap of J&K, Himachal, Tripura, Manipur, Meghalaya, Nagaland, and Sikkim.
- The 10<sup>th</sup> FC recommended specific repayment relief to the Special Category states.

#### **Calamity Relief**

• The 12<sup>th</sup> FC, in its definition of natural calamity, included landslides, avalanches, and cloudbursts to specifically address the disasters faced by the hilly states.

#### **Upgradation and Special Purpose Grants**

- The 8th FC recommended that the entire amount required for upgradation in some of the Special Category states be met out of grants.
- In the normative approach of the 9<sup>th</sup> FC, higher wear and tear in the hill states and a lower rate of return was prescribed for road transport corporations. Higher norms for maintenance were also specified for the hill states.

Source: Reports of various Finance Commissions.

1.3 The fact that its parent state UP, being a non-special category state, received meagre grants from the 11<sup>th</sup> FC meant that Uttarakhand too was deprived of the grants that it would have normally received. In comparison to Himachal (its close comparator in some respects), which was awarded Rs 4,549 crore as non-Plan deficit grants for the period 2000-01 to 2004-05, Uttarakhand received a measly sum of Rs 17 crore. Although the 12<sup>th</sup>

FC increased this to Rs 5,114 crore for the period 2005-06 to 2009-10, it is still nearly half of what Himachal got for this period.

- 1.4 Apart from the above, there are a number of specific characteristics of the state that not only make it vulnerable to natural calamities but also translate into low revenue capability and high expenditure requirements. This should not be construed to imply that there are no opportunities in the state. First, being a new state it can and indeed has learnt from the past experience of other states. The revenue potential of the state, for example, could be built around tourism and hydel power. However, this would require huge upfront expenditure to create the necessary infrastructure, while the pay- offs in terms of revenue could accrue only in the medium-run. Thus, for all this to happen, support of the Finance Commission in filling the revenue gap would be critical.
- 1.5 This memorandum is divided into 9 Chapters. Chapter 2 sketches the profile of Uttarakhand in terms of its economic structure, demography, amenities, and social and physical infrastructure. This chapter also benchmarks the above-mentioned parameters with the comparator Special Category states and a national aggregate. This analysis serves two purposes. The economic structure and other specificities of the state have a critical impact on its fiscal position as revenue capabilities as well as its expenditure needs depend on them. Benchmarking it in terms of relevant parameters against other states permits us to gauge the initial conditions in this relatively new state vis-à-vis other states.
- 1.6 Chapter 3 examines the current fiscal situation of Uttarakhand, draws the link between the profile of the state and its finances and benchmarks it with other states. Chapter 4 deals with the revenue and expenditure forecasts and the rationale behind them. The forecasts draw upon the profile of the state, its specificities and the reasons for the current fiscal situation and use this information for substantiating the expenditure and revenue projections. The projections take into account the endeavour of the state to move to a higher growth trajectory, raise its revenue base and rationalise expenditures.
- 1.7 Chapter 5 analyses the existing devolution criteria and makes suggestions for its improvement. One of the TOR of the 12th FC says: "The Commission shall review the state of the finances of the Union and the states keeping in view, in particular, the

operation of the states' debt consolidation and relief facility 2005-10 introduced by the Central Government on the basis of the recommendation of the 12<sup>th</sup> Finance Commission and suggests measures for maintaining a stable and sustainable fiscal environment consistent with equitable growth". In view of this, **Chapter 6** reviews the debt situation of Uttarakhand and makes a case for debt relief.

- **1.8 Chapter 7** deals with the issues of local bodies. **Chapter 8** deals with some of specific issues of Uttarakhand. These relate to:
  - Valuation of ecosystem services
  - Tourism
  - Vulnerability and calamity relief
  - Special problems and upgradation grants
- 1.9 Chapter 9 concludes the memorandum by highlighting the main issues shaping the fiscal future of Uttarakhand and their impact on the state's requirements for transfers in the coming five years.

## Profile of Uttarakhand

#### **INTRODUCTION**

- 2.0 This chapter profiles the state of Uttarakhand in terms of its economic structure, geographic characteristics and certain critical social, demographic and infrastructure parameters. With respect to each of these indicators, the state is compared with the other Special Category and new states. Uttarakhand is the only state that is contained in the union of those otherwise mutually exclusive sets.
- 2.1 Each of the indicators discussed in this chapter has direct relevance for the analysis of the public finances of the state. The economic structure determines the tax base and, therefore, influences the revenue potential of the newly-created state. The social and demographic parameters, when seen in a comparative context, justify the need for expanding the provision of public services. This implies higher expenditures for critical departments such as health and education.
- 2.2 The geography of the state also has a direct expenditure implication. The terrain does not support large clusters of households. As a consequence, the state is characterised by a relatively large number of relatively small habitations. Each of these has to be provided with some minimal level of services. In doing so, the state is unable to take advantage of agglomeration economies that characterise many of these services. Some threshold levels of capital and operating expenditures have to be made to achieve even small levels of service delivery, but once this is done, the capacity of the system is expandable. The result is that the average cost of delivery in Uttarakhand, driven by the large number of small habitations, is relatively high. In addition to fragmentation, the nature of the terrain itself increases the cost of delivery.

#### **BASIC GEOGRAPHICAL FEATURES**

**2.3** Located between latitudes 29°5′-31°25′N and longitudes 77°45′-81°E, covering a geographical area of 53,483 sq km, Uttarakhand has a very diverse topography ranging

from the plains in the south to the snow-covered peaks in the north. About 61.1 percent of its geographical area is under forest cover. As per the 2001 Census, the population of Uttarakhand was 84.89 lakh. On the basis of its terrain, the 13 districts of the state can be roughly classified into three zones:

- 2.4 The plains/lower hills comprise of the districts of Udham Singh Nagar, Haridwar and parts of Dehradun. These districts border Uttar Pradesh.
- **2.5** The high hills include the districts of Uttarkashi, Rudraprayag, Chamoli and Pithoragarh. These districts have international boundaries with China and Nepal.
- **2.6** Mid hills covering the districts of Tehri, Pauri, Nainital, Almora, Chapawat and Bageshwar are sandwiched between the low and the high hills. Champawat is the only mid-hill district sharing an international border with Nepal.
- 2.7 These zones are depicted in Figure 2.1. While the topography of Uttarakhand offers opportunities in terms of tourism and hydroelectric power, it also makes the creation of infrastructure and delivery of services not only costly but also difficult. Further, its international borders with China and Nepal raise security concerns.

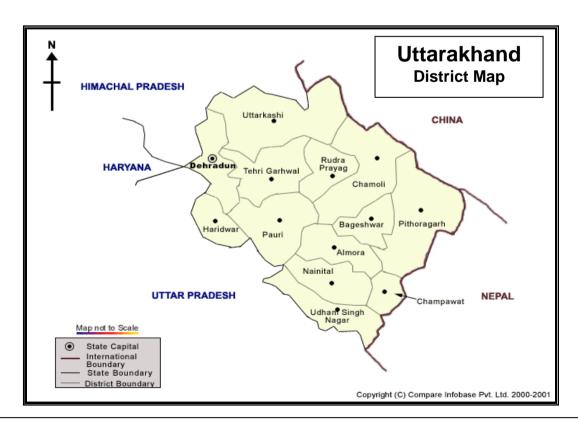


Figure 2.1: Map of Uttarakhand

2.8 In this Chapter, the economic structure of Uttarakhand, its growth performance, demographic and infrastructure characteristics are examined. In doing so, a comparison of the characteristics of the state against other Special Category states and the All-India level estimates is also made. Some special features of Uttarakhand that relate to environment and forests, vulnerability of the region and tourism that have fiscal implications are also discussed.

#### ECONOMIC STRUCTURE AND PERFORMANCE

### **Growth Performance**

2.9 Between 1999-2000 and 2006-07, when the national economy registered a growth of 7.0 percent per annum, Uttarakhand's real GDP during the same period grew at an impressive rate of 9.0 percent (Table 2.1). The growth performance of the state is not only better than the overall growth performance of the national economy during this period but is also better than the Special Category states. However, we must not forget that prior to the creation of this new state, its growth performance was way below the national

Table 2.1 GDP Growth (CAGR 1999-00 to 2006-07)

	Agriculture	Industry	Services	Overall
Uttarakhand	2.4	17.2	8.1	9.0
Himachal Pradesh	7.2	7.9	6.4	7.1
Assam	1.8	7.1	6.8	5.3
Arunachal Pradesh*	1.6	16.5	6.2	7.6
Jammu & Kashmir**	3.6	5.2	4.1	4.2
Manipur	4.9	17.9	2.6	7.8
Meghalaya	4.6	7.7	5.3	5.8
Mizoram	1.4	8.6	8.6	7.2
Nagaland**	14.3	11.8	8.4	10.6
Sikkim	6.1	14.0	5.9	7.8
Tripura*	3.4	14.7	8.2	8.1
Jharkhand	4.6	7.0	6.5	6.4
Chhattisgarh*	5.2	9.2	6.3	7.1
Maharashtra*	1.8	3.6	7.2	5.4
Punjab	2.1	6.4	5.3	4.5
All Special Category States 2004-05	4.5	13.2	8.7	8.6
All India	2.5	7.8	8.5	7.0

**Source:** Central Statistical Organisation.

For the States with \*, latest data is for the year 2005-06

For the States with \*\*, latest data is for the year 2004-05

average and also the average of the Special Category states (Table 2.2). This shows that the creation of Uttarakhand has indeed helped the erstwhile hilly region of Uttar Pradesh to improve its growth performance.

Table 2.2 GDP Growth (CAGR 1993-94 to 1999-00)

	Agriculture	Industry	Services	Total
Uttarakhand*	1.6	1.4	4.9	2.9
Uttar Pradesh (D)	2.9	5.9	5.2	4.5
Himachal Pradesh	-0.1	11.6	8.4	7.1
Assam	1.1	4.6	3.1	2.7
Arunachal Pradesh	-1.6	1.3	8.8	2.8
Jammu & Kashmir	4.5	2.9	6.7	5.2
Manipur	3.1	11.6	9.1	7.7
Meghalaya	7.1	8.2	6.4	6.9
Mizoram	0.7	5.4	6.8	4.9
Nagaland	8.1	2.8	2.8	4.2
Sikkim	3.8	11.1	9.5	8.0
Tripura	3.3	15.5	7.5	7.3
Jharkhand	2.1	3.8	3.9	3.4
Chhattisgarh	-2.6	4.1	6.0	2.9
Goa	-1.1	4.9	11.6	7.8
Maharashtra	1.5	6.8	7.5	6.2
Punjab	2.4	7.2	6.8	5.0
All Special Category States	2.0	5.8	5.5	4.4
All-India	3.1	6.9	8.7	6.6

Source: Central Statistical Organisation.

2.10 The sectoral growth pattern reveals that the services sector, which was the best performing sector of Uttarakhand before its creation, has been overtaken by the industrial sector for the period 1999-00 to 2006-07. As compared to the services sector CAGR of 8.1 percent, the industrial sector grew at a CAGR of 17.2 percent for the period 1990-00 to 2006-07. Also, while its growth performance in agriculture and services are comparable to the national average for the reporting period, its industrial growth is more than double the national average for the same period (Table 2.1). The special category status and the 'industrial package' has helped Uttarakhand in attracting industrial investment after its formation as its industrial growth for the period 1993-94 to 1999-00 was a paltry 1.4 percent.

<sup>\*</sup> GDP (real) for Uttarakhand was computed using price deflators for UP

## **COMPOSITION OF GDP**

2.11 Annexure Table A2.1 compares the composition of the state's GDP with other Special Category states, three high-income states (Goa, Punjab and Maharashtra), the newly formed states and the national GDP. It also documents the change in the composition of GDP of these states between 1999-00 and 2006-07. The growth performance of Uttarakhand vis-à-vis other comparator states is documented in Annexure Table A2.2. The following observations can be made on the basis of inter-state comparisons.

## Agriculture

- **2.12** The share of agriculture (29.9 percent) in the state's GDP, which was higher than the national average (25 percent) and comparable to the average of all Special Category states (30.4 percent) in 1999-00, has declined significantly (19.8 percent) in 2006-07. The decrease is much higher as compared to the national average as well as the average of the Special Category states. Simultaneously, the share of industry, which was 19.7 percent in 1999-00, has gone up to 30.8 percent in 2006-07. But the share of services in the Uttarakhand economy has remained more or less at the same level for this period. Due to this transformation, the composition of the state GDP now looks not only similar to Himachal but is also similar to the national average. Since agriculture is not effectively taxed, a higher share of agriculture in the GDP often acts as a constraint on the ability of the state to generate tax revenue. Thus, this transformation in the economic structure has indeed enhanced the tax revenue potential of the state. However, we must not forget that this transformation has come about on a very low base. This simply means that from a negligible industrial base, the state has been able to create some industrial base. But in terms of catching up with Himachal/other industrialised states, it still has a long way to go.
- 2.13 Table 2.3 compares the composition of agricultural GDP of Uttarakhand (between 1999-00 and 2006-07) with other states. Forestry and logging, which were a key component of agricultural GDP of Uttarakhand till about the early 90s, has become less important since then. Its share in agricultural GDP has fallen from almost 33 percent in 1993-94 to 9.1 percent in 1999-00 and further to 8.9 percent in 2006-07. The same however can not be said

about Jharkhand, Chhattisgarh and Himachal. Nevertheless, it is clear that with rising concerns about environment, the share of forestry and logging in agriculture GDP will only shrink in future. For the Special Category states, the share of forestry and logging in agriculture has fallen from 7.1 percent in 1999-00 to 6.8 percent in 2006-07. For Uttarakhand, which has 61 percent forest cover, (see Table 2.4), the sharp fall in the contribution of forestry to agricultural GDP has critical implications for livelihood as well as forestry-related revenues.

Table 2.3 Composition of GDP in Agriculture (% share)							
	Uttarakhand	Himachal	Jharkhand	Chhattisgarh	All Spl Category States	All-India	
	1993-94						
Agriculture	66.9	77.2	86.1	89.5	85.1	91.7	
Forestry & logging	32.9	21.6	8.5	9.1	10.0	4.7	
Fishing	0.2	1.2	5.4	1.4	4.9	3.6	
				19	99-00		
Agriculture	90.7	83.8	87.0	85.8	89.7	91.7	
Forestry & logging	9.1	15.2	7.4	10.1	7.1	4.0	
Fishing	0.2	1.0	5.6	4.1	3.2	4.2	
	2006-07	2006-07	2006-07	2005-06	2004-05	2006-07	
Agriculture	90.9	83.5	84.9	81.8	89.8	91.2	
Forestry & logging	8.9	15.9	13.3	12.7	6.8	3.9	
Fishing	0.2	0.6	1.8	5.5	3.4	4.9	

Source: CSO

**Table 2.4: Pattern of Land Utilisation** 

	_	Area (Ha)	% Area
1	Total Reported Area	5,670,110	100.0
2	Forest Cover	3,465,057	61.1
3	Culturable Waste	3,86,288	6.8
4	Fallow		
	(i) Current Fallow	41,683	0.7
	(ii) Other Fallow	68,432	1.2
5	Barren & Unculturable Land	3,11,817	5.5
6	Land put to Non-agricultural Use	1,52,180	2.7
7	Permanent Pasture & Other Grazing Land	2,28,944	4.0
8	Misc., Tree Crops and Groves	2,48,979	4.4
9	Net Area Sown	7,66,730	13.5

Source: Uttarakhand at a Glance, Government of Uttarakhand (2007-08)

## **Industry**

- **2.14** As noted above, industrial growth in Uttarakhand has been quite impressive during the 1999-2000 and 2006-07. Consequently, the share of industry in GDP increased from 19.7 percent in 1999-2000 to 30.8 percent in 2006-07.
- **2.15** Industry comprises manufacturing, mining, electricity and construction. Table 2.5 compares the composition of industry in Uttarakhand with other states. The following trends are significant:
- **2.16** The share of mining and quarrying in industrial GDP of Uttarakhand has almost remained at the same level between 1999-00 and 2006-07. From 5.7 percent in 1999-00, it marginally increased to 5.8 percent in 2006-07. In Himachal, it decreased from 1.3 percent to 0.6 percent during the same period.
- **2.17** For Uttarakhand, the share of the manufacturing sector in industrial GDP fell from 46.7 percent in 1999-00 to 42.3 percent in 2006-07. However, the fall was restricted to unregistered sector which fell from 21.9 percent in 1999-00 to 12.1 percent in 2006-07. Even at the national level and at the level of Special Category states as a whole, this trend was visible between 1999-00 and 2006-07, but the magnitude was different.
- 2.18 Within the industrial sector, the construction sector has done quite well as its share in the total industrial GDP of the state increased from 37.2 percent to 46.6 percent between 1999-00 and 2006-07. The share of the construction sector in industrial GDP witnessed an increase even at the national and Special Category states level too for this period. However, the contribution of this sector to the industrial GDP is relatively higher in Uttarakhand (46.6 percent) as compared to the national level of 28.8 percent and other Special Category states at 43.2 percent, but is lower than that of Himachal where it is a high 53.1 percent.
- **2.19** The electricity, gas and water supply segments of the industry saw their shares declining from 10.4 percent in 1999-00 to 5.3 percent in 2006-07.

**Table 2.5: Composition of GDP in Industry (% share)** 

	Uttarakhand	Himachal	Jharkhand	Chhattisgarh	All spl. cat States	All India
			199	3-94		
Mining & Quarrying	6.9	2.2	35.8	23.4	17.7	9.8
Manufacturing	56.5	31.4	48.8	50.1	34.3	61.2
- Registered	48.3	23.4	44.0	36.5	21.2	39.9
- Unregistered	8.1	8.0	4.8	13.6	13.1	21.3
Construction	28.6	49.8	9.9	11.6	37.4	19.8
Electricity, gas & water supply	8.1	16.6	5.6	14.8	10.7	9.3
			199	9-00		
Mining & Quarrying	5.7	1.3	26.3	34.1	12.6	9.2
Manufacturing	46.7	32.0	56.9	40.7	32.0	58.4
- Registered	24.8	25.7	51.6	30.2	20.3	38.3
- Unregistered	21.9	6.3	5.3	10.5	11.7	20.1
Construction	37.2	53.3	13.4	10.3	40.9	22.6
Electricity, gas & water supply	10.4	13.5	3.4	14.9	14.5	9.8
	2006-07	2006-07	2006-07	2005-06	2004-05	2006-07
Mining & Quarrying	5.8	0.6	21.0	21.2	12.4	9.2
Manufacturing	42.3	29.5	66.9	60.0	31.3	55.7
- Registered	30.2	24.6	63.0	52.0	22.8	38.6
- Unregistered	12.1	4.9	3.9	8.0	8.6	17.0
Construction	46.6	53.1	9.5	9.7	43.2	28.8
Electricity, gas & water supply	5.3	16.8	2.6	9.1	13.1	6.4

Source: Central Statistical Organisation

2.20 The above inter-state comparison highlights the trends in the industrial sector of Uttarakhand vis-à-vis other states and shows that since its formation, the share of the registered manufacturing sector in industrial GDP has increased significantly and indeed the fiscal concessions given to promote industrial development in the state has a lot to do with it. These fiscal incentives relate to Excise and income tax and have been extended to all the Special Category states by the Central Government. The state government, however, has resisted from extending any significant fiscal concessions with regard to sales tax (now VAT) to the industry. Instead, the steps taken by the state government to attract industrial investment in the state are:— promise of reasonably good infrastructure, regular power supply and single-window clearance.

#### Services

**2.21** The services sector continues to be the best performing sector in Uttarakhand, though its share in the state GDP declined marginally from 50.5 percent in 1990-00 to 49.5 percent in

2006-07. The bulk of the services sector GDP originates in trade, hotels and restaurants. Its share in the services GDP went up from 33.0 percent in 1999-00 to 34.4 percent in 2006-07. The proportion of this segment in the services GDP is higher than that of Himachal and the other Special Category states (Annexure Table A 2.2).

- **2.22** Among other services, the share of transport, storage & communication in the services sector GDP went up from 14.5 percent in 1999-00 to 16.4 percent in 2006-07. This is higher than its close comparator Himachal as well as all Special Category states.
- **2.23** However, the share of banking & insurance and other services comprising medical, social services, etc. in the services sector GDP went down from 7.0 percent and 20.7 percent in 1999-00 to 5.9 percent and 19.9 percent respectively, in 2006-07.

### TOURISM POTENTIAL

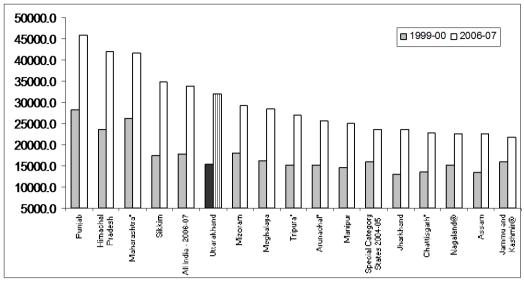
- 2.24 We have noted above that trade, hotels and restaurants are major contributors to the services sector GDP of Uttarakhand. These groups can contribute even more to the state GDP as the state offers immense untapped opportunities in the area of tourism and related activities. Therefore, development of the tourism industry has been declared as a thrust area by the state.
- **2.25** Uttarakhand, besides being host to Haridwar, Rishikesh, the Char Dhaam and the sacred Ganga & Yamuna, has many other pilgrim centres and sites of historical and religious importance. There also lies a vast potential for mountain, leisure, adventure, eco and highend tourism activities.
- 2.26 Although Uttarakhand is the first state in the country to have created a Tourism Development Board by legislation as the highest body to function as the promoter, regulator, adviser and licensing authority for tourism in the state, tourism industry in the state has yet not developed to its potential. Thus, tourism industry, if provided adequate support, can add significantly to the economy of the state and the people.
- **2.27** The New Industrial Policy of Uttarakhand (2003) has identified the following areas where the state has a comparative advantage: tourism, hydel power, agro and food processing,

handloom, khadi and village industries. Developing tourism will require strengthening of the existing as well as new infrastructure. Hydel power development will be capital intensive with long gestation period-- both due to the nature of activity as well as the environmental issues involved. Agro and food processing, and horticulture related industries are less capital intensive and local resource-based. Khadi and village industries too have a significant potential but are in need of modernisation and technical upgrade and marketing. While addressing these issues, the New Industrial Policy has also identified information technology and biotechnology as thrust areas. All these require significant infrastructural support--implying increased government spending--while the efforts are expected to yield results only after medium/long term.

#### PER CAPITA INCOME AND CONSUMPTION EXPENDITURE

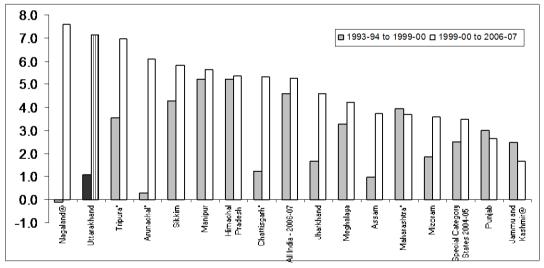
- **2.28** Per capita income is regarded as an important indicator of standard of living. As a general practice, per capita GSDP is used as a proxy for per capita income. GSDP considers the total income generated within a state and, therefore, ignores remittance income. However, since GSDP is the only income indicator available at the state level, we have made per capita GSDP comparisons across states. The following observations are in order:
  - Uttarakhand's nominal per capita GDP was Rs. 32,077.2 in 2006-07. While this is higher than the average per capita GDP of all the Special Category states, it is marginally lower than the average national per capita GDP. Even in 1999-00, the per capita GDP of Uttarakhand was higher than the Special Category states but was lower than the national average. Further, like 1999-00 even in 2006-07, Uttarakhand's per capita GDP is much lower in comparison with higher income states like Punjab, Maharashtra as also Himachal, (Annex Table A2.4/ Figure 2.2). This shows that the relative position of Uttarakhand so far as per capita GDP is concerned has not changed between 1999-00 and 2006-07.

Figure 2.2: Per capita GSDP (1999-00 and 2006-07)
At current prices



Source: CSO

Figure 2.3: CAGR in Real Per Capita GDP (1993-94 to 2006-07)



Source: CSO

As compared to the national real per capita GDP growth of 5.2 percent per annum, Uttarakhand recorded a growth of 7.1 percent per annum between 1999-00 and 2006-07. This contrasts sharply with the period 1993-94 to 1999-00 when the real per capita GDP of Uttarakhand grew by meagre 1.1 percent per annum as compared to 4.6 percent for all-India. The growth in per capita GDP of Uttarakhand for the period 1999-00 to 2006-07 is also higher than other Special Category states in general and Himachal in particular (Annex Table A2.4 / Fig 2.3).

- The growth in per capita GDP indicates that since its creation, Uttarakhand has indeed done well to enhance the well being of its people. Yet it is far behind its comparator state Himachal in terms of per capita GDP.
- 2.29 Like the per capita GSDP in 2004-05, the per capita consumption expenditure in Uttarakhand (Rs 725 per month) is also above the Special Category states average (Rs 693 per month) and above the national average (Rs. 684 per month). While this pattern is true for rural Uttarakhand as well, the per capita consumption expenditure in urban Uttarakhand is lower than the average urban per capita consumption both among the Special Category states as well as nationally. However, across the states per capita consumption is much higher in urban areas than in rural areas (Annexure Table A2.3)

## TERRAIN AND MAINTENANCE COSTS: AN ILLUSTRATION

- **2.30** That there is a great difference in the cost of creation and maintenance of assets in hills and plains is now well established. The Finance Commission too in its normative assessments makes an allowance for these differentials. Although the 11<sup>th</sup> FC did not recommend any separate grants for maintenance of roads, the 12<sup>th</sup> FC did.
- 2.31 Cost of maintenance of roads in hill areas is always higher as road materials like Bitumen, etc, has to be transported from the plains. Also the running cost of machinery is higher in hills. In fact, the cost difference between maintenance of roads in hills and plains is as high as 53 percent for the roads having more than 1,500 commercial vehicles daily (henceforth CVD). The cost difference ranges from 26 percent for the single lane roads with a CVD limit of less than 150 vehicles to a high of 53 percent for the double-lane roads having more than 1,500 CVD.
- 2.32 An ordinary repair of a painted road in plains costs Rs 0.24 lakh per km while in the hills, the expenses go up to Rs 0.32 lakh per km. However, in case of a special repair or flood damage repair the cost difference is to the tune of 33.3 percent, with the costs of repair in hills being Rs 0.12 lakh. The cost of maintenance of unpainted roads in hills varies from Rs 0.25 lakh for an ordinary repair to Rs 0.05 lakh for any kind of special repair or flood damage. The costs for special repair and flood damage are higher for the border roads at

Rs 0.125 lakh. Thus, a greater amount of time and effort are required to undertake a very crucial activity in the hills-- like the maintenance of roads.

2.33 Given the lack/difficulty in setting up a rail system, roads emerge as an important medium of movement of goods and passengers. For a state like Uttarakhand that has a predominantly hilly terrain this corresponds to very high level of expenditure, which is not just one-time but has to be incurred every time a road gets damaged either by rains, landslides or any other natural disasters. Moreover, as the road network expands in the state the fund required to maintain them would also increase proportionately.

#### PER CAPITA CAPITAL FLOWS

- **2.34** Table 2.6 documents some indicators of capital flows to Uttarakhand and other Special Category states. They have been standardised in per capita terms to facilitate comparability. Some key inferences that can be drawn from these indictors are as follows:
  - Despite the credit deposit ratio of Uttarakhand improving marginally between 2001 and 2007, it is still very low as compared to the other Special Category states. This is a clear pointer towards lack of investment opportunities in the state.
  - Per capita Plan outlay also shows some increase between 2001-02 and 2005-06. Yet, it continued to be one of the lowest among the Special Category states.
  - Per capita credit utilised in Uttarakhand though shows significant improvement between 2001 and 2006, it is still lower by a considerable margin in comparison with Himachal, its nearest comparator state.
  - All these indicators point towards the fact that since its creation, Uttarakhand though may have created some investment opportunity within the state, it still fares quite poorly in terms of per capita capital flows among the Special Category states. In the present era where private, institutional and external capital flows usually favour states with better infrastructure, this is certainly a cause of concern for state which is still finding its feet to make the state an attractive investment destination.

Table 2.6: Comparative position of per capita flows to States

	Credit Deposit Ratio		Ratio Per capita Plan Outlay (Rs.)		Per capita Scheduled Bank Credit Utilised in States (Rs.)		
	2001	2007	2001-02	2005-06	2001	2006	
Arunachal Pradesh	22.1	26.8	6,057.2	3,772.1	1,165.3	5,157.9	
Assam	38.1	43.3	641.9	353.9	1,318.9	3,576.8	
Manipur	40.7	53.5	1,476.4	2,444.3	697.7	2,503.9	
Meghalaya	17.3	35.8	2,050.3	1,051.8	1,160.9	15,041.9	
Mizoram	29.0	53.8	4,954.9	4,547.5	1,149.8	5,195.6	
Nagaland	13.6	28.9	2,069.1	2,023.5	491.3	1,835.5	
Sikkim	14.5	52.4	5,550.5	5,981.7	1,524.0	10,130.8	
Tripura	21.7	34.0	1,754.8	1,824.2	1,000.2	3,443.5	
Himachal	25.7	41.5	2,870.6	1,232.7	2,873.9	11,241.2	
J & K*	33.5	47.3	2,035.8	2,861.9	2,906.6	8,908.9	
Uttarakhand	23.9	27.0	1,238.3	1,809.6	2,438.1	7,956.1	
Chhattisgarh	49.9	53.0	630.9	653.4	1,651.5	4,761.4	
Jharkhand	30.6	34.0	836.1	763.1	1,625.7	3,392.1	

Source: RBI

### EMPLOYMENT, SEX RATIO, DEPENDENCY AND MIGRATION

- 2.35 Uttarakhand, which had a sex ratio of 964 in comparison to the national level of 933 in 2001, shows an even higher sex ratio of 1,010 in 2004. This number makes sex ratio of Uttarakhand to be the highest among all the Special Category states and also much higher than the national average of 951. Interestingly, in 2001, the sex ratio of Manipur, Meghalaya and Himachal was higher than the sex ratio of Uttarakhand. However, the picture is somewhat different when one looks at the rural and urban sex ratio. While rural Uttarakhand continues to have the highest sex ratio (1,044) among the Special Category states in 2004, its urban sex ratio is lower than the Special Category states as also the national average (Annexure Table A2.5).
- 2.36 Among the Special Category states, the fastest growth in the overall sex ratio between 2001 and 2004 was witnessed by Uttarakhand (4.8 percent) followed by Himachal (3.5 percent). The high sex ratio in Uttarakhand in general and more so in its rural belt clearly reflects lack of employment opportunities leading to out-migration of male workforce whose literacy level is reasonably high (Bora,1996). There is nothing wrong with high migration per se as it often brings in remittance income. However, what needs emphasis

is that out-migration from Uttarakhand is often not by choice and are forced one because of a weak economic base<sup>1</sup>.

2.37 Another indicator of high government spending requirement in the state is the dependency ratio – both old age and child. The higher the ratios, the higher would the spending requirement on the social services. The child, old age and overall dependency ratios in rural and urban areas are presented in Annex Table A2.6. Child dependency is defined as the ratio of population in the age group 0-17 to the working age group (18-59). Old age dependency is defined as the ratio of population over 50 years to the population in the age group of 18-59. For deriving dependency ratios we have used NSS 55th and 61st round data.

## The following observations are in order:

- The total dependency ratio of Uttarakhand is higher than both the Special Category states as also the all-India average in 2004-05. In fact, its total dependency ratio overall as also for the urban areas is highest among the Special Category states. Although the total dependency ratio of Uttarakhand in 2004-05 as compared to 1999-00 has declined, it continues to be a state with higher dependency ratio.
- Like total dependency ratio, the old age dependency ratio of Uttarakhand is also higher
  than the national average and Special Category states in 2004-05. Further, Uttarakhand
  has the second highest old age dependency in both urban and rural areas. The high oldage dependency ratio implies a higher need for government spending on health and
  medical infrastructure in the state.

<sup>&</sup>lt;sup>1</sup> See R.S.Bora (Himalayan Migration: A study of the hill region of Uttar Pradesh 1996). Bora lists out some important characteristics of migration in Uttarakhand. His results based on a sample survey, points out that significant portion of the out-migrants were non-workers and among workers, majority were males. Further, most of the migrants were either literate or had some level of formal education when they moved out. This supports the view of lack of employment opportunities in the region, which could meet the expectations of literate population. Bora's study further points out that migration in Uttarakhand have not benefited the state. As per his calculations the opportunity cost of out-migration is around Rs 2,886 per annum per household. The annual benefits to an average household in the form of remittances were lower than foregone earnings, thus making the net benefit negative (28).

- Similarly, the child dependency ratio in Uttarakhand is highest among the Special Category states and is also higher than the national average for 2004-05. This means higher spending needs for both basic education and health infrastructure.
- 2.38 The straight forward implication of higher dependency ratio is higher expenditure requirement by the state government on both education and health. Luckily, the 11th Finance Commission had taken cognisance of the age profile of the population while reassessing the expenditure requirements of the state. In its report it noted "On the expenditure side, the normative approach would imply in essence that the expenditure per capita that a state has to incur on the revenue account will be worked out broadly on the basis of average expenditure per capita that a state has to incur on the revenue account to provide public services at a 'reasonable' level, after allowing for cost differentials among them arising from factors not within their control, such as terrain, age-profile of the population, varying rates of inflation and other relevant factors". (Chapter5, Para 5.5)

#### PHYSICAL INFRASTRUCTURE AND AMENITIES

#### Roads

- **2.39** As on 31 March 2008, the state had 19778.56 km of roads maintained by the PWD, of which more than 13200.41 km consisted of painted roads. In addition to the above there were 3391.34 km of bridle roads and 497.41 km of border tracks.
- 2.40 Although the length of metalled roads per lakh population in the state is higher than Himachal in 2001-02, this was not the case in 1996-97. Even the length of metalled roads per sq km in Uttarakhand was higher than both Himachal and the national average for 2001-02. This is directly related to the nature of terrain where roads become critical for transporting goods as well as passengers in the absence of rail and air links. This implies higher per capita expenditure on maintenance of roads in hills on account of both higher per capita length of roads and terrain related issues.

Table 2.7: Road Availability

State	Length of Metalled Roads		Length of Mo	etalled Roads
	per lakh I	Population	per thous	and sq km
	1996-97 2001-02		1996-97	2001-02
Arunachal Pradesh		516.2		67.7
Assam	46.4	48.0	148.6	165.2
Manipur		159.2		175.6
Meghalaya		280.5		298.2
Mizoram		319.0		137.0
Nagaland		314.5		379.5
Sikkim		280.1		217.9
Tripura		137.4		439.3
Himachal Pradesh	248.6	273.3	270.4	299.2
J & K		97.3		44.8
Uttarakhand	237.5	280.8	346.7	448.7
Jharkhand		10.4		35.5
Chhattisgarh	116.9			181.3
India	147.8	136.9	424.1	432.2

Source: Statistical Diary Uttarakhand, 2001-02 and 2006-07

#### Power

- 2.41 Nature has given Uttarakhand huge water resources. Natural slope of these rivers has immense potential for generation of hydel power. The total hydel power potential in Uttarakhand, as per preliminary estimate, has been assessed around 20,177 MW out of which only 2,810 MW has been harnessed so far. This constitutes only 14 percent of the available potential. A number of schemes on which work has started and infrastructure fully created, had to be stopped half way on account of financial constraints. As a consequence, Uttarakhand is unable to tap and develop hydel power to its potential which can be a major source of revenue. While the requirement of investments is now, the pay off can be expected only in the medium to long run.
- **2.42** Despite not being able to harness hydel power adequately, Uttarakhand is not a power deficit state. Table 2.8 compares Uttarakhand with other Special Category states. Its consumption and availability of power while is higher than the all-India average and the Special Category states, it is lower than its closest comparator state Himachal.
- **2.43** As many as 60.3 percent of the household in the state had electricity connection in 2001. This figure was 55.8 and 50.2 percent for all-India and Special Category states.

2.44 In terms of the number of village electrified and per capita consumption of electricity also, Uttarakhand fairs better in comparison with both the national and Special Category states averages, barring Himachal.

**Table 2.8: Power Availability** 

State	Households with Electricity Connection (%) (2001)	Villages Electrified (%) (2005-06)	Per Capita Consumption of Electricity KWH (2005-06)
Arunachal Pradesh	54.7	56.8	297.66
Assam	24.9	78.3	170.65
Jammu & Kashmir	80.6	98.2	711.01
Manipur	60.0	83.4	215.21
Meghalaya	42.7	59.3	517.54
Mizoram	69.6	80.6	250.15
Nagaland	63.6	64.3	179.34
Sikkim	77.8	94.4	429.81
Tripura	41.8	57.2	190.62
Uttarakhand	60.3	94.3	654.84
Himachal Pradesh	94.8	96.7	765.86
All Special Category States	50.2	92.6	401.11
Chhattisgarh	53.1	83.3	685.81
Jharkhand	24.3	30.4	548.74
All-India	55.8	77.4	631.41

Source: Uttarakhand Statistical Diary, 2006-07 and Census 2001.

## Shelter, Sanitation and Drinking Water

- **2.45** Annexure Table A2.7 provides a profile of Uttarakhand and other comparator states with respect to basic amenities.
  - Uttarakhand, at 87.6 percent, has the highest proportion of households living in pucca houses among the Special Category states. This is also higher than Himachal and the national average.
  - However, Uttarakhand does not fare so well in terms of sanitation vis-à-vis other comparator states. In terms of the percentage of households having access to toilet facilities, while it is ahead of both Himachal and all-India averages, it is way behind the average of Special Category states. In fact, one of the Special Category states, Nagaland, has cent percent of its households having access to toilet facilities.

- **2.46** Annexure A2.8 compares the access to safe drinking water in Uttarakhand with other Special Category states. As many as 92.1 percent of the state population had access to safe drinking water in 2003-04. This is higher than both Himachal and Special Category states and also the national averages.
- **2.47** Table 2.9 provides the tele-density for Uttarakhand and its comparator states. Tele-density in Uttarakhand is considerably lower than both the average of Special Category states as also its nearest comparator state Himachal. Its tele-density is also lower than the national average. This suggests that for improving telecommunication access for its population and catching up with other states, Uttarakhand will have to attract substantial investment into this sector.

Table 2.9: Tele-density (Telephone per 100 Population)

	2003-04			2005-06		
State	Urban	Rural	Total	Urban	Rural	Total
Uttarakhand	15.17	1.48	5.1	22.72	1.84	7.46
Himachal Pradesh	51.12	5.51	10.14	118.14	7.25	18.78
Assam	12.47	0.56	2.13	37.03	0.73	5.67
Jammu and Kashmir	10.12	0.61	3.01	44.49	0.85	12.18
NE-1(Meghalaya, Mizoram, Tripura)	10.89	1.08	3.35	30.45	1.29	8.11
NE-2( Arunachal, Manipur, Nagaland)	9.07	1.01	2.71	19.8	1.26	5.21
All Special Category States	18.14	1.71	4.41	45.44	2.20	9.57
Jharkhand	7.34	0.45	2	11.18	0.58	2.99
Chhattisgarh	6.02	0.47	1.63	7.84	0.51	2.09
All-India	20.74	1.57	7.02	39.45	1.86	12.74

Source: India Stat (www.indiastat.com)

## POPULATION DENSITY AND HABITATION CHARACTERISTICS

- 2.48 The economics of delivery of services is directly linked to the population density, the average size of habitations and the density of habitations. Low population density, small and sparsely spread habitations increase the cost of delivery of services. Some habitation related statistics derived from Census 2001 are presented in Table 2.10. The following observations are in order:
  - With a population density of 159 per sq km, Uttarakhand is quite a sparsely populated state. The average density of population at the national level is 324. Although the

population density of Uttarakhand is higher than that of Himachal (109), it varies from a high of 612 in Haridwar to a low of 37 persons per km in Uttarkashi.

- Average size of a village in Uttarakhand (375) is not only below the national average (1,161) but also lower than the average size of village in the Special Category states (610). This together with the fact that habitation density is high in Uttarakhand implies that the number of small villages per unit of area is higher in the state vis-à-vis most of the Special Category states.
- Low population density and high habitation density with low average village size implies higher cost and effort for delivery of services.

Table2.10: Population Density and Habitation Size: Cost Drivers

State	Average Habitation Size			
	Density of Population (Persons/Sq Km)	Rural	Urban	Habitation Density
Uttarakhand	159.0	375	24,792	316
Himachal Pradesh	109.0	272	10,437	362
Assam	340.0	886	26,203	336
Arunachal Pradesh	13.0	214	13,099	49
Jammu & Kashmir	99.0	1,137	29,526	66
Manipur	107.0	760	17,076	109
Meghalaya	103.0	308	28,288	269
Mizoram	42.0	550	20,047	40
Nagaland	120.0	1,241	39,202	80
Sikkim	76.0	1,061	6,667	65
Tripura	304.0	3,040	23,613	85
Special Category States	108.00	610	22,993	182
Jharkhand	338.0	641	39,016	411
Chhattisgarh	154.0	818	41,717	151
All-India	324.0	1,161	54,326	203

Source: Census 2001.

Note: Habitation refers to the number of towns and villages.

Habitation density refers to the number of towns and villages per sq km.

## **Education and Health**

**2.49** An approach paper to the 11<sup>th</sup> Five Year Plan (2006) recognises at the outset that unless people have access to basic services like health and education besides clean drinking water and sanitation, they may not get their due share from the benefits of growth. The problem of lack of access to such basic services is more severe in hilly areas.

## **Literacy Rate**

- **2.50** The Annexure Tables A2.9 and A2.10 present the statistics relating to literacy rate and the gaps by gender and place of residence. Some of the key observations that emerge from the two tables are as follows:
  - Literacy rate is defined as the proportion of literates to the total population in the age group seven and above. According to NSS 61st Round (2004-05), literacy rate of Uttarakhand at 72.6 was higher than the national rate of 67.3. These figures, as per Census 2001, were 72.3 percent and 65.2 percent respectively.
  - In 2001, among the Special Category states only Himachal, Tripura and Mizoram had literacy rate higher than Uttarakhand. However, the scenario appears to have changed quite rapidly as among the Special Category states in 2004-05, except for Arunachal and J&K all other states have a literacy rate higher than Uttarakhand.
  - Between 2001 and 2004-05, Uttarakhand's overall literacy rate increased by mere 0.3 percent. Further, while the female literacy for the same period increased by 1.8 percent, male literacy interestingly has declined by 0.8 percent. Consequently, the gender gap in literacy rate declined from 23.8 percent to 21.1 percent. The gender gap in literacy rate is defined as the difference between male and female literacy rates. Despite the decline, the gender gap in literacy rate remained second highest among the Special Category states (the highest being J&K) in 2004-05. It is also higher than the national average.
  - Between 2001 and 2004-05, the gender gap in literacy rate fell more sharply in rural areas of the state (11.2 percent) as compared to urban areas (3.4 percent). With the exception of Meghalaya and Sikkim, the gender gap in literacy rate for all the Special Category states was higher in rural areas as compared to urban areas in 2004-05.
  - While rural literacy remained stagnant between 2001 and 2004-05, urban literacy rate increased by two percent. This resulted in the urban-rural literacy rate gap increasing from 12.6 in 2001 to 14.5 percent in 2004-05. At 14.5 percent, the urban-rural literacy rate gap in Uttarakhand is the second highest among the Special Category states. It may be worthwhile to point out here that among the Special Category states, except Uttarakhand, all other states have seen a decline in their urban-rural literacy rate gaps

between 2001 and 2004-05. How dramatically the scenario has changed for Uttarakhand on this front can be gauged from the fact that from a position of having lowest urban-rural literacy rate gap among the Special Category states in 2001, it moved to having the second highest urban-rural literacy rate gap in 2004-05.

### **Education**

- **2.51** Annexure Table A2.11 presents the data relating to educational by gender and place of residence. The data has been sourced from the 61<sup>st</sup> Round of NSS. The following key points emerge:
  - Nearly 17 percent of the male and 12.4 percent of the female population in Uttarakhand had completed higher secondary education and above in 2004-05. This is considerably higher than the similar figures for other Special Category states as well as the national average. It is also higher than its closest comparator state, Himachal. However, the scenario with regard to the percentage of population that are literate, primary complete and middle school complete, is not very encouraging. These figures for both male and female population of Uttarakhand are lower than the average of the Special Category states. Also the percentages of illiterate population (both male and female) are higher for Uttarakhand than the average of the Special Category states and Himachal. High level of illiteracy combined with lower proportion of male and female completing the middle level education does not augur well for the state. This simply means that the state will have to provide more incentives and perhaps will have to undertake more expenditure as well to improve the enrolment and retention rates at primary and middle school level.
  - Also, Uttarakhand will have to focus on generating sufficient employment opportunities in the state in view of the relatively higher proportion of population having higher secondary education and above. Non-availability of enough employment can have serious implications for the state. Firstly, it may result in heavy out-migration and secondly it may provide no incentive for the younger population to pursue higher education.

- There exists a wide gender gap in favour of males in the overall education figures. For the Special Category states, the gender gap among the illiterates is the second highest for Uttarakhand at 21.1 percent. This is also higher than the national average of 20.0 percent.
- The gender gap is prevalent among educated categories also. Barring primary school, the gender gap is higher for all other educational categories than the average for Special Category states.
- 2.52 A strong case, therefore, appears for strengthening the education infrastructure of the state by providing facilities to promote enrolment in the middle and higher education levels particularly with a focus on female education. Also, focus has to be made on rural areas as they invariably lag behind urban areas in terms of educational and other social infrastructure. Uttarakhand, thus, needs to undertake necessary investment for enhancing its educational infrastructure.

#### Health

- **2.53** Annexure Tables A2.12 and A2.13 presents the data relating to mortality and health and has been taken from National Family Health Survey (NFHS) 1998-99 and 2005-06. Some of the key points that emerge from the tables are as follows:
- 2.54 Infant mortality rate in Uttarakhand, which was lower than the national average in 1998-99, became higher than the national average in 2005-06. Also, it compares unfavourably with Himachal where infant mortality was 36 in 2005-06. While the percentage of children that are fully vaccinated in Uttarakhand at 60 percent are high as compared to the Special Category states and the national average, it's low in comparison with its neighbouring Himachal. Similarly, the percentage of children with acute respiratory infection for two weeks taken to a health facility are high in comparison with other Special Category states and the national average, but compares unfavourably with Himachal. This implies that there is clearly a need for further strengthening of the child health infrastructure particularly in view of the fact that the situation with regard to the infant mortality, instead of improving, has worsened over the years.

2.55 In Uttarakhand, a significant proportion of women suffer from anaemia (47.6 percent). In fact, the proportion of women suffering from anaemia has increased between 1998-99 and 2005-06 by a full two percent. This is pointer that anaemia is indeed a serious problem among the women population of the hilly state. This has serious consequences for the overall health of not just women but also the overall health status of the state, as anaemic women are more likely to have anaemic children. This means more emphasis has to be paid to improve the overall health of the women and more resources have to be allocated to initiate such programmes on one hand and spreading awareness about meeting the specific needs of women on the other.

#### **SPECIAL FEATURES**

**2.56** Here we briefly discuss some of the special features of Uttarakhand which have fiscal implications. The details are discussed in Chapter 8.

## **Forestry**

2.57 The forest resources of Uttarakhand should be treated as a special feature with important implications for the Centre-state financial transfers. The 12th Finance Commission did acknowledge this and said: "forests are a national wealth and the country as a whole has a responsibility in preserving it." Accordingly, the Commission recommended a total grant of Rs. 1,000 crore spread over 2005-10 for maintenance of forests, of which Uttarakhand got Rs. 35 crore. While this is indeed a step in the right direction, there is a need to allocate more resources for preserving and augmenting forest resources in view of the deteriorating global environment situation.

### Vulnerability

**2.58** Uttarakhand lies in a zone of high seismic activity and the disaster in Uttarkashi a few years back bears testimony to this. The state is also vulnerable to other disasters like landslides, cloudbursts, flash floods, avalanches, and forest fires among others.

## **Tourism**

2.59 Uttarakhand is host to Haridwar, Rishikesh, the Char Dhaam and the sacred Ganga & Yamuna. Beside these there are many other pilgrim centres and sites of historical and

religious importance. Given the average profile of the pilgrim, 'Yatra' related tourism remains a low spend activity. The state has to incur significant expenditures in providing facilities to these pilgrims. There also lies vast potential for adventure, nature, leisure and eco-tourism activities. But developing this would require significant investments in infrastructure.

#### **INTRA-STATE DISPARITY**

**2.60** While state-level statistics may portray certain picture about Uttarakhand on various parameters, significant disparity exists across regions/districts and even within districts with respect to infrastructure availability and demographic characteristics. Table 2.11 provides a summary statistics of some key indicators across the districts.

## **2.61** The following patterns emerge:

- A high degree of variability in urbanisation is observed and there has been no significant reduction in the last decade.
- Dispersion in the population density has increased significantly over the decade.
- Besides the gaps in rural-urban literacy rate across districts, the coefficient of variation has also increased between 2001 and 2004-05.
- Although the coefficient of variation associated with the 'number of beds in allopathic hospitals, clinics and PHCs came down from 55.5 percent in 1999-00 to 45.1 percent in 2004-05, still it is very high.
- No decline in the coefficient of variation associated with the number of higher secondary schools per lakh of population, which is at 44 percent.
- Dispersion in the availability of physical infrastructure with the exception of villages electrified has increased between 1998-99 and 2004-05.

## **Demographic Features**

2.62 The demographic profile reveals a huge variation across the districts. According to 2001 Census, the population density varied from a high of 612 in Haridwar to 37 in Uttarkashi. These variations are quite startling even within the districts. The fertile plains are densely populated, with maximum density being 961 persons in one of the blocks of Haridwar

district, while areas located in the inner Himalayas have medium density, ranging from 150 to 350 persons. The sparsely populated areas lie in the Greater Himalayas which are inaccessible, barren and snow-clad.

**Table 2.11 Intra-State Disparity** 

	Unit	Year	Rai	nge	Mean	Standard Deviation	Coefficient of Variation (%)
Item			Minimum	Maximum			
Level of Urbanisation		1991	0.9	50.3	16.35	14.63	89.44
(Urban)	(%)	2001	1.2	52.9	18.1	15.17	83.82
	(Persons	1991	30	485	168.62	134.77	79.93
	per sq						
Population Density	km)	2001	37	612	202.62	173.6	85.68
Rural-Urban Gap in		2001	4.4	22.8	14.45	5.65	39.09
Literacy Rate	(%)	2004-05	2.1	30.0	13.5	8.8	65.5
Gender Gap in Literacy		2001	14.7	37	27.09	6.85	25.29
Rate	(%)	2004-05	15.2	38.9	23.7	7.3	30.7
Number of Higher Secondary Schools per	Number	1999-00	5.3	36.2	21.65	9.67	44.67
Lakh of Population	Number	2004-05	6.0	41.1	25.3	11.2	44.1
Number of Beds in Allopathic Hospitals/Clinics and	Number	1999-00	37	229.3	93.82	52.14	55.57
PHCs per Lakh of							
Population	Number	2004-05	35.0	204.1	103.8	46.8	45.1
Length of Metalled Roads	Km	1998-99	133.4	847.5	402.48	275.75	68.51
per 1000 sq km	Km	2003-04	103.7	977.8	492.9	300.9	61.0
Length of Metalled Roads	Km	1998-99	76.3	414.5	217.9	85.35	39.17
per Lakh of Population	Km	2003-04	125.8	503.7	276.2	109.2	39.5
Villages Electrified as percent to Inhabited	(%)	2001-02	65.6	100.0	85.6	10.4	12.2
Villages	(%)	2004-05	85.3	100.0	94.1	4.9	5.2

Source: Census 2001 and Uttarakhand Statistical Diary, 2006-07

2.63 The increase in the population density in these districts follows the pattern associated to the terrain of these districts. Between 1991 and 2001, while the plains like Udham Singh Nagar recorded a growth rate of about 27 percent, the high hills districts like Chamoli and Pithoragarh had only 10 percent. The level of urbanisation within the state also varies from a high of 53 percent in Dehradun to a low of 1.2 percent in Rudraprayag.

## **Education**

- 2.64 Although the male literacy rate continues to be higher than that of females, both have shown improvement across all the districts between 2001 and 2004-05. With exception of Uttarkashi, Dehradun and Pauri Gharhwal, the gender gap in the literacy rate has narrowed across the districts between 2001 and 2004-05. Yet, it is very high with Uttarkashi and Tehri Gharhwal showing a gender gap of 38.9 and 31.6 percent respectively in 2004-05.
- 2.65 Dispersion between the rural and urban literacy rates across the state has also widened between 2001 and 2004-05. The minimum and maximum rural and urban literacy gap, which was 4.4 and 22.8 percent respectively in 2001, became 2.1 and 30.0 percent in 2004-05.
- **2.66** The number of primary, secondary and higher secondary schools available per lakh of population is significantly high for the high hills and mid hills districts. This is perhaps due to the sparsely distributed population in the hilly terrains.

## Health

2.67 The number of primary healthcare centres (PHCs) per lakh of population in 2004-05 at 4.3 was highest in Tehri Gharwal and at 1.0 was lowest in Champawat. Similarly, the number of allopathic hospitals/dispensaries/PHCs available per lakh of population also shows a considerable amount of dispersion. This number is highest for Pauri Garhwal (16.3) and lowest for Haridwar (3.3). However, a look at the number of beds available in allopathic hospitals/dispensaries/PHCs alters the picture across the districts. Here Nainital with 204 beds is at the top and Udham Singh Nagar with 35 beds per lakh of population is at the bottom of the list.

## **Physical Infrastructure**

2.68 Like social infrastructure, even in case of physical infrastructure, wide disparity exists across the districts. While the length of metalled roads/1,000 sq km in Nainital was 977.8 km in 2003-04, it was just 103.7 km in Pithorgarh. In fact, the dispersion across the state in terms of the length of metalled roads increased between 1998-99 and 2003-04.

## **Land Holding Pattern**

2.69 Although the mean size of land possessed in Uttarakhand is 0.37 hectare<sup>2</sup>, it does not reflect the actual variation in the land holding pattern across the districts. In fact, out of 13 districts, the mean size of land possessed in eight districts is lower than the state average. While part of the reason for such small land holdings could also be due to the hilly terrain, it is not very conducive for adoption of new/Green Revolution technologies. In 2004-05, the percent of gross irrigated to gross cultivated area was as high as in 95.9 percent in Udham Singh Nagar, it was a poor 5.5 and 8.1 percent respectively in Chamoli and Pithoragarh. This simply means that there is very little scope for making agriculture a viable livelihood option in most of the districts.

#### INDEX FOR ACCESS TO SERVICES

- 2.70 From the above discussion it is quite clear that there exist great disparities across regions/districts and even within districts in Uttarakhand with respect to the availability of social and physical infrastructure. Thus the areas where the availability of physical infrastructure like roads, electricity, and transport services are minimal become relatively difficult to access. Also the cost of deliveries of public services to such areas tends to be relatively high leading to social isolation and retarded growth. On the other hand, absence or inadequacy of social infrastructure facilities like health and educational services results in people migrating to other areas. As a consequence the working population in these areas goes down leading to high dependency ratio and associated problems.
- 2.71 In this section, therefore, we have attempted to quantify the disparities among the districts with respect to availability of social and physical infrastructure by developing an index of access to basic public services for each block of all 13 districts. These indices suggest how far each block is from the desirable level of access to public services. Also, the indices help in comparing one block from another suggesting the extent of disparities within the state.

<sup>&</sup>lt;sup>2</sup> Source: NSS 61<sup>st</sup> Round (2004-05)

**2.72** To develop this index, we have taken into account six indicators for social infrastructure and three for physical infrastructure. These are:

**Social**: Junior basic schools & senior basic schools for Boys; Higher secondary schools for boys; Senior basic schools & Higher secondary schools for girls; Allopathic hospitals/dispensaries/ PHCs.

**Physical**: Metalled roads, electricity, bus stop

- 2.73 The Districts' Statistical Diary of Uttarakhand for 2005 gives the number of villages in each block of a district and provides data relating to the above-mentioned indicators with the specification whether they are available within the village or within a range of 3-5 km. A desirable level of access of services for each block will be that all the villages have access to these services. An 'ideal village' is the one that has access to some basic services listed above within the village and some within a range of 3-5 km. If a particular village has junior basic school, pucca roads, bus stop and electricity within the village; senior basic schools (boys and girls) within a range of 3 km and higher secondary schools and a hospital/dispensary/PHC within a range of 5 km then it is called an 'ideal village'.
- **2.74** The widely accepted 'range equalisation method' has been used to construct the index for access to services. Using this method, for a particular block, the index for access is calculated as follows:

Index for access to service i = (Actual Value – Minimum Value) / (Maximum Value – Minimum Value); Where i takes value from 1 to 9

Actual value is the number of villages having access to service i, according to the 'ideal village' criteria. Maximum value is the total number of villages in the block.

And to get the minimum value, the number of villages having access to service i within the block is calculated as a proportion to the total number of villages in the block. These ratios are obtained for all the blocks in all the districts. The lowest value of these ratios is the threshold value and is kept as constant for the entire state. For example, if this threshold value for a service comes out to be 0.1, this would mean that across all the blocks, at least 10 percent of the total villages in each block have access to a particular

service. This threshold value is applied to the total number of villages of each block of each district to get the required minimum value.

- **2.75** This method places an index value 1 to the block that comprises the 'ideal villages', that is, all the villages in this block have access to service i such that actual value is equal to the maximum value. The index value lies between 0 and 1.
- 2.76 For each block within a district, these indices are calculated for all the nine indicators. The composite index for the block is the geometric mean of these indices. The geometric mean is preferred over simple mean to ensure that improvement in one indicator does not get offset by a decline in another.
- 2.77 Further the aggregate index for the district is the weighted average of these composite indices, where the block population as a proportion of the district population is taken as weights. The population proportion taken as weight takes care of the demographic disparity among the blocks.
- **2.78** Table 2.12 presents the index for access to both social and physical infrastructure services across the districts.
- 2.79 The index shows that across the districts access to physical infrastructure is better than social infrastructure. Social infrastructure, which means availability of schools and hospitals within a desirable range, is inadequate in most of the districts, but is more pronounced in high and mid-hill districts. All the districts, with the exception of Udham Singh Nagar and Haridwar, have social infrastructure index value less than 0.5. This means that the access to social infrastructure in these districts is even less than half of the desired level. On the other hand, physical infrastructure, particularly in the plains, looks satisfactory. Among the districts, Udham Singh Nagar tops the index chart both for access to physical as well as social infrastructure.

**Table 2.12: Index for Access to Services** 

_			Index	
Location	District	Total	Social	Physical
	Udham Singh			
Plains	Nagar	0.63	0.53	0.94
Plains	Haridwar	0.62	0.53	0.85
Plains	Dehradun	0.57	0.48	0.84
Mid Hills	Nainital	0.53	0.44	0.79
Mid Hills	Tehri	0.42	0.42	0.45
Mid Hills	Pauri	0.36	0.32	0.49
Mid Hills	Almora	0.35	0.30	0.52
Mid Hills	Bageshwar	0.32	0.32	0.33
Mid Hills	Champawat	0.31	0.35	0.24
High Hills	Uttarkashi	0.45	0.41	0.53
High Hills	Rudraprayag	0.42	0.37	0.55
High Hills	Pithoragarh	0.38	0.45	0.31
High Hills	Chamoli	0.22	0.30	0.19

2.80 Apart from quantifying the regional disparity within the state, this index also suggests as to how far the district is from the desired goalpost. It is quite evident from Table 2.12 that majority of the districts are far away from the desired level. Therefore, the state has an onerous task to improve access of social and physical infrastructure in the lagging districts. This would call for substantial investment which the state alone will not be able to undertake and thus would need the support from Finance Commission.

## **CONCLUSIONS**

- **2.81** The profile of the state developed in this chapter has the following fiscal implications:
  - The structure of Uttarakhand economy has changed significantly since it came into existence in 2000. The share of industry in GDP increased from 19.7 percent in 1999-00 to 30.8 percent in 2006-07. While this has enhanced the tax revenue potential of the state, we must not forget that this transformation has come about on a very low base. This means that from a negligible industrial base, the state has been able to create

- some industrial base. The tax revenue potential, therefore, will continue to be relatively weak as compared to other states or even its nearest comparator Himachal.
- Lagging industrialisation and higher proportion of population having completed higher secondary education as compared to other Special Category states/national average has led to heavy out-migration among adult males. This has resulted in high incidence of both child and old age dependence. Further, despite having shown some improvement between 2001 and 2004-05, the gender gap in literacy is still the second highest among the Special Category states. The health indicators of women and children are relatively weak. In fact, the infant mortality rate, which was lower than the national average in 1998-99, has become higher in 2005-06. This means that the level and quality of public services in education and healthcare will have to be enhanced.
- Partly due to its terrain, and also because of relatively low levels of investment, the state still suffers from a weak infrastructure base. In the present era where private, institutional and external investment usually favours states with better infrastructure, this is certainly a cause of concern for the state. Thus, to improve the situation the state would have to undertake substantial investment in infrastructure. Transfer calculations, therefore, will have to take into account not only the need but also the increased exposure of the state in operating and maintaining these assets in coming years.
- The state also has three major features, each of which deserves special consideration in the Commission's recommendations. The arguments supporting such special consideration and the fiscal implications of each issue are detailed in Chapter 8.

# Fiscal Situation in Uttarakhand: A Comparative Assessment

3.0 Under the federal system, the state governments have the responsibility to provide the economic and social infrastructure in their respective states, but the requirement far exceeds the resources available to them. This calls for fiscal transfers from the Centre to the states. The Finance Commission facilitates the division of financial resources between the Centre and the states. As the ability of the Centre to transfer resources to the states depends on its own financial position, an assessment of the fiscal situation of the Centre and all the states put together would be in order.

## **UNION GOVERNMENT FINANCES**

3.1 The fiscal imbalance has been one of the key problems of the government finances throughout the 90s and also during the first few years of this decade. However, robust economic growth, coupled with fiscal consolidation driven by the Fiscal Responsibility Budget and Management Act 2003¹, has improved the government finances lately. In the post-FRBM period, the fiscal consolidation has been quite satisfactory. Revenue deficit as percent to GDP declined from a high of 4.4 percent in 2002-03 to to 1.4 percent in 2007-08 RE. For 2008-09BE, this is expected to improve further to 1.0 percent of GDP on the back of higher growth in revenue receipts as compared to growth in revenue expenditure. However, the 2008-09 RE

The Fiscal Responsibility and Budget Management (FRBM) Act was enacted by Parliament in 2003, to bring in fiscal discipline. The FRBM Act imposes limits on fiscal and revenue deficits. As per the target, revenue deficit has to be reduced to nil in five years beginning 2004-05. Each year, the government is required to reduce revenue deficit by 0.5 percent of GDP. Fiscal deficit is required to be reduced to 3.0 percent by 2008-09. It would mean an annual reduction by 0.3 percent.

- shall be significantly higher due to impact of 6<sup>th</sup> Pay Commission Recommendations and slow down of the economy.
- 3.2 The gross fiscal deficit as a percentage of GDP, another key deficit indicator, has also come down from 6.2 percent in 2001-02 to 3.1 percent in 2007-08 RE and is budgeted at 2.5 percent for 2008-09.
- 3.3 The remarkable improvement in the fiscal consolidation process in recent years is primarily an outcome of impressive tax collections. The balanced tax structure based on reasonable rates, fewer exemptions, wider coverage, better compliance and more efficient tax administration has resulted in direct tax collections outperforming indirect tax collections. The gross tax to GDP ratio improved from 8.8 percent in 2002-03 to 12.5 percent in 2007-08 and expected to reach 13.0 percent in 2008-09.
- 3.4 On the expenditure front, too, there has been improvement. The attempt has been to contain the non-Plan revenue expenditure and increase the allocation to social sector under Plan expenditure. Overall revenue expenditure is estimated to grow at 11.8 percent in 2008-09 BE (Budget Estimates) as compared to a growth of 14.4 percent in 2007-08 RE. The allocation to the social sector in the Budget of 2008-09 BE saw a growth of 27 percent. On the other hand, non-Plan revenue expenditure growth was contained at 16.9 percent in 2007-08.
- 3.5 A comfortable fiscal situation at the Centre has improved the devolution and transfers of resources (sharable Central taxes, grants and loans and advances) from the Centre to the states. The gross devolution grew by 28 percent in 2006-07 RE as compared to 10.7 percent in 2005-06. It was a meagre 8.0 percent in 2002-03. For 2007-08, the gross devolution has been estimated to grow at 17.3 percent. Although this is lower than previous year's growth of 28 percent, as percent to GDP the gross devolution in 2007-8 works out to be 5.8 percent as compared to 5.5 percent in 2006-07.

3.6 Among the three components of the gross devolution and transfers-- share in Central taxes (SCT), grants-in-aid (GIA) and loans from Centre (LFC)-- the shares of SCT and GIA went up from 37.3 percent and 33.7 percent respectively in 1991-92 to 50.7 percent and 43.7 percent in 2007-08 BE. With the recommended phasing out of the LFC to the states by the 12th Finance Commission, its share came down to 5.6 percent in 2007-08 BE.

#### STATE GOVERNMENT FINANCES

- 3.7 After witnessing a continued deterioration in the late 1990s, the fiscal situation of the states has also witnessed significant improvement since 2003-04. The states have been pursuing fiscal correction and consolidation under the Fiscal Responsibility Legislation (FRL). The FRL has been enacted by 26 states so far. This is helping the states pursue fiscal sustainability by reducing the key deficit indicators.
- 3.8 This rule-based fiscal framework aims at reducing revenue deficit GDP ratio to zero percent by 2008-09 and fiscal deficit to GDP ratio to less than 3.0 percent by 2009-10. A number of states have already achieved these targets well ahead of the schedule. All the states, put together, show a revenue surplus in 2007-08 BE. It is after a gap of two decades that the state governments are showing surplus on revenue account. Even the gross fiscal deficit to GDP ratio of all the states put together has been below 3.0 percent since 2005-06, and is budgeted at 2.3 percent for 2007-08.

5.0 4.0 3.0 2.0 1.0 0.0 -1.0 92 95 96 97 99 00 01 02 04 07 Gross Fiscal Deficit = - Revenue Deficit Primary Deficit

Figure 3.1: Key Fiscal Indicators of the States (as % of GDP)

Source: RBI

3.9 The year 2005-06 witnessed a major turnaround in the state finances when the revenue deficit fell by a phenomenal 82.1 percent, gross fiscal deficit by 16.4 percent and primary deficit by 71.6 percent. The ratio of revenue deficit to fiscal deficit declined to 8.0 percent in 2005-06 from 38.2 percent in 2004-05. It fell further to 3.6 percent in 2006-07 and is budgeted at -13.0 for 2007-08. A decomposition of GFD (Gross Fiscal Deficit) reveals that the surplus on revenue account would finance capital expenditure in 2007-08. The share of capital outlay, at 92.1 percent in 2006-07, is budgeted to increase to 109.7 percent. A decline in the share of flows from the National Small Savings Fund, market borrowings and loans from the Centre is expected in 2007-08.

Table 3.1: Major Deficit Indicators of State Governments (as % of GDP)

Year	Gross Fiscal	Revenue	Revenue Deficit/	Primary	Outstanding
	Deficit	Deficit	Fiscal Deficit	Deficit	Liabilities
1990-91	3.3	0.9	27.3	1.8	22.5
1991-92	2.9	0.9	31.0	1.2	22.5
1992-93	2.8	0.7	25.0	1.0	22.5
1993-94	2.4	0.5	20.8	0.5	21.9
1994-95	2.7	0.7	25.9	0.8	21.4
1995-96	2.6	0.7	26.9	0.8	21.0
1996-97	2.7	1.2	44.4	0.8	20.9
1997-98	2.9	1.1	37.9	0.9	21.7
1998-99	4.2	2.6	61.9	2.2	23.0
1999-00	4.6	2.8	60.9	2.3	26.1
2000-01	4.2	2.6	61.9	1.8	28.3
2001-02	4.1	2.6	63.4	1.4	30.3
2002-03	4.1	2.3	56.1	1.2	32.0
2003-04	4.4	2.3	52.3	1.5	33.0
2004-05	3.4	1.3	38.2	0.7	32.9
2005-06	2.5	0.2	8.0	0.2	32.7
2006-07 (RE)	2.8	0.1	3.6	0.4	30.8
2007-08 (BE)	2.3	-0.3	-13.0	0.1	29.8
Source: RBI. I	RE: Revised Estim	ates and BE: I	Budget Estimates.	1	

3.10 The year 2005-06 also witnessed a decline in debt to GDP ratio. In order to have sustainable level of debt, the FRL has capped the debt to GDP ratio at 30.8 percent by 2009-10. From a high of 33.0 percent in 2003-04, the debt to GDP ratio of the states declined to 30.8 percent in 2006-07 and was budgeted at 29.8 percent in 2007-08. Thus the states are well within the FRL stipulated limit and have achieved the target two years ahead of the deadline.

#### FINANCES OF UTTARAKHAND

3.11 Uttarakhand came into existence in November 2000 and the complete fiscal data of the state is available from 2001-02 till 2008-09. The fiscal data for 2007-08 is actual

and for 2008-09 it is the budget estimates. The state enacted the Fiscal Responsibility Legislation as recommended by the 12<sup>th</sup> Finance Commission in October 2005. This legislation is also a pre-condition now for availing of debt relief from the Centre. Uttarakhand achieved revenue surplus and GFD less than 3.0 percent in 2006-07, well ahead of the target. The GFD/GSDP ratio of Uttarakhand for 2006-07 was 2.98 percent, but it rose to 5.04 percent in 2007-08 (Table 3.2a). It is further expected to rise significantly to 10.93 percent in 2008-09 due to increased non-Plan expenditure on account of the implementation of the Sixth Pay Commission report. This expenditure is also expected to result in a revenue deficit of 3.53 percent, after achieving surplus for the last two years.

	T	able 3.2	a: Fiscal	Summar	y of Utta	rakhand		
							(	(Rs. crore)
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 BE	2007-08 Actual	2008-09 *Forecast
Receipts								
Total Revenue Receipts	3,218.50	3,600.06	4,085.57	5,537.01	7,373.21	9,016.49	7,892.02	10,456.56
Total Tax Revenue	1,393.36	1,660.79	1,964.31	2,794.51	3,645.61	3,990.52	4,166.45	4,799.66
-State's own Tax Revenue	1,019.26	1,227.76	1,444.34	1,784.68	2,513.78	2,745.43	2,738.70	3,119.76
-Share in Central Taxes	374.10	433.03	519.97	1,009.82	1,131.83	1,245.09	1,427.75	1,679.90
Non-Tax Revenue	374.89	370.58	547.70	650.08	646.73	883.36	669.32	897.23
Grants from the Centre	1,450.25	1,568.68	1,573.57	2,092.42	3,080.79	4,142.61	3,056.25	4,759.67
Total Capital Receipts	2,888.55	3,497.85	2,526.94	2,013.26	1,923.86	1,852.10	1977.76	1,655.82
Borrowings and other Liabilities	2,885.34	3,474.94	2,439.86	1,976.89	1,904.36	1,695.74	1909.33	1,395.58
Recovery of Loans	3.20	22.91	87.09	36.37	19.50	156.36	68.43	260.24
Total Receipts	6,106.87	7,098.11	6,612.51	7,550.27	9,297.07	10,868.59	9868.85	12,112.38
Expenditure								

Revenue	2 (75 40	4.071.00	5 000	00 5	10.05	C 41	76 70	0.0	) = 0	7.0	F4.F6	11 051 00
Expenditure	3,675.40	4,361.32	5,033.	80 5,6	10.85	6,4	76.70	8,0	)72.58	7,2	54.56	11,871.22
- Plan Expenditure	965.27	1,077.11	1,147.	64 1,3	96.26	1,58	82.49	2,3	319.15	1,8	33.87	2577.33
- Non-Plan												
Expenditure	2,710.13	3,284.21	3,886.	16 4,2	14.59	4,89	94.21	5,7	753.43	5,4	20.69	929.389
- of which,												
Interest	FF0.77	F07.0F	015.5	0	)T	06	4.22	1 1	150.42	1.0	05.00	1 240 02
Payments Capital	552.76	596.85	815.5	8 80	)7.53	96	4.23	1,1	150.42	1,0	95.93	1,249.03
Expenditure	2,309.47	2,257.11	2,182.	88 23	07.99	27	15.17	3.0	)55.64	3.2	31.99	3,778.79
- Plan	2,007.47	2,237.11	2,102.	2,0	107.77	2,1	15.17	٥,٠	000.01	0,2	31.77	5,110.17
Expenditure	218.30	560.45	1,207.	45   1.7	74.21	1.7	16.23	2.4	168.93	2.3	52.27	3,157.03
- Non-Plan			,	,		ŕ		,		,-		, , , , , , ,
Expenditure	2,091.17	1,696.66	975.4	.3 53	33.78	99	8.94	58	86.71	87	9.72	621.76
- of which,												
Loan												
Payments	1,874.74	1,588.32	874.5	1 40	67.34	91	3.53	49	95.16	784.	64	569.22
Total												
Expenditure	5,984.87	6,618.43	7,218.	61 7,9	18.95	9,19	92.01	11,	128.22	10,4	186.55	15650.01
Fiscal Indicators								ı	,	1		
Revenue												
Deficit (RD)	456.29	761.26	950.1	4 7	3.95	-89	6.37	-9	43.91	-63	36.55	1414.69
Fiscal Deficit												
(FD)	888.82	1,407.14	2,171.	42 1,8	378.23	88	5.77	1,4	160.21	174	12.30	4373.49
Primary	226.06	010.20	1 255	04 1 0	70.70	_	0.46	2/	20.70	(1	C 45	2124.46
Deficit (PD)	336.06	810.29	1,355.	84 1,0	70.70	-/	8.46	30	09.79	64	6.45	3124.46
Fiscal Indicators	as percent	to GSDP	1									
RD/GSDP	2.44	3.72	4.17	' (	).29	-3	3.02	-	2.77	-(	).97	3.53
FD/GSDP	4.75	6.88	9.53	; ;	7.29	2	.98	4	4.29	5	.04	10.93
PD/GSDP	1.80	3.96	5.95	<b>,</b> 4	1.15	-0	).26	(	0.91	1	.87	7.80
Source: Finance					_							
* Impact of 6 <sup>th</sup> F	*											
	T	able 3.2	2 b: Fisc	cal Sur	nmar	y of	Utta	rak	hand			
											(Rs. 1	oer capita)
		2002-03	2003-04	2004-05	200	5-06	2006-	-07	2007-08		2007-08	2008-09
n									BE		Actual	BE
Receipts	1							J				1
Total Revenue Receipts		2 601 4	4 060 E	4 E22 E	6.0	110	7.022	, ,	Q E 41 2	,   ,	0 251 2	10.905.7
*		3,691.4	4,060.5	4,532.5		44.8	7,923		9,541.3		8,351.3	10,895.7
Total Tax Reve		1,598.1	1,873.2	2,179.2	3,0	50.8	3,917	,.9	4,222.8	5 /	4,408.9	5,001.2
- State's own T Revenue	ax	1 160 0	1 204 0	1 600 0	1 0	102	2 701	_	2 005 2	,   ,	2001	2 250 0
- Share from C	entral	1,169.0	1,384.8	1,602.3	1,9	48.3	2,701	د.ن	2,905.2	+	2,898.1	3,250.8
Taxes	Elitidi	429.1	488.4	576.8	11	02.4	1,216	, <sub>4</sub>	1,317.6		1,510.8	1,750.4
TUNCS		<b>ゴムノ・1</b>	T.00.T	570.0	1,1	U4. <del>T</del>	1,410	,.T	1,017.0	,	1,010.0	1,7 00.4

							1	
Non-Tax Revenue	430.0	418.0	607.6	709.7	695.0	934.8	708.3	934.9
Central Grants	1,663.3	1,769.3	1,745.7	2,284.3	3,310.9	4,383.7	3,234.1	4,959.5
Total Capital Receipts	3,312.9	3,945.2	2,803.4	2,197.9	2,067.6	1,959.9	2092.86	1,725.4
Borrowings and other								
Liabilities	3,309.3	3,919.4	2,706.7	2,158.2	2,046.6	1,794.4	2020.45	1,454.2
Recovery of Loans	3.7	25.8	96.6	39.7	21.0	165.5	72.61	271.2
Total Receipts	7,004.3	8,005.8	7,335.8	8,242.7	9,991.5	11,501.2	10453.22	12,621.0
Expenditure								
Revenue Expenditure	4,215.4	4,919.2	5,584.4	6,125.4	6,960.6	8,542.4	7,676.7	12369.71
- Plan Expenditure	1,107.1	1,214.9	1,273.2	1,524.3	1,700.7	2,454.1	1,940.6	2685.55
- Non-Plan								
Expenditure	3,108.3	3,704.3	4,311.2	4,601.1	5,259.9	6,088.3	5,736.1	9684.46
- of which, Interest								
Payments	634.0	673.2	904.8	881.6	1,036.2	1,217.4	1,159.7	1,301.5
Capital Expenditure	2,648.8	2,545.8	2,421.7	2,519.6	2,918.0	3,233.5	3420.09	3,937.5
- Plan Expenditure	250.4	632.1	1,339.5	1,936.9	1,844.4	2,612.6	2489.17	3,289.6
- Non-Plan								
Expenditure	2,398.4	1,913.7	1,082.1	582.7	1,073.6	620.9	930.92	647.9
- of which, Loan								
Payments	2,150.2	1,791.5	970.2	503.6	981.8	524.0	830.30	593.1
Total Expenditure	6,864.2	7,465.0	8,006.1	8,645.0	9,878.6	11,775.9	11096.87	16307.18
Fiscal Indicators								
Revenue Deficit	524.0	858.6	1,052.0	80.6	-963.3	-998.8	-674.6	1474.09
Fiscal Deficit	1,018.9	1,587.1	2,406.8	2,056.9	951.9	1,545.2	1843.78	4557.14
Primary Deficit	385.0	913.9	1,502.0	1,175.3	-84.3	327.8	684.07	3255.66
Source: Finance Deptt, Go	vt. of Uttar	akhand						

## **Revenue Receipts: Trends and Composition**

3.12 The overall revenue receipts of Uttarakhand increased by only 7.0 percent in 2007-08 as compared to 33.2 percent in 2006-07 (Appendix Table A3.4). The slower growth in 2007-08 as compared to the preceding year was due to slow growth in both state's own tax revenue and grants from the Centre. Its tax revenue grew only by 9.0 percent in 2007-08 as compared to 40.9 percent in 2006-07. The grants from the Centre experienced a negative growth of 0.8 percent in 2007-08 as compared to 47.2 percent in 2006-07.

- 3.13 Due to the low base of 2007-08 growth in 2008-09 is expected to be quite impressive. The total revenue receipts are budgeted to grow at an impressive rate of 32.5 percent. The growth in revenue receipts is mainly on account of non-tax revenue and grants from the Centre, which are estimated to grow by 34.1 percent and 55.7 percent respectively. Tax revenue is estimated to grow by 15.2 percent in 2008-09 BE. Tax revenue rose by 14.3 percent in 2007-08. Within the total tax revenue, the state's own tax revenue is estimated to grow at 13.9 percent while share in Central taxes is estimated to grow at 17.7 percent. These growth rates are higher than those of the previous year mainly because of the low base. If compared with the growth in 2006-07, then its tax revenue in 2008-09 is expected to witness a very low growth mainly on account of various tax reforms viz. reduction of stamp and registration fees from 8.0 percent to 7.0 percent, reduction in additional stamp duty in urban areas from 2.0 percent to 1.0 percent and Central sales tax from 3.0 percent to 2.0 percent, during 2008-09.
- 3.14 The percentage distribution of total tax revenue by sources reveals that the revenue raised by the Uttarakhand government was 43.2 percent of the total revenue receipts in 2007-08 while it was budgeted at 40.2 percent for this year. For 2008-09, this is budgeted at 38.4 percent of the total receipts. The remaining 61.6 percent of the receipts are to come from the Central government. The revenue from stamp and registration fees had been growing at a significant rate since 2001-02, with its share in the total tax revenue growing steadily till 2006-07 (Table 3.3). In 2007-08 however, it went down to 15.5 percent as against 21.7 percent in 2006-07. For 2008-09 again, it is budgeted at 15.5 percent of the total tax revenue as stamp duty on transfer of immovable property has been reduced from 8.0 percent to 7.0 percent and additional stamp duty in urban areas has been reduced from 2.0 percent to 1.0 percent. However, VAT has been a very buoyant source of tax revenue and has always been the highest contributor to the state's revenue kitty with its share ranging from 54.3 percent in 2001-02 to 59.4 percent in 2007-08 and now 59.3 percent in 2008-09 BE.

	Ta	ble 3.3: S	Sources o	of State's	own Tax	k Revenu	ıe		
								(1	Rs. crore)
	2001-						2007-08	2007-08	2008-09
	02	2002-03	2003-04	2004-05	2005-06	2006-07	BE	Actual	BE
Land Revenue	3.28	2.52	12.63	7.73	9.18	15.42	20.62	23.40	31.43
Stamps &									
Registration Fees	89.45	123.34	168.94	207.80	333.39	546.32	465.66	424.27	485.04
State Excise	232.03	245.86	273.37	292.01	292.75	372.91	459.71	441.56	501.00
Tax on Sales, Trade,									
etc.	486.20	551.06	661.96	793.50	1,014.33	1,361.42	1,551.50	1,627.41	1,849.50
Taxes on Vehicles	67.40	71.68	86.12	98.91	114.85	141.46	170.00	155.26	175.54
Taxes & Duties on									
Electricity	7.94	18.10	16.44	37.48	12.24	66.19	67.08	55.22	64.60
Other Taxes and	6.19	6.70	6.04	4.32	4.46	5.43	6.12	6.40	6.30
Duties on									
Commodities and Services									
Others (residual)	2.18	0.00	2.26	2.59	3.48	4.63	4.73	5.18	6.34
Total	894.67	1,019.26	1,227.76	1,444.34	1,784.68	2,513.78	2,745.43	2,738.70	3,119.76
							Perc	entage Dis	tribution
Land Revenue	0.37	0.25	1.03	0.54	0.51	0.61	0.75	0.85	1.01
Stamps &									
Registration Fees	10.00	12.10	13.76	14.39	18.68	21.73	16.96	15.49	15.55
State Excise	25.93	24.12	22.27	20.22	16.40	14.83	16.74	16.12	16.06
Tax on Sales, Trade									
etc.(VAT)	54.34	54.06	53.92	54.94	56.84	54.16	56.51	59.42	59.28
Taxes on Vehicles	7.53	7.03	7.01	6.85	6.44	5.63	6.19	5.67	5.63
Taxes on Goods &									
Passengers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Taxes & Duties on									
Electricity	0.89	1.78	1.34	2.59	0.69	2.63	2.44	2.02	2.07
Other Taxes and									
Duties on									
Commodities and	0.60	0.66	0.40	0.20	0.25	0.22	0.22	0.22	0.20
Services Others (residual)	0.69	0.66	0.49	0.30	0.25	0.22	0.22	0.23	0.20
Omers (residual)	0.24	0.00	0.18	0.18	0.19	0.18	0.17	0.19	0.20
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source: Finance Dept, G	ovt. of Utta	rakhand							

3.15 The state's non-tax revenue registered a meagre growth of 3.5 percent for 2007-08 as compared to -0.5 percent in 2006-07 (Appendix Table A3.4). The budgeted figure for non-tax revenue growth for 2007-08 was 36.6 percent. The budgeted figure of

non-tax revenue for 2008-09 is 34.1 percent. A growth of this scale is expected mainly due to an expected increase in the three main sources of non-tax revenue namely-- economic services, general services and social services. While the share of economic services in non-tax revenue is gradually declining, the share of general services in non-tax revenue is steadily going up (Table 3.4). The share of general services in total non-tax revenue increased from 6.5 percent in 2002-03 to 16.1 percent in 2007-08 and is budgeted at 23.1 percent for 2008-09 BE mainly due to an increased contribution and recoveries towards pension and other retirement benefits.

	Table	e 3.4 : Soı	arces of o	own Nor	ı-Tax Re	venue						
							1	(Rs. crore)				
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 BE	2007-08 Actual	2008-09 BE				
Fiscal Services	0.0012	0.0026	0.0154	0.0046	0.005	0.005	0.005	0.005				
Interest Receipts	3.9564	30.22	21.96	34.6	40.94	21.62	41.56	38.02				
Dividends and Profits 0.0413 0.0387 0.255 0.0691 0.16 0.12 0.52												
General Services 24.19 37.063 69.77 94.26 108.3 204.4 107.96 207												
Social Services	33.56	34.54	31.48	41.52	36.34	50.02	50.73	52.52				
Economic Services	313.14	268.72	424.22	479.63	461.06	607.2	468.55	598.57				
Total	374.89	370.58	547.7	650.08	646.81	883.37	669.32	897.23				
Percentage Distribut	ion											
Fiscal Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Interest Receipts	1.06	8.15	4.01	5.32	6.33	2.45	6.21	4.24				
Dividends and Profits	0.01	0.01	0.05	0.01	0.02	0.01	0.08	0.10				
General Services	6.45	10.00	12.74	14.50	16.74	23.14	16.13	23.10				
Social Services	8.95	9.32	5.75	6.39	5.62	5.66	7.58	5.85				
Economic Services	83.53	72.51	77.45	73.78	71.28	68.74	70.00	66.71				
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				
Source: Finance Deptt,	Govt. of Utt	arakhand										

## **Expenditure: Trends and Composition**

3.16 The state has successfully kept a check on the revenue expenditure lately. From a growth of 15.4 percent in 2006-07, the revenue expenditure growth was brought

down to 12 percent in 2007-08. However, this is unlikely to be repeated in 2008-09 due to the burden of the Sixth Pay Commission. Therefore, revenue expenditure is expected to grow at 63.64 percent in 2008-09 (Appendix Table A3.4). Both Plan and non-Plan expenditures, on revenue account, are estimated to grow at a rate much higher than that witnessed in 2007-08. This is also because the 2007-08 numbers are much lower than those budgeted for the year. This has resulted in slow growth in 2007-08 and thus on a low base growth in 2008-09 is expected to be higher. As compared to a 15.89-percent growth in the Plan spending in 2007-08, the same is budgeted to grow at 40.54 percent in 2008-09 BE. Similarly, non-Pan expenditure, which partly includes the Sixth Pay Commission payout, is budgeted to grow by 71.45 percent in 2008-09 BE as compared to 10.76 percent in 2007-08.

- 3.17 On the capital account front, Plan expenditure is estimated to increase by 16.92 percent in 2008-09 as compared to an increase of 19.03 percent in the previous year. Non-Plan capital expenditure saw a negative growth of -11.93 percent in 2007-08. In 2008-09 it is budgeted to grow at -29.32 percent mainly on account of an reduction in loan payments.
- 3.18 Since its inception, Uttarakhand has been steadily raising the share of Plan outgo in its total spending. The share of Plan expenditure in the total expenditure, therefore, has gone up from 19.8 percent in 2002-03 to 39.92 percent in 2007-08. However, according to the 2008-09 BE, this figure is expected to fall to 36.64 percent (Table 3.5). A lower share in 2008-09 is because of the increased share of non-Plan expenditure driven by the Sixth Pay Commission. Further, within the capital expenditure, Plan expenditure has witnessed greater emphasis over the years. Consequently, the share of Plan expenditure in capital expenditure increased from 9.4 percent in 2002-03 to 72.78 percent in 2007-08 and further to 83.5 percent in 2008-09 BE.

		Table	3.5 : Com	position (	of Expend	liture		
			•		•		(	Rs. crore)
	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 BE	2007-08 Actual	2008-09 BE
1) Plan Expenditure	1,183.60	1,637.60	2,355.10	3,170.50	3,298.80	4,788.10	4,186.14	5,734.36
2) Non-Plan Expenditure	4,801.30	4,980.90	4,861.60	4,748.40	5,893.30	6,340.10	6,300.41	9,915.65
3) Revenue Expenditure	3,675.40	4,361.30	5,033.80	5,610.90	6,476.80	8,072.60	7,254.55	11,871.22
Of which				T	T			ı
Plan Expenditure	965.3	1,077.10	1,147.60	1,396.30	1,582.50	2,319.20	1,833.86	2,577.33
Non-Plan Expenditure	2,710.10	3,284.20	3,886.20	4,214.60	4,894.30	5,753.40	5,420.70	9,293.89
4) Capital Expenditure	2,309.50	2,257.10	2,182.90	2,308.00	2,715.20	3,055.60	3,231.99	3,778.79
Of which								
Plan Expenditure	218.3	560.5	1,207.50	1,774.20	1,716.20	2,468.90	2,352.27	3,157.00
Non-Plan Expenditure	2,091.20	1,696.70	975.4	533.8	998.9	586.7	879.72	621.8
Total (1+2=3+4)	5,984.90	6,618.40	7,216.70	7,918.80	9,192.00	11,128.20	10,486.55	15,650.01
Percentage Di	stribution							
1) Plan Expenditure	19.8	24.7	32.6	40	35.9	43	39.92	36.64
2) Non-Plan Expenditure	80.2	75.3	67.4	60	64.1	57	60.08	63.36
3)Revenue Expenditure,	61.4	65.9	69.8	70.9	70.5	72.5	69.18	75.85
Plan Expenditure	26.3	24.7	22.8	24.9	24.4	28.7	25.3	21.7
Non-Plan Outgo	73.7	75.3	77.2	75.1	75.6	71.3	74.7	78.3
4)Capital Expenditure, of which	38.6	34.1	30.2	29.1	29.5	27.5	30.82	24.15
Plan Expenditure	9.5	24.8	55.3	76.9	63.2	80.8	72.8	83.5
Non-Plan Expenditure	90.5	75.2	44.7	23.1	36.8	19.2	27.2	16.5
Total (1+2=3+4)	100	100	100	100	100	100	100.00	100.00
Source: Finance	Deptt, Govt.	of Uttarakha	ınd					

- 3.19 The committed expenditures of the state have shown some improvement over the years (Table 3.6). As compared to 2002-03, when the committed expenditures formed 73.0 percent of total revenue receipts, it fell to 51.0 percent in 2007-08 RE. It is expected to rise marginally in 2008-09, where it is budgeted at 51.9 percent of the total revenue receipts. Within these liabilities, interest payment, which was 17 percent of the total revenue receipts in 2002-03, fell to 11.9 percent in 2008-09 BE. The decline in the salary expenditure as percentage of revenue receipts has also been quite impressive. From 51.6 percent in 2002-03, it declined to 29.6 percent in 2008-09 BE.
- 3.20 The committed liabilities as a percentage of the total revenue expenditures were 63.9 percent in 2002-03. This proportion declined to 55.4 percent in 2007-08 and further to 49.3 percent in 2008-09 BE. Taken together, salary expenses and pension payments accounted for 48.9 percent of revenue expenditure in 2002-03. This fell to 40.3 percent in 2007-08 and further to 38.0 percent in 2008-09 BE. This clearly shows that the state has been able to contain its committed liabilities effectively, so that the revenue expenditure could be used elsewhere.

	Table 3.6 : Committed Expenditures in Uttarakhand As Percent of Total Revenue Receipts											
2002-03 2003-04 2004-05 2005-06 2006-07 2007-08 BE												
Salary Expenditure 51.6 50.2 47.3 38.1 30.8 29.2 29.6												
Pensions 4.2 7.9 8.7 8.2 7.1 7.9 10.4												
Interest Payments	17.1	16.6	20.0	14.6	13.1	13.9	11.9					
Total	73.0	74.7	76.0	60.9	51.0	51.0	51.9					
As Percent of Total Rev	enue Expe	nditure										
Salary Expenditure	45.2	41.5	38.4	37.6	35.1	31.7	28.1					
Pensions	3.7	6.5	7.0	8.1	8.1	8.6	9.9					
Interest Payments	15.0	13.7	16.2	14.4	14.9	15.1	11.3					
Total 63.9 61.7 61.6 60.1 58.1 55.4 49.3												
Source: Deptt of Finance, C	Govt. of Utta	rakhand										

- 3.21 A glance at the share of various heads in the revenue expenditure reveals that the share of social services has been the highest since the formation of the state, followed closely by general services and then by economic services (Appendix Table A3.1). However, the picture becomes quite different when expenditures are bifurcated under the head of Plan and non-Plan. Within the non-Plan revenue expenditure, general services lead the pack followed by social and economic services. Within non-Plan expenditure, the share of general services was 40.4 percent in 2002-03. This rose to 45.6 percent in 2006-07 and further to 46.1 percent in 2007-08. For 2008-09 it is budgeted at 37.9 percent. As the expenditure on account of the Sixth Pay Commission takes a large pie of non-Plan outgo in 2008-09, this has resulted in shrinkage of the shares of all the three main components of non-Plan spend, namely general services, social services and economic services. The Plan expenditure is mainly on social and economic services, with an insignificant and gradually diminishing share being allocated to general services. In 2007-08, the share of economic and social services in Plan expenditure was 36.2 percent and 63.6 percent, respectively. In 2008-09 these are budgeted at 34.0 percent and 65.7 percent, respectively. During the initial years, share of economic services in Plan expenditure was much higher than that of social services. In 2002-03, the shares of economic services and social services were 52.1 percent and 43.2 percent, respectively. However, over the years, the pattern changed in favour of social services. This is in line with the priorities of the state to have higher allocation for social services particularly in rural areas.
- 3.22 Within social services, although the share of general education has been the highest, it has been waning over the years as literacy rate has shown improvement. The share of general education in the social service expenditure, which was 61.69 percent in 2002-03, fell to 53.44 percent in 2007-08. It is budgeted at 47.81 percent for 2008-09. Other main components of social expenditure are health and water supply. However, lately urban development is emerging as an important area in which the government is showing interest and consequently its share in

- expenditure is also growing. This could well be the result of the initiative taken by the state under JNNURM.
- 3.23 Among economic services, the share of agriculture and allied activities has been the highest and is increasing with each passing year. From 38.6 percent in 2002-03, its share in total economic service expenditure rose to 44.69 percent in 2007-08. It is budgeted at 47.8 percent for 2008-09. Another major component of economic service expenditure is rural development, the share of which rose from 16 percent in 2002-03 to 18.73 percent in 2008-09 BE.

## A COMPARATIVE ASSESSMENT OF UTTARAKHAND'S FINANCES

## Debt and Surplus/Deficit

- 3.24 Uttarakhand implemented the Fiscal Responsibility Legislation (FRL) Act in October 2005. This Act led to a significant reduction in key deficit indicators, viz., revenue deficit, fiscal deficit and primary deficit in 2006-07. The state achieved revenue surplus as well as primary surplus in 2006-07. Revenue surplus was maintained in the subsequent year too, but growth in surplus receded by 28.9 percent (Appendix Table A3.4). The year 2008-09 is expected to experience a huge revenue deficit again, due to the Sixth Pay Commission. In per capita terms, the revenue deficit is expected to be Rs. 1474.09 in 2008-09 forecast against a per capita revenue surplus of Rs. 674.60 in 2006-07 (refer Table 3.2 b).
- 3.25 In 2006-07, Uttarakhand witnessed considerable improvement in its fiscal deficit as the same posted a negative growth of 53.0 percent (Appendix Table A3.4). But, this could not be sustained in 2007-08. The fiscal deficit grew by 96.70 percent in 2007-08. For 2008-09, again due to the Sixth Pay Commission award, fiscal deficit is budgeted to grow by 151.02 percent, pushing the state farther away from FRL target. In per capita terms, fiscal deficit stood at Rs. 951.9 in 2006-07, but rose substantially to Rs. 1843.78 in 2007-08 and is expected to increase further to Rs. 4557.14 in 2008-09 BE.

3.26 Uttarakhand's debt position is not very different from the average debt burden of other Special Category states taken together (Appendix Table A3.2). In 2005-06 (the latest year for which the actual data is available for all the states), per capita debt of Uttarakhand stood at Rs. 13,119.0, marginally higher than the average per capita debt of Rs. 12,755.7 of the Special Category states. However, as compared to its nearest comparator state Himachal, per capita indebtedness of Uttarakhand is much lower. As a result, the interest burden of the state is also significantly lower than that of Himachal.

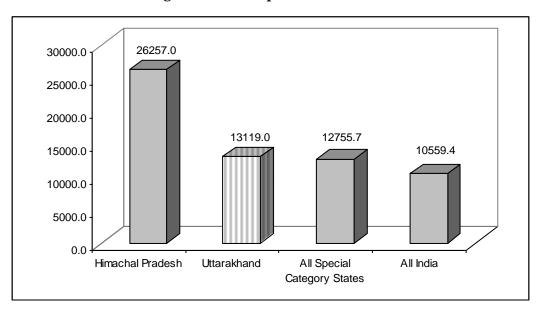


Figure 3.2: Per Capita Debt (2005-06)

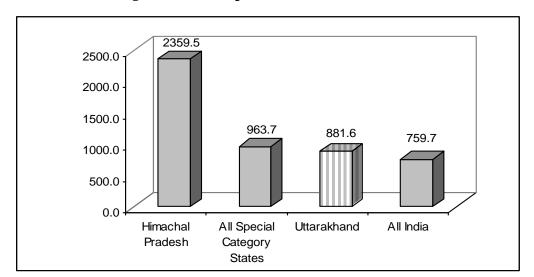


Figure 3.3: Per Capita Interest Burden (2005-06)

- 3.27 The debt burden of Uttarakhand at 45.9 percent of GSDP is lower than 51.7 percent of the Special Category states taken together (Appendix Table A3.3). In fact, its debt to GSDP ratio is among the lowest among the Special Category states. The state's interest payment as percent to GSDP is 3.1 percent, as compared to 3.9 percent for the Special Category states taken together.
- 3.28 The interest payment as a proportion of revenue receipts indicates the debt sustainability of a state. According to the recommendation of the 11th Finance Commission, this proportion was to be brought down to 18 percent. In 2005-06, with the exception of Himachal, all the Special Category states had interest payment as a proportion of revenue receipts within this range. For the same year, Uttarakhand's interest payments as percent to revenue receipts was 14.6 percent while that of all Special Category states taken together it was 13.2 percent.

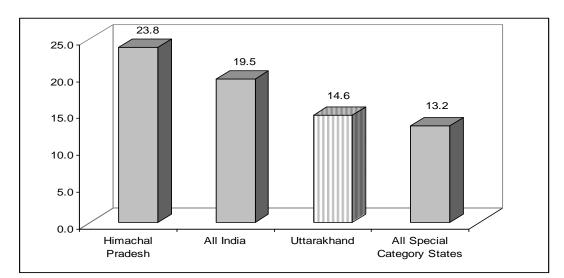


Figure 3.4: Interest Payments as Percent to Revenue Receipts (2005-06)

- 3.29 All Special Category states, except Uttarakhand, had revenue surplus in 2005-06. Uttarakhand had a revenue deficit of 0.3 percent of GSDP in 2005-06 but in the following year, the state had a surplus of 3.02 percent (Table 3.2 a). For the Special Category states taken together, the revenue surplus stood at 3.0 percent during the reporting year (Appendix Table A3.3). For Himachal Pradesh, it was 0.4 percent of GSDP. In per capita terms, Uttarakhand's revenue deficit stood at Rs. 80.8 in 2005-06 as compared to a surplus of Rs. 138.9 of Himachal and Rs. 736.6 for the Special Category states taken together. However, in 2006-07, Uttarakhand's per capita revenue surplus was Rs. 963.3 (Table 3.2 b).
- 3.30 Uttarakhand met the target of less than 3.0 percent fiscal deficit to GSDP ratio in 2006-07 by recording a fiscal deficit of 2.98 percent. Some of the other special category states, including Himachal, attained this target in 2005-06. Uttarakhand's fiscal deficit as percent to GSDP was 7.2 percent in 2005-06.
- 3.31 Uttarakhand's revenue expenditure and revenue receipts as percentage of GSDP stood at 21.4 percent and 21.2 percent respectively in 2005-06. This makes it one of

the lowest within the Special Category states. For the Special Category states put together, these ratios stood at 26.6 and 29.6 percent, respectively.

#### Revenue

3.32 The per capita non-tax revenue of Uttarakhand showed a significant improvement from Rs. 359 in 2000-01 to Rs. 710 in 2005-06. This translates into a compounded annual growth rate (CAGR) of 14.6 percent. Although it is considerably lower than the per capita non-tax revenue of Himachal, it is close to the average of Special Category states put together and higher than the national average (Fig 3.5).

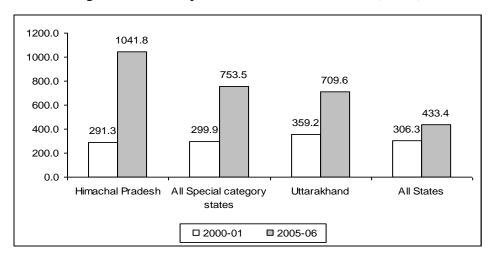


Figure 3.5: Per Capita Own Non-Tax Revenue (in Rs.)

Source: RBI

3.33 With respect to per capita tax revenue, in 2005-06 Uttarakhand was close to Himachal but higher than the Special Category states put together (Fig 3.6). The state's per capita tax revenue, which was Rs. 1,186 in 2000-01, grew to Rs. 1,948.7 in 2005-06. Improving significantly, this reached Rs. 3,055 in 2007-08, a CAGR of 14.5 percent (refer Table 3.2 b).

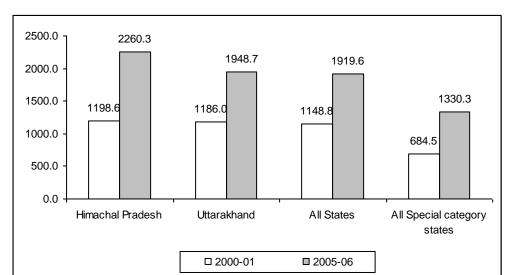


Figure 3.6: Per Capita Own Tax Revenue (in Rs.)

Table 3.7: Per Capita Revenue Receipts (in Rs)										
State	Sale	s Tax	Duti	s and es on ricity	Forestry and Wildlife		Industries#			
	2000- 01	2005- 06	2000- 01	2005- 06	2000- 01	2005- 06	2000- 01	2005- 06		
Arunachal Pradesh	75.1	410.1	0.0	-	119.1	117.9	47.5	215.0		
Assam	344.6	901.0	5.0	4.7	5.5	13.5	0.2	0.2		
Himachal Pradesh	497.0	1,097.7	45.1	134.8	27.2	225.9	90.5	101.2		
Jammu & Kashmir	356.3	958.0	12.6	61.4	56.8	56.1	3.2	6.5		
Manipur	131.0	189.3	4.1	-	4.1	54.4	0.1	99.3		
Meghalaya	280.6	705.3	2.0	0.2	23.6	62.2	247.7	396.9		
Mizoram	68.0	416.8	0.2	-	20.9	41.7	0.9	3.3		
Nagaland	179.5	309.5	0.0	0.0	12.6	24.9	0.3	0.2		
Sikkim	453.3	979.9	0.0	-	118.2	172.5	0.9	5.0		
Tripura	254.1	600.0	0.0	0.1	23.8	14.4	17.3	25.0		
Uttarakhand	640.3	1,107.3	20.7	13.4	202.4	174.1	26.0	58.2		
All Special Category States	373.9	873.1	11.4	26.7	47.4	69.2	19.8	41.1		
All-States	714.3	1,164.3	43.1	69.8	14.5	20.4	44.8	88.2		

<sup>#</sup> Includes non-ferrous mining and metallurgical and other industries

- 3.34 The above table (Table 3.7) compares the revenue receipts of Uttarakhand with other Special Category states by the major heads of sales tax, taxes and duties on electricity, forestry and wildlife and industries. For 2005-06, the per capita revenue raised by taxes on sales and trade was the highest for Uttarakhand, growing at a CAGR of 11.6 percent between 2000-01 and 2005-06. At Rs. 1,107.3, it was close to the national average of Rs. 1,164.3. The per capita revenue receipts from forestry and wildlife was also very high, next only to Himachal among the Special Category states but has decreased considerably from 2000-01.
- 3.35 Per capita revenue receipts from industries show improvement over the years. But it is still quite low as compared to some Special Category states. It is however, higher than the per capita revenue from industries of all Special Category states put together.

## Expenditure

3.36 The per capita revenue expenditure of Uttarakhand (Rs. 6,125.5) was nearly same as the average per capita expenditure of all Special Category states put together (Rs. 6,565) in 2005-06. This is significantly higher than the national average of Rs 3,960 for the same year. For Himachal, per capita expenditure was Rs. 9,762 in 2005-06.

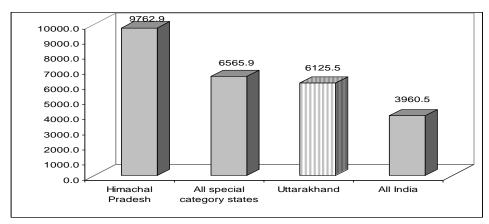


Fig 3.7: Per capita Revenue Expenditure (2005-06)

- 3.37 The share of pension payments in the total non-Plan revenue expenditure of Uttarakhand has been increasing since 2002-03 (Appendix Table A3.1) despite the measures taken by the state to contain the outgo on wages/salaries and pension payments. From 4.97 percent in 2002-03, the share of pension in non-Plan expenditure went up to 10.75 percent in 2005-06. It further increased to 12.8 percent in 2008-09 BE. At Rs. 494.6, the state's per capita expenditure on pension payments in 2005-06, however, is still lower than the average of Special Category states taken together but is higher than the national average (Table 3.8). With the new contributory pension scheme (NPS) introduced in the state since October 2005 for the newly-recruited staff, the rising pension obligation is expected to taper off in the long-run.
- 3.38 Uttarakhand's per capita expenditure on forestry and wildlife (Rs. 262.9) in 2005-06 is significantly higher than the average of Special Category states combined (Rs. 138.3) (Table 3.8). The state's per capita expenditure is also higher than Himachal.
- 3.39 Uttarakhand's per capita expenditure on power (Rs. 86.9) in 2005-06 is the lowest among all the Special Category states. Its share in total revenue expenditure is also falling and has reached a paltry 0.05 percent in 2008-09 BE from 3.3 percent in 2002-03 (Appendix Table A3.1).
- 3.40 Per capita expenditure of Uttarakhand on roads and bridges is quite close to the average of Special Category states. However, it is no where near Himachal.
- 3.41 Further, Uttarakhand's per capita expenditure on tourism is Rs. 12.9. Although it is close to the average of Special Category states (Rs. 10.5), it is much higher than Himachal' per capita expenditure of Rs. 5.9. The state has to undertake high tourism related expenditure due to the massive influx of religious tourists into the state, which is increasing with every year.

Table 3.8: Pe	Table 3.8: Per Capita Revenue Expenditure (2005-06) (in Rs.)											
State	Pension Payments	Forestry and Wildlife	Power	Roads and Bridges	Tourism							
Arunachal Pradesh	608.3	512.2	834.0	347.5	30.1							
Assam	354.8	47.5	113.1	105.9	1.8							
Himachal Pradesh	1,011.3	251.1	182.2	542.4	5.9							
Jammu & Kashmir	640.7	168.3	1,706.7	31.4	26.6							
Manipur	668.8	103.9	767.2	188.3	7.2							
Meghalaya	379.3	148.2	272.3	213.8	10.4							
Mizoram	893.4	297.8	1,543.0	343.2	37.1							
Nagaland	719.8	98.6	388.1	231.4	11.8							
Sikkim	718.3	338.4	719.6	413.3	101.6							
Tripura	712.7	82.8	363.7	171.7	3.4							
Uttarakhand	494.6	262.9	86.9	73.5	12.9							
All Special												
Category States	541.1	138.3	467.8	155.7	10.5							
All-States	367.5	39.1	189.5	72.3	4.4							
Source: RBI												

### **CONCLUSION**

- 3.42 The above analysis reveals that the fiscal situation of Uttarakhand gradually improved and was much better than other Special Category states till 2005-06. The state achieved revenue surplus as also primary surplus in 2006-07. However, due to the impact of the Sixth Pay Commission award, its fiscal situation again turned adverse in 2008-09. The state, after achieving the FRL targets in 2006-07, much ahead of the schedule, is back into deficit and is quite unlikely that without substantial support from the Centre, it will be able to regain its fiscal health in the medium-term.
- 3.43 The Plan expenditure of the state has been increasing over the years. Moreover, the increased share of capital expenditure within Plan expenditure indicates that the state is undertaking long-term investments particularly in the area of social and economic services.

- 3.44 Although the debt situation as also the interest payment burden of the state is better than many other Special Category states, its fiscal health has taken a beating due to the impact of the Sixth Pay Commission.
- 3.45 Despite a low industrial base, the per capita own tax revenue collection of the state is better than most of Special Category states. This shows the state's commitment towards tapping and broad-basing its own revenue collection effort.
- 3.46 The per capita expenditure on forests and wildlife and tourism is higher than other Special Category states. This has put considerable pressure on state finances. Therefore support of the Finance Commission in this regard will be critical.

## Grants- in-Aid: Receipts, Expenditures and Deficit Forecast

- 4.0 The 13th Finance Commission requires the states to provide detailed assessment of their revenues and expenditures for the period spanning 2010-11 to 2014-15. A realistic estimate of the revenue receipts and expenditures is critical for working out the grants-in-aid to be provided to the states.
- 4.1 The two components of the assessment of revenue resources and expenditures needs for the future relate to the **base** year and the **future** values. The base year for the 13<sup>th</sup> FC is 2007-08, for which actual estimates of state finances are available. The forecasts of receipts and expenditures cover the period from 2010-11 to 2014-15.
- **4.2** In what follows, we spell out the specific issues related to the above-mentioned aspects of financial projections in the case of Uttarakhand.

#### ISSUES AND APPROACH: BASE YEAR

- 4.3 The actual data for Uttarakhand is available for 2001-02 to 2007-08. For 2008-09, the budgetary estimates are available. In general, various components of revenue and expenditure, though, show an increasing trend, few components show significant volatility due to structural and other exogenous factors. The volatility could also be attributed to several policy changes introduced by the Centre from time to time. Tax revenues, after showing a very healthy growth till 2006-07, have tapered off thereafter.
- **4.4** While we have taken 2007-08 actual estimates as our base for both revenue and expenditure projection there are few exceptions.

#### ISSUES AND APPROACH: FORECASTING

4.5 The statistical tool kit that is used for forecasting usually demands a long time-series data. This is not available in case of Uttarakhand. A long time-series data, apart from

being a statistical necessity, also facilitates a trend and fluctuation analysis of the series. Further, it is not entirely possible to predict the future on the basis of aggregate past data if the various policy changes have altered the economic relationships. Therefore, we have adopted an eclectic approach for revenue and expenditure projections. Revenue has two components – tax and non-tax. With respect to both we have assumed appropriate growth wherever feasible.

- 4.6 Although average GSDP growth of past four years (2003-04 to 2006-07) is 12.5 percent, it is expected that industrial activity would get further momentum during the forecast period. This would also boost the services activity. The nominal GSDP growth implicit in our forecasts is 14.5 percent. The underlying price-level assumption in the nominal GSDP growth is 5.5 percent.
- 4.7 The expenditure forecasts have been made keeping in view the specificities and expenditure requirements of the state. An attempt has also been made to curtail the unproductive/unnecessary expenditures and boost spending on health, education and infrastructure. The specific assumptions underlying the base year estimates and projections are detailed in the explanatory notes to Statements 1 to 4.

## REVENUE RECEIPTS FORECAST (2010-11 TO 2014-15)

- 4.8 Major sources of tax revenues for Uttarakhand are sales tax, excise duties and stamps and registration fees. Non-tax revenues of the state originate primarily in economic services of which power, forestry and mine and minerals are the major ones. In what follows we provide revenue forecasts and their implicit buoyancy. The revenue buoyancy is defined as the ratio of proportionate change in revenue to proportionate change in nominal GSDP of the state.
- 4.9 While there may be year-to-year fluctuations, as a general approach, we have assumed fixed buoyancy over the forecast period. The total own revenues of the state are projected to grow at a CAGR of 14 percent per annum between 2010-11 and 2014-15. Under the assumption of nominal GSDP growth of 14.5 percent per annum during the same period, the projected revenue growth translates into own revenue buoyancy close to unity.

Within own revenues, the average buoyancies of tax and non-tax revenues are assumed to be 1 and 0.5 respectively. The less than unity buoyancy in non-tax revenue is due to lower revenue prospects from power and forestry.

Table 4.1: Revenue Forecasts (2010-11 to 2014-15)

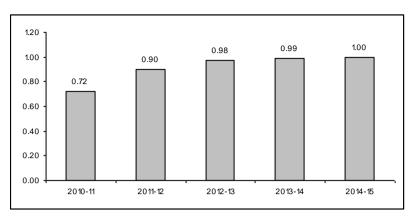
(Rs. crore)

	2010-11	2011-12	2012-13	2013-14	2014-15
Total Own Revenues	4,889.1	5,528.6	6,311.2	7,214.7	8,257.9
Own Tax Revenue of which	4,006.1	4,574.2	5,275.5	6,086.5	7,024.4
- Sales and Trade Tax i.e., VAT	2,580.2	3,004.8	3,499.4	4,075.7	4,747.0
-Excise	662.8	758.9	869.0	995.0	1,139.3
-Stamps & Registration Fees	424.3	424.3	466.7	513.4	564.7
-Hotel Receipts	7.9	9.1	10.4	12.0	13.8
Own Non-tax Revenue of which	882.9	954.4	1,035.7	1,128.2	1,233.5
-Power	206.6	206.6	206.6	206.6	206.6
-Forestry & Wildlife	225.9	231.5	237.3	243.2	249.3

Source: Projections

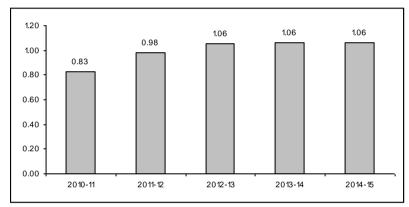
- 4.10 The year-wise buoyancy in own revenues, own tax revenues and non-tax revenues are displayed in Figures 4.1 to 4.3. Both in case of tax and non-tax revenue, though buoyancy shows an upward trend, it is of lower magnitude. The basis of the decline in tax buoyancy is explained in terms of stabilisation or downward correction of revenue flow from VAT and the complete elimination of Central sales tax. Non-tax buoyancy also exhibits a sharp drop due to squeeze in revenue flow from several sources as discussed below.
- **4.11** Revenue forecasts make it evident that the revenue buoyancy state experienced during the initial years of its formation is not likely to be repeated as it goes forward. Moreover, while some of the tax components show an upward trend some others show a declining trend.

Figure 4.1: Buoyancy of Own Revenues (2010-11 to 2014-15)



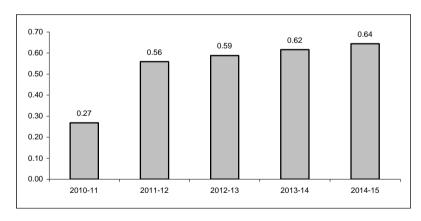
Source: Projections.

Figure 4.2: Buoyancy of Own Tax Revenues (2010-11 to 2014-15)



Source: Projections.

Figure 4.3: Buoyancy of Own Non-Tax Revenues (2010-11 to 2014-15)



Source: Projections.

Table 4.2: Buoyancy of Major Sources of Tax and Non-Tax Revenues (2010-11 to 2014-15)

	2010-11	2014-15	Average (2010-11 to 2014-15)			
	Tax Revenues					
VAT	0.92	1.14	1.09			
Excise	1.00	1.00	1.00			
Stamps & Registration Fees	0.00	0.69	0.41			
	Non-Ta	x Revenues				
Power	-0.87	0.00	-0.17			
Forestry & Wildlife	0.17	0.17	0.17			

Source: Projections.

The highlights of the revenue forecasts for 2010-11 to 2014-15 can be summarised as follows:

- The forecast indicates that the buoyancy witnessed during the 12th FC period is over. The composition of tax revenues, however, has remained unchanged. Value added tax (earlier sales tax) is still a major revenue contributor for Uttarakhand followed by excise duties. The VAT buoyancy witnessed immediately after its introduction is tapering off now. Also, CST is being phased out and will cease to exist by 2010-11. Excise collection in the state, although highly volatile till 2007-08, is projected to grow at the rate of nominal GSDP growth.
- Sources of non-tax revenues are drying up. Power was a major contributor to this pool. But
  due to change in the power policy (erstwhile highest premium bid has been replaced by
  lowest tariff bid), power would no longer be an important source of non-tax revenues.
   Revenue flow through the Power Development Fund is also showing a declining trend.
- The low buoyancy in revenues from forestry is a result of limits imposed on the exploitation of forests for commercial purpose by stringent environmental regulations.

# REVENUE EXPENDITURE FORECAST (2010-11 TO 2014-15)

**4.12** Expenditure forecasts have been made by taking into account the spending requirements of the state on social and economic infrastructure as also on the committed liabilities of the state. Table 4.3 documents the revenue expenditure forecasts under major heads.

Table 4.3: Expenditure Forecasts (2010-11 to 2014-15)

(Rs. crore)

					(RS. Cro
2010-11	2011-12	2012-13	2013-14	2014-15	CAGR (2014-15/
					2014-15/
13697.72	15352.26	17208.68	19252.94	21667.58	12.15
3533.15	3981.52	4482.94	5004.13	5705.79	12.73
2.64	2.91	3.20	3.52	3.87	10.03
3530.50	3978.61	4479.74	5000.61	5701.92	12.73
1436.95	1537.04	1631.40	1671.23	1809.70	5.94
1008.00	1209.60	1451.52	1741.82	2090.19	20.00
4204.22	4717.45	5294.54	5943.55	6673.61	12.25
1552.48	1,707.72	1,878.50	2,066.35	2,272.98	10.00
2651.74	3,009.73	3,416.04	3877.21	4400.63	13.50
2501.97	2808.74	3153.82	3542.08	3,979.00	12.30
885.65	974.21	1,071.64	1178.81	1296.69	10.00
1616.31	1834.51	2082.17	2363.27	2682.31	13.50
					10.00
2913.63	3204.99	3525.49	3878.04	4265.84	
74.90	82.39	90.63	99.69	109.66	10.00
2838.73	3122.60	3434.86	3778.35	4156.18	10.00
					17.64
544.76	639.56	751.90	885.15	1043.34	
544.76	639.56	751.90	885.15	1043.34	17.64
2515.67	2767.24	3043.97	3348.36	3683.20	10.00
11182.05	12585.01	14164.71	15904.58	17984.38	12.61
	13697.72 3533.15 2.64 3530.50 1436.95 1008.00 4204.22 1552.48 2651.74 2501.97 885.65 1616.31 2913.63 74.90 2838.73 544.76	13697.72 15352.26 3533.15 3981.52 2.64 2.91 3530.50 3978.61 1436.95 1537.04 1008.00 1209.60 4204.22 4717.45 1552.48 1,707.72 2651.74 3,009.73 2501.97 2808.74 885.65 974.21 1616.31 1834.51 2913.63 3204.99 74.90 82.39 2838.73 3122.60 544.76 639.56 544.76 639.56	13697.72 15352.26 17208.68 3533.15 3981.52 4482.94 2.64 2.91 3.20 3530.50 3978.61 4479.74 1436.95 1537.04 1631.40  1008.00 1209.60 1451.52 4204.22 4717.45 5294.54 1552.48 1,707.72 1,878.50 2651.74 3,009.73 3,416.04 2501.97 2808.74 3153.82 885.65 974.21 1,071.64 1616.31 1834.51 2082.17  2913.63 3204.99 3525.49 74.90 82.39 90.63 2838.73 3122.60 3434.86  544.76 639.56 751.90 2515.67 2767.24 3043.97	13697.72       15352.26       17208.68       19252.94         3533.15       3981.52       4482.94       5004.13         2.64       2.91       3.20       3.52         3530.50       3978.61       4479.74       5000.61         1436.95       1537.04       1631.40       1671.23         1008.00       1209.60       1451.52       1741.82         4204.22       4717.45       5294.54       5943.55         1552.48       1,707.72       1,878.50       2,066.35         2651.74       3,009.73       3,416.04       3877.21         2501.97       2808.74       3153.82       3542.08         885.65       974.21       1,071.64       1178.81         1616.31       1834.51       2082.17       2363.27         2913.63       3204.99       3525.49       3878.04         74.90       82.39       90.63       99.69         2838.73       3122.60       3434.86       3778.35         544.76       639.56       751.90       885.15         544.76       639.56       751.90       885.15         52515.67       2767.24       3043.97       3348.36	13697.72       15352.26       17208.68       19252.94       21667.58         3533.15       3981.52       4482.94       5004.13       5705.79         2.64       2.91       3.20       3.52       3.87         3530.50       3978.61       4479.74       5000.61       5701.92         1436.95       1537.04       1631.40       1671.23       1809.70         1008.00       1209.60       1451.52       1741.82       2090.19         4204.22       4717.45       5294.54       5943.55       6673.61         1552.48       1,707.72       1,878.50       2,066.35       2,272.98         2651.74       3,009.73       3,416.04       3877.21       4400.63         2501.97       2808.74       3153.82       3542.08       3,979.00         885.65       974.21       1,071.64       1178.81       1296.69         1616.31       1834.51       2082.17       2363.27       2682.31         2913.63       3204.99       3525.49       3878.04       4265.84         74.90       82.39       90.63       99.69       109.66         2838.73       3122.60       3434.86       3778.35       4156.18         544.76

Source: Projections.

The following expenditure patterns emerge:

- Interest payment continues to be a major expenditure for the state, but as a proportion of revenue expenditure, it is showing a declining trend. The share of interest payments in the total revenue expenditure of the state is projected to decrease from 10.5 percent of revenue expenditure in 2010-11 to 8.4 percent in 2014-15.
- The share of pension payment in revenue expenditure is projected to grow from 11.3 to 14.5 percent between 2010-11 and 2014-15.

Expenditures on social and economic services are projected to grow at the CAGR of 12
percent between 2010-11 and 2014-15 due to higher maintenance requirements of
existing assets and higher per unit delivery cost of services in the state due to its
topography (see Chapter 2).

## PRE-DEVOLUTION DEFICIT

**4.13** Table 4.4 documents the pre-devolution deficit on the revenue and non-Plan revenue account on the basis of the projection of the state's revenue resources and expenditure requirements.

**Table 4.4: Deficit Projections (Rs. crore)** 

	2010-11	2011-12	2012-13	2013-14	2014-15	Total
Total Own Revenue Receipts (2+3)	4,925.40	5,568.60	6,355.20	7,263.03	8,311.09	32,423.32
State's Own Revenues	4,889.07	5,528.64	6,311.24	7,214.67	8,257.90	32,201.51
Other Grants*	36.33	39.97	43.96	48.36	53.19	221.81
Total Revenue Expenditure	13,697.72	15,352.26	17,208.68	19,252.94	21,677.58	87,189.18
Non-Plan revenue Expenditure	11,182.05	12,585.01	14,164.71	15,904.58	17,984.38	71,820.73
Pre-devolution Revenue Deficit (1-4)	-8,772.33	-9,783.66	-10,853.48	-11,989.91	-13,366.49	-54,765.86
Pre-devolution Non-Plan Revenue						
Deficit (1-5)	-6,256.65	-7,016.41	-7,809.51	-8,641.55	-9,673.29	-39,397.41

<sup>\*</sup>Other grants are grants other than FC and Planning Commission.

Source: Projections

- 4.14 The rise in pre-devolution revenue deficit in the forecast period would put enormous pressure on the state in terms of fulfilling its developmental plans. While raising the tax and non-tax revenues by way of influencing compliance and collection would be the top priority, the state has little control over committed expenditures like salaries and pensions. The Sixth Pay Commission award has already widened the gap between revenue and expenditure and its impact is clearly visible in terms of the rising deficit in the forecast period. We have discussed it in detail in Chapter 6.
- 4.15 To reiterate, the expenditure requirements of this fiscally disadvantaged state is higher both on account of higher cost of delivery of services (due to its typical hilly terrains) and also because of its efforts to bridge the gap with more prosperous states. Thus, the support of the FC in meeting the projected revenue gap of Uttarakhand will go a long way in ensuring the future prosperity as well as its financial viability.

4.16 Further, at present the Special Category States get Central assistance for their plans in the form of 90 percent as grants and 10 percent as loan. However, the 12<sup>th</sup> Finance Commission recommended that the externally assisted projects be transferred to the states on a back-to-back basis, i.e. on same terms and conditions as attached to such assistance by external funding agencies. This formula may be favourable to the non-special category states but are certainly not favourable to the Special Category states (see Box 4.1). Govt. of India vide letter no. 54(1) PFI/2001(Volume-II) dated 11.01.2007, restored the earlier dispensation in case of the special category states of the grant loan ratio 90:10, instead of releasing it on back to back basis.

# Box: 4.1 Externally Assisted Project: Recommendation of the 12th Finance Commission and Its Implication for Special Category States

Assuming an external assistance loan of Rs. 100 at 5.0 percent interest rate, the non-special category states had to pay Rs. 6.30 at 9.0 percent interest rate on Rs. 70 loan component, thus the total annual interest liability of Rs. 6.30 and principal to be repaid is Rs. 70. Under the new scheme, the annual interest liability is likely to be Rs.5.0 and the total principal repayment Rs.100 only. In case of the Special Category states the interest liability is Rs. 0.90 on Rs.10, the 10 percent of loan component and the principal payment is Rs. 10 only. But under the new scheme, the annual interest liability is likely to be Rs.5.0 and the principal repayment is Rs.100. Thus, in case of the non-special category states the annual interest liability is likely to get reduced and principal repayment increase is Rs.30 on a loan of Rs.100, whereas for the Special Category states there is an increase in the annual interest rate liability of around Rs. 4.10 and the principal repayment liability increases by Rs.90. Thus, the additional liability in case of the non-special category states is Rs.28.70 only, whereas the additional liability in case of the Special Category states will be Rs. 94.10.

4.17 At this juncture it may be worthwhile to reproduce the observation made by the 11th Finance Commission with regard to the restructuring of finances of special category states. The 11th Finance Commission wrote "Out of 25 States currently forming the India Union, 10 are grouped under a "Special category States, for various purposes, particularly plan financing. Unlike the general category States, States of the special category get Central plan assistance for their plans in the form of 90 percent grants and only 10 percent as loan. Such Special consideration is given to this category of States presumably in view of their weak economic

bases; their own revenue sources meet on an average a small percentage of their revenue expenditure. The bulk of their revenues come from the Centre. Because of their weak revenue base, all the special category States have large deficits on their non-plan revenue account before devolution. With 90 percent of Central assistance for the State Plans in the forms of grants, the revenue budgets of the States are left with sizeable surpluses. Even so, all the special category States have large fiscal deficits. Even with massive infusion of Central funs, the finances of these States remain under acute stress with fiscal deficits running at over 10 percent of their GSDP in some cases. Evidently, the system of financing of the expenditure of these States needs a fundamental restructuring. In our view, such restructuring should proceed on the following lines.

- The non-plan revenue gap of these states assessed on the basis of norms relevant in their case after taking into account their share in Central taxes should be met out of Finance Commission grants. There should be no need for any plan grants to meet these gaps.
- Responsibility of development of infrastructure of vital importance to the region requiring large investments should be that of the Centre.
- The system of plan assistance for special category states should be reviewed. The review of Gadgil formula as suggested by us earlier should also cover the review of plan assistance to the special category states." (Chapter 3, Para 3.77)
- 4.18 In the light of the above, it is all the more important that the 90:10 dispensations be maintained as EAP's are implemented mainly in the fields of infrastructure development. We would thus urge the commission to continue this special dispensation in the case of special category states.

# The Devolution Criteria – Some Issues

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5.0 The Constitution provides independent revenue raising and spending powers to both the Central and state governments. However, as the expenditure responsibilities of the states are higher, inter-governmental fiscal transfer, based on the recommendations of the Finance Commission, serves to redress these fiscal imbalances. These transfers, in the form of tax devolution and grants, are meant to correct both the vertical and horizontal imbalances. Correcting the vertical imbalance relates to transfers from the Central government to the states taken together, whereas the correction of the horizontal imbalance is concerned with the allocation of transfers among the states. The vertical imbalance arises since resources have been assigned more to the Centre and the states have been entrusted with larger responsibilities. The horizontal imbalances have their roots in the inequalities among the states with respect to their revenue generating capacities and unit cost of providing goods and services.

## **VERTICAL DEVOLUTION**

Prior to the 80<sup>th</sup> Constitution amendment, only two Central taxes were sharable—non-corporate income tax and Central excise duties. However, the 80<sup>th</sup> amendment altered the pattern of sharing of Central taxes in a fundamental way by dropping the Article 272 and changing the Article 270. The new Article 270 provides for sharing of all the taxes and duties referred to in the Union List, except the taxes and duties referred to in Articles 268 and 269 respectively, surcharges on taxes and duties referred to in the Article 271 and any cess levied for special purpose. This means the surcharge and cess imposed by the Centre do not form a part of the divisible pool. In view of this, in our memorandum to the 12<sup>th</sup> Finance Commission we have suggested that gross taxes and not net taxes be shared with the states. We would once again request the Commission to consider giving a suitable recommendation in this regard so that the collection on

account of surcharge/cess, which if continued for more than one/two years, is shared by the Centre with the states.

- The 12th Finance Commission has increased the share of the states in the net proceeds of the shareable Central taxes to 30.5 percent as against 29.5 percent recommended by the 11th Finance Commission. However, this is still not enough to finance the various social and economic expenditure commitments that the states have. Given the greater burden of responsibilities of development expenditure of the states, unfortunately there has not been matching transfer of resources from the Centre to the states in terms of devolution of the Central taxes and grants as envisaged in Chapter I and Article 275 of the Constitution. Therefore, the states over a long period have been demanding that 50 percent of the total pool of collection of Central taxes be devolved to them. Moreover, over the years the non-tax revenue of the Centre has been increasing significantly. As the non-tax revenue is non-shareable, the Union Government's ability to share higher tax revenue has definitely increased. In view of the above, we would urge the Commission that with reference to the terms of reference 4(i), increase the share of the states in the Central taxes from the present 30.5 to 50 percent.
- 5.3 Although service tax has been excluded from the ambit of the Commission, we still believe that the Commission can look into the matter. Not only the share of the services sector in the overall GDP today is more than 50 percent, it is also the fastest growing sector of the economy. The revenue buoyancy of service tax is thus much more than the revenue buoyancy of other sectors. The states, therefore, should also justifiably get residuary powers to tax services. However, of late, through a Constitutional amendment, the Centre has acquired for itself the entire power to levy service tax. This has again denied the states a fair share in the revenue collected by taxing services. We would thus urge the Commission to make a suitable recommendation so that the states may at least be given the concurrent powers to tax all services.
- 5.4 The current market borrowing of the states are fixed by the Centre. While in the 1950s, the share of market borrowing of the states and the Centre in the total government

market borrowing were approximately in the proportion of 50:50, this has now fallen to about 15 percent with more than 85 percent cornered by the Centre. Consistent with the developmental responsibilities of the states, there is an urgent need to increase the share of market borrowing of the states from this abysmally low level. We would request the Commission to look into the matter and let the share of the states in the total market borrowing to go up to 33.3 percent immediately and then steadily let it go up to 50 percent within five years contingent upon the perceived needs of the states. Consequently, the 3% cap on Fiscal Deficit/ GSDP ratio recommended by the 12th FC should be suitably raised.

### HORIZONTAL DEVOLUTION

The horizontal aspect of transfers relates to their inter se distribution among the states. The differences in per capita fiscal capacities and differential costs of providing services justify departures from an equal per capita transfer norm. Cost disabilities arise due to factors that are mainly beyond the control of the states, like large areas relative to population, hilly terrains, excessive rainfall, proneness to droughts etc. Various commissions took different views in this regard and the devolution criteria evolved over time. In recent years, the devolution criteria for sharing the taxes have undergone significant changes. The devolution criteria of the 12<sup>th</sup> Finance Commission is given in Table 5.1.

Table 5.1: The Devolution Criteria of 12th Finance Commission

Criteria	Weight
Population	25.0
Income (distance)	50.0
Area	10.0
Tax Effort	7.5
Fiscal Discipline	7.5

Source: XII Finance Commission report.

5.6 Finance Commissions in the past have tended to assign much higher weighting to the population and income as compared to other factors. This has its implications for states like Uttarakhand which has large area under forest, higher operational cost for providing services, deficient infrastructure and is far away from the main markets.

- 5.7 The TOR of the 13th Finance Commission requires it to take 1971 population figures as the base for determining the devolution of taxes, duties and grants-in-aid. Population is regarded as an objective criteria (it is a rough indicator of the total consumption) and implies that funds are allocated according to the expenditure needs. Considering 1971 as the base year helps keep a check on the population growth rate as it rewards the states with low population growth. On these considerations this criteria should be retained in the devolution formula. However, the 12th Finance Commission raised its weight from 10 to 25 percent. We feel that even if a strong case existed for reviewing this weight it should not have been raised to this level. We would, therefore, request the Commission to bring it down to 15 percent.
- 5.8 While per capita income is a good criteria for determining the revenue raising capacity of a state, structure of the economy of a state also plays a critical role and should be given due weight in the devolution formula.
- 5.9 The criterion of area justifies the fact that larger area implies greater expenditure needs. It also recognises the additional cost of delivery of services in those states with larger area and low population density. From that point of view it is an important criterion as higher travel/transportation cost leads to increased cost of providing basic minimum needs and services. The 12<sup>th</sup> Finance Commission increased the weight assigned to area from 7.5 to 10 percent. It is our view that it should be further increased to 20 percent.
- 5.10 The use of infrastructure index as a criterion for the devolution of taxes is important as it recognises the disabilities of the states with poor infrastructure particularly in attracting investments. This assumes greater significance in the context of the present regime of liberalisation and de-licensing, where infrastructure-related factors are influential in shaping the investment decisions of private investors. However, the 12<sup>th</sup> Finance Commission chose to drop it. We would, therefore, urge the Commission to reintroduce the infrastructure index into the tax devolution criteria and assign it a suitable weighting.

- 5.11 The criteria of tax effort and fiscal discipline are welcome developments and much needed for providing incentive to the states to give up a profligate fiscal stance. As fiscal discipline is often linked to the state's own revenue and expenditure, we would like to submit that Uttarakhand still has a low revenue base and a sub-normal expenditure pattern. The existing expenditure levels in Uttarakhand are likely to be sub-normal because:
  - All the programmes for creating infrastructure and pursing developmental goals
    are not yet in place. Moreover, as the fiscal transfers received by the state have
    primarily been used for investment in human capital rather than in physical
    capital, the expenditure is higher and without revenue yielding assets. Added to
    this is the relatively higher financial burden in providing a given level of public
    services in a hilly state.
  - At present, over 27 percent of the sanctioned posts in Uttarakhand are vacant.
     As the number of vacancies gets filled up, the wage bill too will go up. While keeping a check on government employment may be a laudable objective, the current vacancies are essentially in public services like health and education and cannot be done away with.
- 5.12 The TOR of the 13<sup>th</sup> Finance Commission states that "in making its recommendations, the Commission shall have regard, among other considerations to ....the need to manage ecology, environment and climate change consistent with sustainable development." In Chapter 8, we have discussed in details how Uttarakhand forests, are valuable not only to the nation but also to the global fraternity. The immense contribution of Uttarakhand forest and the importance of management of these forests require that the devolution formula should be suitably amended to include the percentage of forest cover in the devolution criterion.
- 5.13 In view of the above the commission may consider the following criterion for horizontal devolution.

Table 5.2 Suggested Devolution Criteria for 13th Finance Commission

Criteria	Weight
Population	15
Income (distance)	40
Area	20
Tax Effort	7.5
Fiscal Discipline	7.5
Forest Cover	10

5.14 Thus, the existing devolution formula needs to be suitably modified, as in its current form it is unlikely to do justice to the states like Uttarakhand.

# **Debt Situation and Debt Dynamics**

- 6.0 The debt burden of Uttarakhand is currently lower than the average debt burden of the Special Category states. However, it has gradually moved up over the years. Between 2001-02 and 2007-08, it rose from Rs. 5,021 per capita to Rs. 14,413 per capita.
- 6.1 This chapter takes a closer look at the debt burden of the state and also tries to create a 'business as usual' scenario to assess the debt liability of the state by 2014-15.

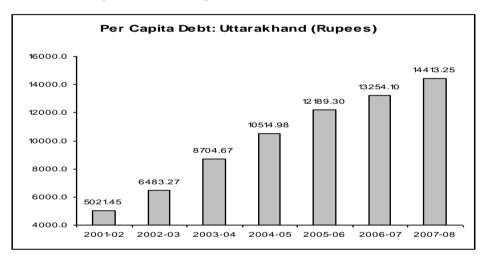


Figure 6.1: Per Capita Debt: Uttarakhand (Rs)

Source: Budget Document, Government of Uttarakhand.

6.2 The magnitude and composition of the state's debt since 2001-02 is presented in Table 6.1.

Table 6.1: Uttarakhand: The Changing Composition of Debt (Rs. crores)

	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Govt. of India Loans	1738.51	1,253.92	366.22	491.25	468.78	459.45	492.00
Small Savings	1447.97	2,255	3,244.48	4,382.77	5,550.85	6,248.47	6,572.68
Market Borrowings	920.64	1,871.3	3,237.12	3,545.96	3,949.53	4,268.37	5,177.6
Other Liabilities	200.28	272.54	869.74	1,058.22	1,196.24	1,356.65	1,378.24
Grand Total	4307.40	5,652.76	7,717.56	9,478.2	11,165.4	12,332.94	13,620.52
			Per	rcentage (	Share		
Govt. of India Loans	40.36	22.18	4.75	5.18	4.20	3.73	3.61
Small Savings	33.62	39.89	42.04	46.24	49.71	50.66	48.26
Market Borrowings	21.37	33.10	41.94	37.41	35.37	34.61	38.01
Other Liabilities	4.65	4.82	11.27	11.16	10.71	11.00	10.12

Source: Ministry of Finance, Uttarakhand

- 6.3 The State of Uttarakhand was created shortly after the 11th Finance Commission had submitted its report. Thus it did not receive the revenue deficit grant like other special category states from the 11th Finance Commission despite being declared one. Appreciating the difficulty being faced by the state in funding its plans, the Central Government did provide Special Plan Assistance and Additional Market Borrowing facility to Uttarakhand during the 11th Finance Commission award period. This, however, resulted in borrowing levels of the state going up substantially.
- 6.4 From Table 6.1 it is quite evident that for Uttarakhand, the Central loans have been on the wane. The reduction was quite sharp in 2003-04. Although there has been some increase in the loan value thereafter, the Central loans appear to be stabilising around 3-4 percent of the state's total liabilities.
- 6.5 The share of small savings (NSSF and PF) in the total debt is the maximum. From 34 percent in 2001-02, it reached close to 50 percent by 2005-06 and then declined to 48.26 percent in 2007-08.
- 6.6 Market borrowings show a steep rise in 2002-03 and 2003-04 over the previous year. However, thereafter, it has fluctuated in the range of 34 to 38 percent of the total borrowing between 2004-05 and 2007-08. The sharp decline in Central loans in 2003-04 and the concurrent rise in market borrowings are due to the conversion of Government of India loans to market borrowings (i.e., debt swap).
- 6.7 The category of other liabilities though not very significant has remained around 10-11 percent of the total state liabilities since 2003-04.

Debt/GSDP: Uttarakhand 45.00 43.00 4151 40.04 41.00 39.00 37.76 37.00 35.00 33.00 30.60 31.00 2722 27.00 25.00 2005-06

Figure 6.2: Debt/GSDP of Uttarakhand

Source: Budget Documents, Government of Uttarakhand.

6.8 The Debt-GSDP ratio was 27 percent in 2001-02 but shot up to 43 percent by 2005-06. The enactment of the FRBM legislation in 2005 has brought in more fiscal discipline in the state. The FRBM Act promises to bring down the total liabilities of the state to 25 percent of the GSDP by 2014-15. At present, (2007-08), the debt-GSDP ratio is 40 percent. Uttarakhand, being a new state, can not avoid market loans completely. It needs to utilise the same for creating capital assets. Also, the state is not in a position to reduce its indebtedness to any significant level immediately because of the high level of small saving loans. Thus, bringing the debt down to 25 percent would not only require a sustained effort on the part of the state government but would also require adequate support from the Centre.

# **CURRENT DEBT BURDEN AND ITS IMPLICATIONS**

- 6.9 The rising debt of the state has raised its debt service burden to some extent. Interest payments were 3.0 percent of GSDP and 15 percent of the revenue expenditure of the state in 2002-03. In 2007-08 the debt servicing burden increased to 3.5 percent primarily due to higher growth in debt relative to nominal state domestic product.
- 6.10 Sustainability of the debt until now was not really an issue, as between 2003-04 and 2007-08 the debt/revenue receipts decreased from 2.14 to 1.49 percent, implying enhanced ability of current revenues to service debt. This is also reflected in the decline of the ratio of interest payments to revenue receipts from 0.18 to 0.14 during the same period.

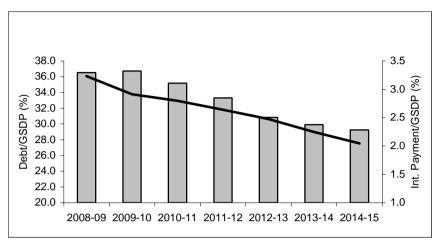


Figure 6.3: Debt and Interest Payments of Uttarakhand

**Source:** Projections

6.11 Under the 'business as usual' scenario, simple extrapolation of the present trends suggests a significant improvement in indebtedness and debt servicing capability. In the 'business as usual' scenario, the interest payments and debt of the state (including PF) would be 2.0 percent and 29.23 percent of GSDP respectively by 2014-15 (Figure 6.3). These projections are based on the repayment schedule and debt repayments of the existing debts, together with an assumption that fresh borrowings will increase at a rate of 10 percent per annum.

## UTTARAKHAND'S DEBT DYNAMICS AND THE CASE FOR DEBT RELIEF

- approach where the debt stock for individual categories of debt has been worked out (on the basis of repayment schedule) and an assumption with respect to fresh borrowings by the state has been assumed. The resultant debt stock under individual debt categories has been aggregated to compute the aggregate debt stock. Another way of analysing the debt situation is what is known as the debt dynamics identity. We also analyse the prospects of debt/GSDP in future using this identity, which is essentially a macro approach to projecting the trajectory of the debt/GSDP ratio.
- 6.13 A simple, nevertheless useful analytical tool for understanding and quantifying the long-term implications of high deficits/borrowings is the debt dynamics identity which can be mathematically expressed as follows:

$$\Delta D = PD/GSDP + (i-g) \times D$$

Where D = Debt/Nominal GDP; PD = Primary or non-interest deficit; i = Nominal Interest rate; g = Nominal GSDP growth;  $\Delta$  = Change.

- 6.14 What clearly emerges from the debt dynamics equation is that when real interest rate is greater than real GSDP growth rate, then presence of a primary deficit will lead to an explosive debt ratio. This is because in the debt ratio 'i' is driving the numerator (DEBT) and 'g' is driving the denominator (GSDP).
- assumptions of future growth, interest rates and primary deficits/surplus. Alternatively, it could also be used to simulate the level of primary deficit/surplus required to stabilise/reduce the debt/GDP ratio. Table 6.2 sketches the path of debt/GSDP under alternate assumptions of nominal growth in GSDP and interest rates. The terminal values of debt/GSDP at the end of 2014-15 are reported in Table 6.2. The debt/GSDP projections have been made for a combination of three growth and three interest rate scenarios.

Table 6.2: Terminal Value of Debt/GSDP in 2014-15 Under Alternate Assumptions of Growth, Interest Rates and Primary Account Balance

GSDP	Iı	nterest Rat	te
Growth	8.5	9.5	10.5
14.5	48.9	50.6	52.2
15.5	47.2	48.9	50.6
16.5	45.6	47.2	48.9

Source: Projections

6.16 It may be worth pointing out that Uttarakhand was running a primary surplus to the tune of Rs 78.5 crore in 2006-07 which turned into a deficit of Rs. 980 crore in the following year. In 2008-09, the primary deficit is expected to be Rs. 1,724 crore, a 76 percent rise in comparison to 2007-08. The pre-adjusted primary deficit of 2008-09 includes arrears that are paid on account of implementation of the Sixth Pay Commission and are one-time payments. Thus, we have deducted it from the non-Plan expenditure of 2008-09 to arrive at the primary deficit which in turn has been used for projection.

- 6.17 Table 6.2 shows the value of debt/GSDP ratio for the terminal year 2014-15 using the debt dynamics identity. It is much higher than the aggregation of the predicted debt stock under different heads (bottom-up approach). This is due to the difference in the two approaches. However, the present approach depicts an alarming situation for the state. The underlying assumption is that the state would run a primary deficit to the tune of 4.4 percent in each year of the projected period.
- 6.18 The simulations predict an unfavourable debt/GSDP ratio even under the most favourable combination of GSDP growth and interest rates (16.5 percent GSDP growth and 8.5 percent interest rate) if the existing levels of primary deficit continues. This highlights the need for improving the balance on the primary account to stabilise and improve the debt to GSDP ratio.

Table 6.3: Terminal Value of Debt/GSDP in 2014-15 Under Alternate

Assumptions of Growth and Primary Account Balance

Interest	Primary	G	SDP Grov	vth
Rate	Deficit (% of GSDP)	14.5	15.5	16.5
8.5	0	26.8	25.1	23.5
8.5	1	31.8	30.1	28.5
8.5	2	36.8	35.1	33.5
8.5	3	41.8	40.1	38.5
8.5	4	46.8	45.1	43.5
8.5	5	51.8	50.1	48.5

Source: Projections

6.19 Table 6.3 sketches the path of debt/GSDP under alternate assumptions of nominal growth in GSDP and primary deficit keeping the interest rate constant at 8.5 percent. The state can reach the targeted 25 percent debt to GSDP ratio only if its primary deficit becomes zero while nominal GSDP growth is 15.5 percent or higher. Therefore, a zero primary deficit or a moderate primary surplus appears to be a necessity for the state to achieve debt to GDP ratio of 25 percent mentioned in its FRBM target.

# REASONS FOR HIGH INDEBTEDNESS AND REQUEST FOR DEBT RELIEF

- **6.20** The historic reason behind the high debt/GSDP ratio is the creation of a Special Category state from a non-special category states and lack of adequate support from the 11<sup>th</sup> Finance Commission.
- were divided between the two states with a disproportionate debt burden on the former. While a sizeable portion of the debt has been redeemed now, it did jeopardise the developmental efforts of the newly-formed state during the initial years of its existence. Moreover, as Uttar Pradesh received only Rs 1,000 crore as non-Plan revenue grant from the 11th FC that too only for 2000-01, the share for Uttarakhand worked out to be a mere Rs. 17 crore. In contrast, Himachal Pradesh got Rs. 4,593.3 crore as non-Plan grant for 2000-05.
- 6.22 However, the immediate cause for deterioration in indebtedness is the pay out due to implementation of the Sixth Pay Commission recommendation. Its ramifications are:(a) increase in salary and pension expenditure with retrospective effect that is from year 2006; and (b) increase in the pay scale for all new appointments in the current year and years ahead.

Table 6.4: Expenditure Increase Due to 6th Pay Commission Pay-out (Rs. crore)

Year	Non-Plan expenditure	Total Expenditure	Expenditure due to Pay	Non-Plan Expenditure	Total Expenditure
			Commission	including Pay	including Pay
				Commission	Commission
2008-09	6147.1	8662.5	3208.7	9355.8	11871.2
2009-10	6891.5	9110.4	4854.1	11745.6	13964.5
2010-11	7798.6	10239.3	3458.4	11256.9	13697.7
2011-12	8822.9	11507.7	3844.5	12667.4	15352.3
2012-13	9978.0	12931.3	4277.4	14255.3	17208.7
2013-14	11241.1	14489.8	4763.2	16004.3	19252.9
2014-15	12784.9	16358.4	5309.2	18094.0	21667.6

Source: Projection

6.23 As shown in the Table 6.4, there is a quantum jump in expenditure due to the ballooning of non-Plan expenditure. In 2008-09 itself there is a 52 percent jump in non-Plan expenditure and 137 percent in total expenditure from the earlier estimate i.e. without the Pay Commission award. Therefore, the share of non-Plan expenditure in

- total expenditure has gone up to 79 percent from the earlier estimate of 71 percent for the current fiscal.
- **6.24** Going forward the stress would become more visible in 2009-10, as besides paying the remaining arrear, the state will be filling up the vacant posts with a revised pay scale.
- 6.25 On the whole, by 2014-15 the state would end up spending Rs. 29,715 crore due to the Sixth Pay Commission, which is more than the entire non-Plan expenditure for the period 2002-03 to 2007-08. Moreover, by 2014-15, the share of non-Plan outgo would be around 83.5 percent of the total expenditure.
- 6.26 On the earning side, some of the earlier revenue sources like power and forestry stand to contribute less in future due to institutional and legal constraints. Also, the revenue buoyancy witnessed during the initial years after the introduction of VAT is gradually petering out. Thus, the growth in sales tax which was more than 30 percent during 2006-07 and about 20 percent during 2007-08 are expected to grow at a lower level of 16.5 percent during the Finance Commission's award period.
- 6.27 Thus, it is obvious that the rising debt burden of Uttarakhand is mainly due to factors beyond its control. Given the pressing need for the state to push its developmental efforts, it is important to ensure that its mounting debt liabilities do not hinder its cherished goal to become a developed state. The Finance Commission, therefore, needs to sympathetically examine the circumstances leading to Uttarakhand's indebtedness and award suitable debt relief to it, only then the state will be able to pursue its developmental work without getting bogged down by liabilities.

# **Local Body Finances**

- **7.0** One of the terms of reference of the 13<sup>th</sup> Finance Commission is to recommend measures needed to augment the Consolidated Fund of the State to supplement the resources of the Panchayats and municipalities on the basis of the recommendations of the state finance commission.
- 7.1 The appointment of a state finance commission is provided for under Articles 243 I and 243 Y of the Constitution, whereby in every five year, the state is required to constitute such a commission. The First State Finance commission of Uttarakhand was constituted on 31 March 2001. Its recommendations were applicable from 1 April 2001 to 31 March 2006. The Second State Finance Commission was constituted on 30 April 2005, which submitted its report on 6 June 2006. Its recommendations are applicable from 1 April 2006 to 31 March 2011.
- **7.2** The principles that govern state finance commissions are:
  - (a) Distribution between the state and panchayats/municipalities of the net proceeds of the taxes, duties, tolls and fees leviable by the state
  - (b) Determination of the taxes, duties, tolls and fees which may be assigned as, or appropriated by, panchayats/municipalities
  - (c) Grants-in-aid to panchayats/municipalities from the Consolidated Fund of the State
  - (d) Measures needed to improve the financial position of panchayats/ municipalities
  - (e) Any other matter referred to the Finance Commission by the governor in the interests of sound finance of panchayats/municipalities
- **7.3** Some of the key recommendations of the Second State Finance Commission of Uttarakhand are:

- The government need to refrain from standing guarantee for loans to be taken
  by local bodies and allow financial institutions to assess proposals from local
  bodies for loan independently on merit and credit worthiness of the borrower
- Restrict market borrowings to the minimum and maintain it at a prudent level so that outstanding liabilities are reduced as much as possible and the state is able to achieve the target set in the FRBM Act
- Set cost recovery targets for various services as suggested by the 12<sup>th</sup> Finance
   Commission-- 12.5 percent annual rate of growth for general services and 25
   percent annual growth rate for both social and economic services
- Consider levying professional tax as it is a very buoyant source of revenue. A
  possible option could be to impose the tax at a uniform rate of Rs.500 for
  various professions including salary earners.
- Consider levying an environment or carbon tax on the 19 industries identified by the ministry of environment and forests as polluting industries if they do not adhere to the minimum ambient standards (MINAS) prescribed by the Pollution Control Board
- Rationalise VAT and increase the rate of some commodities in which there is no possibility of diversion of trade
- Make property tax system on the basis of self-assessment based on the unit area method as is done by Delhi Municipal Corporation and many other cities
- The First State Finance Commission of Uttarakhand did not venture to earmark the percentage share of state revenues for the local bodies. Instead, it recommended devolution on per capita basis, separately for different categories of rural and urban local bodies. This devolution formula, worked out in terms of the percentage of the state revenues amounted to 9.01 percent of the state's actual revenues in 2001-02 and dwindled to 5.96 percent in the fourth year (2004-05) of the award period. This devolution formula neither

took inflation into account nor had any built-in mechanism for keeping pace with the buoyancy of the state revenues. To remove the earlier anomaly, now 10 percent of the state's own revenues (both tax and non-tax, excluding interest receipts, dividend, profits, royalties from minerals and sale proceeds from forest produce etc.) would devolve on the local bodies each year for the period 2006-07 to 2010-11.

- Spend a major portion of the SFC devolution to local bodies on provisioning of core civic services such as sanitation, solid waste management, drainage and local roads
- Give ULBs (Urban Local Bodies) the full net proceeds of the additional stamp duty. Amend the relevant legislations to provide for imposition of additional stamp duty in rural areas and the collection on this account be passed onto the GP concerned. Until then, the PRIs (Panchayati Raj Institutions) be given 15 percent of the stamp duty collections from transfer deeds of rural areas.
- No deficit grant need be given to local bodies as all of them are expected to be in revenue surplus post-devolution.
- ZPs (Zilla Parishads) and ULBs, which achieve the norms laid down in the
  preceding recommendations, be given an additional grant as incentive grant
  amounting to the actual collection made by them. For this purpose the state
  government need to set up an 'incentive fund' with a core amount of Rs. 50
  crore, to be replenished through normal budgetary mechanism, as and when
  required.
- 7.4 Uttarakhand has a three-tier Panchayati Raj structure consisting of Gram Panchayats (GPs) at the lowest (village) level, Kshetra Panchayats (KPs) at the intermediate or development block level and Zila Panchayats (ZPs) at the district level. There are at present 7,227 GPs, 95 KPs and 13 ZPs in the state. The Second State Finance Commission has made a forecast of revenue receipts from own sources and revenue

expenditure of ZPs for its award period (Table -7.1). The forecast shows that three ZPs- Dehradun, Hardwar and Uttarkashi – will attain revenue surplus during the Commission's award period. Since KPs and GPs have practically no revenue of their own, the Commission did not make any forecast of their own revenues and expenditure.

Table -7.1: Revenue Surplus/Deficit of Zila Panchayats

(Rs. in 000)

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
ZP	Actual	Actual	Actual	Corrected	Forecast	Forecast	Forecast	Forecast
Almora	-1,340.95	-4,556.29	-2,547.67	-1,645.11	-1,751.38	-1,862.18	-1,977.31	-2,096.5
Bageshwar	843.2	548.76	95.1	-243.08	-238.46	-227.25	-207.59	-1,77.26
Chamoli	-1,026.59	-1,636.31	-2,922.06	-941.05	-1,016.09	-1,096.31	-1,181.96	-1,273.25
					-			
Champawat	-1,1335	-1,1569	-2,6738	-22,128.02	26,469.27	-3,1591.74	-37,632.88	-44,754.17
Dehradun	-681.1	-1356.98	-1135.75	-95.62	92.78	312.23	566.59	860.1
Hardwar	-11	-1,706	267	6,776.12	9,392.11	12,876.07	17,495.29	23,595.82
Nainital	-800	-79	16	-1,849.36	-2,605.36	-3,584.91	-4,846.62	-6,463.52
Pauri	118.41	100.7	446.94	-625.88	-900.17	-1,207.62	-1,551.42	-1,935.09
					-			
Pithoragarh	-8,240	-2,3643	-2,3787	-2,8451.92	38,005.46	-50,666.19	-67,432.92	-89,624.09
Rudra								
Prayag	-9,099	-5,635	-9,412	-15,111.58	-17,145.8	-19,450.1	-22,060.01	-25,015.72
Tehri	-2,949	-1,715	-1,244	-9,67.53	-207.77	753.67	1,957.69	3,452.88
U.S.Nagar	-3,626	-4,903	-4,406	-7,202.06	-8,306.56	-9,576.89	-11,037.57	-12,716.67
Uttarkashi	-483	-667	385	1,493.01	2,319.34	3,327.37	4,550.39	6,027.32
	-	-	-		-	-	-	
Total ZPs	38,630.03	56,817.12	70,982.44	-71,247.93	84,874.95	1,00,962.74	1,19,940.06	-1,42,308.56

- 7.5 There are three categories of urban local bodies (ULBs) in Uttarakhand: Nagar Nigam (NN) or Municipal Corporation (MC), Nagar Palika Parishads (NNPs) and Nagar Panchayats (NPs). There are at present 63 ULBs comprising one NN (at Dehradun) and 31 NPPs and NPs each. The revenue of the ULBs are forecast at Rs.7,540.66 lakh for 2010-11, while the expenditure forecast for the year is at Rs. 41,707.70 lakh. Thus the projected deficit comes to Rs. 34,167.04 lakh. The deficit over the Commission's award period shows an increasing trend.
- 7.6 The recommendations of the Uttarakhand SFC regarding devolution of funds have been accepted by the Government and an interim ATR has been placed before the house.

- 7.7 The 12<sup>th</sup> Finance Commission report on local bodies states that "there may be a case to augment the Consolidated Fund of the States through additional grants from the Centre keeping in view the special circumstances of the state, which may justify such assistance." Thus keeping in view the observation of the 12<sup>th</sup> FC, projected deficit of ULBs in the state and the high cost involved in providing various infrastructure services due to predominantly hilly and difficult terrains, we would urge the 13<sup>th</sup> FC to look into the matter and give additional grant to Uttarakhand to supplement the resources of its local bodies.
- 7.8 To further amplify the above contentions, it would be pertinent to mention that under ongoing programs like JNNURM, IDSSMT, BSUP and IHSDP the Urban Local Bodies (ULBs) are required to perform very significant and complex tasks requiring very sophisticated skills and capacities. The fulfillment of commitments under the 74th Amendment would further enhance the responsibility sphere of these bodies, making capacity issues even more critical. The 63 ULBs in the State are at present extremely deficient in terms of these capacities, both in terms of human resources and infrastructure that could facilitate more effective functioning through e-governance and other capacity enhancing initiatives.
- 7.9 These ULBs in the State are also saddled with certain major constraints on account of their peculiar situation. They are required to cater for a huge non/minimal revenue paying floating population on account of the fact that a large number of them are pilgrim destinations or on the Yatra route. Many others are important tourist destinations. While the level of economic activity and paying capacity is low, given their hill nature, the responsibilities on this account are onerous.
- 7.10 This situation merits supports for ULBs from the 13th Finance Commission on a greatly enhanced scale, as compared to the 12th Finance Commission. The Commission may consider a 3% norm for assignment of shareable central revenues towards ULBs. The Commission could also consider earmarking 50% of this devolution for SWM, Sanitation and Slum up-gradation, targeted to achievement of the following outcome;

- (a) Trash free cities
- (b) Open defecation free cities
- (c) Safe disposal of all solid and human waste
- (d) Slum free cities

# **Special Problems and Issues**

# SECTION I: VALUATION OF ECOSYSTEM SERVICES

## INTRODUCTION

- 8.1.0 This section argues that the forest resources of Uttarakhand should be treated as a special feature with important implications for the Centre-state financial transfers. It draws upon contemporary economic perspectives of ecosystem services (ESS) to emphasise the point that the benefits from the state's ESS flow to a set of stakeholders far beyond its boundaries. Payments to those who contribute to maintain the flow of ESS are in place in some parts of the globe. In most payments, governments have played a significant role. Regulatory imperatives that induce the state to preserve its forests are not backed up by any economic incentives. It is often suggested that as long as the ecosystem services are not included in the market system, governments should incorporate them in their accounting systems so that the service providers have economic rewards for their conservation efforts. Taking note of this, the 12th Finance Commission allocated Rs 1,000 crore, spread over the award period 2005-10, for maintenance of forests under grants-in-aid, of which the share of Uttarakhand was Rs 35 crore. While this is, no doubt, a step in the right direction, the next step should be differentiation of forest cover across the states on the basis of the ESS flow. This simply means rewarding those states more whose ESS serve hundreds of million of people as against the ones whose ESS serve no one, even if they have similar forest cover.
- **8.1.1** Ecosystem services are defined as a wide range of conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life. The ESS is generated as a consequence of interaction and complex exchange between biotic and abiotic components of an ecosystem through the universal driving forces of matter and energy. In other words, ecosystem functions (such as nutrient cycling and biomass productivity) generate ecosystem services, but

it is not always necessary that they show a one-to-one correspondence. Based on available scientific evidences we can make three general statements: i) ESS are essential to human civilization; ii) they operate at such a large scale, and in complex and little explored ways that, most cannot be substituted by human endeavours or available technology; and iii) human activities are already damaging the flow of ESS on large scale.

**8.1.2** According to contemporary thinking, ESS may be categorised as: (i) regulating, such a climate moderation, disease and pest control, pollination, and hydrological regulation; (ii) cultural, like recreational, spiritual, educational, and aesthetic; and (iii) supporting services like soil formation, nutrient cycling, biodiversity and succession.

## **UTTARAKHAND: SOME RELEVANT FACTS**

- **8.1.3** Forests are obviously one of the most important resources of Uttarakhand and have a direct role in supporting rural livelihoods not only by meeting the people's day-to-day needs of fuel, fodder and timber but also by providing employment in some areas. Agriculture is one of the core economic activities for over 80 percent of the population of the state. Agriculture, forest and animal husbandry form an interlinked production system and the role of forests in sustaining the agriculture and animal husbandry systems is immense.
- **8.1.4** Of the total forest area under the control of the state forest department, the area occupied by sal (shorea robusta) forest, chir pine (pinus roxburghii), and oak (quercus spp) forests is 3,151 km², 3,993 km² and 3,000 km², respectively. Further, at the high elevations (above 2,000 m) deodar (cedrus deodara), blue pine (pinus wallichiana), cypress (cupressus torulosa), fir (abies pindrow) and spruce (picea smithiana) together cover nearly 5.4 percent of the total forest area.
- **8.1.5** The remaining forest area is under the management of local forest institutions known as van panchayats (Forest Councils) (15.7 percent), state revenue deapartment (13.7 percent) as Civil and Soyam forests, and very small area (0.46 percent) under the

control of others including private ones. The van panchayat forests occupy approximately half a million hectares and are being managed through more than 12,000 van panchayats.

8.1.6 Many of the biomass and productivity values are on the higher side of ranges for similar forest types found elsewhere. The potential regional productivity appears to be above that previously predicted form measurements of climate (Singh, et al 1994). The area between the timber line (>2,800 m amsl) and snowline is represented by vast stretches of alpine meadows locally known as buggyals that provide an additional ecological dimension to the ecology of the state. These buggyals and adjacent subalpine forests are not only of unparallel scenic and aesthetic value, but also harbour many life-saving medicinal plants (e.g. taxus baccata, podophyllum hexandrum, picrorhiza kurooa, aconitum heterophyllum. A balfourii etc.). There also live some endangered wild animals, and more importantly these meadows serve grazing grounds for large number of livestock, and are known historically as a sacred land for saints, trekkers, and nature lovers. The alpine meadows are going to be the hub of activities with rising global temperatures because of the upward march of species and humans.

# EFFORTS MADE BY THE STATE

- **8.1.7** Uttarakhand has taken several steps to maintain its rich natural capital and ESS flows that the people living in the Gangetic basin use. Some of these are given below:
  - (i) Establishment of Corbett and Rajaji national parks in productive low-land areas. It may be pointed out that the foothill belt of Uttarakhand is highly productive. Thus the establishment of two protected areas, along with elephant corridors and the maintenance of some good tropical forests in this belt amount to a huge opportunity cost. The combined area of these is 7,000 km² which could have been put to intensive agricultural and other economic activities.
  - (ii) Ban on converting biodiversity-rich oak (quercus spp.) forests into chir pine (pinus roxburghii) forest of a commercial value (source of timber and resin). During the

British period some oak forests were converted into chir pine forests. This convention does not take place any more. Oak forests have far superior ESS than chir pine forests. However, it results in a loss of revenues.

- (iii) The state also does not allow commercial charcoal making from oak trees, despite serious problems of energy supply in remote mountains areas.
- (iv) The forest development has developed a huge infrastructure to take several measures to manage forests and meadows in the alpine zone, which include enforcing ban on commercial felling, raising seedlings and plantations, encouraging formation of community forests, fire control, and regulating non-timber forest products among others.

#### AN OUTLINE OF FOREST ECOSYSTEM SERVICES

- **8.1.8** The state lying in the Central Himalayan region has a high ecosystem value with above 45 percent area under good forest cover and also because of its river connections nurturing a large territory downstream the Gangetic Plains. There is no such receiver territory for ecosystem services in the Eastern Himalaya region though this area is given higher priority internationally for conservation.
- **8.1.9** Thus, the forest ecosystems of Uttarakhand play a major role in the ecological security of the country. The forests of Uttarakhand contain 496 million t c in their biomass and soil components and contribute significantly in terms of carbon sequestration which has great significance from a climate change stand point.
- 8.1.10 Apart from the C-sequestration the forests plays a significant role in providing ESS to the adjacent Gangetic Plains, one of the most productive agricultural areas of the world. Though the formation of the great Gangetic Plains was a geological process; ESS flowing from the Himalayas has played a pivotal role in making it fertile and robust. The principal forest ESS includes soil formation, hydrologic regulation, and maintaining suitable moisture regimes for the rich and highly endemic biodiversity and maintenance of productive agriculture in the Gangetic Plains. These ESS are important for the well being of not only 50 crore people living in the Gangetic Plains

but also for over 50 lakh local farmers of Uttarakhand as traditional agriculture is heavily dependent on surrounding forests for resources. According to an estimate, to generate one unit of energy from agriculture, 10-12 energy units of forest biomass are required. According to a rough estimate, contribution to forest ESS of the state to food production in the Gangetic Plains is worth about Rs. 1,000-5,000 crore annually. These figures simply indicate a cautious guess. The maintenance of genetic diversity of crops, livestock, fodder plants, soil microbes, and organically produced food grains and pulses in the traditional mountain agriculture of the state can also be recognised as services provided by the forests.

### ESS FLOW TO THE GANGETIC PLAIN

- **8.1.11** Although, it has not been possible yet to give precise estimates of the magnitude of ESS flowing from Uttarakhand to the Gangetic Plains, there are certain evidences as given below that testify their value:
  - High water status in the low-land forest ecosystems than in highlands despite lower precipitation. For example, though the sal forests in the plains receive 100 cm less rainfall than the forests in the Nainital catchments, the water potential both in soil and tress are significantly higher in the sal forests largely because of downstream movement of water, soil and nutrients resulting in a high productivity.
  - Increase in the proportion of sand and gravel in downstream areas subsequent to deforestation upstream. The grasslands in plains adjacent of the mountains are among the most productive ecosystems of the world.
  - In many parts of the world (e.g. western coastal United States), ecosystem productivities are much lower in the plains than in the adjacent mountains (Zobel et. al. 2001). In some regions, desert vegetation in the plains surrounds forest vegetation in the mountains. In contrast, the productivity in the plains of the Himalayan region is generally greater than in the mountains, indicating an effective downstream flow of the ESS.
  - Resumption of crop cultivation in the plains immediately after scooping out one meter of soil for brick-making is testimony to the build-up to soil fertility.
  - Crop cultivation in the Gangetic Plains for several thousands of years without widespread degradation has been possible because of the ongoing replenishment of soil and its fertility from the mountains.

# **HUMIDITY**

**8.1.12** Much of the high humidity of the Gangetic Plains is due to the forest cover of the Himalayas. Delhi's humidity, for example, is very high considering that from the

standpoint of precipitation it is a semi-arid place. In contrast to the temperate region, where forest cover is limited to 1,000-1,500 m altitudes, in the Himalayan region, forests clothe the slopes even beyond 3,000 m altitudes. A high humidity level plays a significant role in promoting growth of both cultivated food crops as well as trees. Valuation of these services is difficult because several other factors can suppress their effects, nevertheless they are real, and could be made apparent through focused research.

### **CARBON VALUE**

- **8.1.13** A reasonably detailed carbon data-set for various forest types of Uttarakhand is available. In least-disturbed forests of various types, such as sal (shorea robusta), pine (pinus roxburghii) and oaks (quercus spp) forests carbon sequestration rates in the total biomass range between 4.0 and 5.6 t C ha-1 yr-1, which are reasonably close to values reported for tropical forests. However, these high rates are not found everywhere, and for some areas forest types may reflect a range between 2.5-3.5 t C ha-1 yr-1. The amount of carbon accumulated in total forest biomass in the state is estimated at 6.61 M t yr-1, and valued at Rs.382 crore at the rate of \$13 per t carbon. These values are not dissimilar from the profitability from growing cereals or millets in terraced fields. Thus, if current carbon credit trading values are taken, the economic gains from the forests protection should rival that from terraced agricultural fields. These figures do not even put a worth on the increase in biodiversity, groundwater recharge, climate mitigation and other beneficial impacts of the forests or increase in tourism potential which can add real economic value.
- **8.1.14** Most of the data on forest soil carbon of Uttarakhand Himalaya are based on top 30 cm soil depth, which may account for only a small fraction of soil carbon. On an average the percentage of carbon in the top 20 cm, relative to that in the first meter soil column is 50 percent and the amount in the next two meters is 56 percent of that in the first meter. Thus, the forest soils are expected to contain about three times as much soil carbon as the reported values on the basis of top 30 cm soil. Carbon content

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<sup>\$1=</sup> Rs 44.5 has been used throughout to convert \$ value to rupee value.

in the surface layer of soil is mostly affected by climate, whereas clay content seems to regulate deeper soil carbon (Jabbagy and Jackson 2000). The turnover of the deep soil carbon is slow which could be important from the standpoint of carbon sequestration. There is a need to understand vertical carbon distribution in soils of different kinds of forest ecosystems.

- **8.1.15** In a study carried out by Tewari and Jina, (unpublished) in a banj oak (quercus leucotrichophora) and chir pine (pinus roxburghii) forests of Uttarakhand that are under community management regime, deeper soil layers 60-150 cm have two times more soil carbon than the top layers. Even at 150 cm depth the soil carbon is as high as 1.0 percent and the projected carbon in the forest soils of Uttarakhand up to 150 m depth is 263.58 million t. Its value would be worth Rs. 15,263 crore @ of \$13 t-1 in the international market.
- 8.1.16 Carbon has become a commodity which can be traded at national and international levels with no cost of transportation and quality control. There are serious threats to the C-stock of Uttarakhand if conservation measures were not positively linked to economic growth. The poor people in Uttarakhand depend heavily on firewood as a source of cooking energy. Fuel wood consumption per capita in the 1,500-2,000 m zone in the Garhwal region is approx two kg day-1 (Bhatt and Sachan, 2004). It varies from 2.8 kg at higher altitudes (>2,000m) to 1.42 kg capita-1 day-1 at lower altitudes (1,000-1,500 m) and lower still in the foot hills.
- 8.1.17 Assuming on a simple calculation a dependence of about three million people living in the hills on fuel wood, and an average consumption of 1.7 kg capita<sup>-1</sup> day<sup>-1</sup>, this translates into almost two million t of fuel wood year<sup>-1</sup> for the Uttarakhand Himalaya or about one million t C. It is not possible to conserve forests for long without enabling the poor people to have access to modern, efficient energy sources such as LPG, biogas solar energy and electricity (modern energy sources, hereby referred to as MES). There is a need to replace the present subsidy of firewood by providing MES. For example, a small 1 cubic metre biogas plant can save 15 kg of fuel wood per day. This would translate into a direct savings of 2 t C annually, or over an eight year

period (a conservative estimate for the life of a biogas plant) 16 t C and worth \$250-300 would be saved. This is more than the cost of construction of a biogas plant. The van panchayats can contribute for MES which may be provided at subsidised rates by sale of C-sequestered annually in their forests. Additionally, the ecosystem would benefit through much higher productivity (and hence higher carbon sequestration) as the process of lopping for fuel wood damages buds, leaves and greatly reduces the photosynthetic potential of a tree. Similarly, any subsidy given on a fodder programme to replace tree fodder with grasses would pay for itself in a very short time in terms of increased carbon sequestration rates of forests.

**8.1.18** However, the major hindrance has been that clean development mechanism (CDM) under the Kyoto Protocol does not recognise carbon credits that are created by preventing forest degradation. There are no rewards for protecting a forest.

### **SPATIAL SCALES OF ESS**

**8.1.19** Besides the ESS flow to the Gangetic Plains and carbon sequestration, there are various other ESSes generated by the forests of Uttarakhand. Some of them such as genetic resources and recreation are of global significance, while others are useful to local and regional people, or are of national significance (Table 1).

**Table 8.1: Spatial Scale of Ecosystem Services** 

Ecosystem		<b>Spatial Scale of Benefits</b>		
	Local	Regional/National		
Carbon Sequestration			$\sqrt{}$	
Landscape Beauty/Recreation	V	$\sqrt{}$	$\sqrt{}$	
Agro-biodiversity	$\sqrt{}$	$\sqrt{}$	$\checkmark$	
Soil Formation/Fertility Maintenance	V	$\sqrt{}$		
Hydrological Regulation and Climate	$\sqrt{}$	$\sqrt{}$		
Moderation				
Succession (Landslide/Slip	$\sqrt{}$			
Stabilisation)				
Pollination	$\sqrt{}$			
Non-Timber Forest Products				
Grazing	V			

# VALUATION OF FOREST ESS OF UTTARAKHAND AND PAYMENT FOR ENVIRONMENTAL SERVICES

- 8.1.20 From the above discussion it is clear that the intangible services of the forests such as carbon sequestration, watershed protection, landscape beauty, biodiversity conservation, prevention of soil erosion, nutrient cycling etc seldom enter into the development planning process and therefore do not command a market valuation. As many of these services are facing increasing threats there is recognition that existing and traditional regulatory approaches alone may not suffice to ensure their protection and sustained flow. Thus, in many parts of the world explicit value is being placed on these services and real payments are being generated for forest owners and managers acting as incentive for conservation. Such an approach is clearly the need of the hour particularly when two-thirds of Uttarakhand's geographical area has to be maintained as forests and while the cost of conservation is borne by the forest conserving local communities, the large benefits are reaped by other key stakeholders. Given this scenario, payment for ecosystem service (PES) to the state are extremely relevant as they offer the potential of addressing both conservation and livelihood concerns.
- **8.1.21** Indeed, it is almost impossible to give a precise value of ESS flowing from a state to other states/regions of the country. However, in order to maintain the natural capital and flow of ESS, individuals, communities and states must be given economic incentive. Needless to say the Central Government is expected to take the lead. The 12th Finance Commission has already taken the first step by relating the value of ESS to forest area.
- **8.1.22** Costanza et al. (1997) identified 17 specific goods and services provided by ecosystems: gas regulation, water regulation, water supply, erosion control and sediment retention, soil formation, nutrient cycling, waste treatment, pollination, biological control, refugia, food production, raw materials, genetic resources, recreation and cultural services. The study provides a rough estimate of the

magnitude of ecosystems service values on a global scale and reported values can serve as a basis for estimates relevant to specific region or ecosystems. The study provided the estimates of forest ecosystems values for tropical, temperate and boreal forests of the world. In order to make estimation of total value of ESS the authors estimated the total global extents of ecosystems and classified them into 16 primary categories such as coastal areas, open areas, tropical and temperate and grasslands. Valuation of each type of the ecosystem and each type of ecosystem services was done separately. Though the figures of Costanza et al are global but for them one could draw some conclusions for the Himalayan area. The Himalayan forests are closer to temperate forests as far as species richness are concerned and are closer to tropical forests in terms of the ecosystem functioning. Since the latter is more important in relation to ESS for the Himalayan forests taking the mid-point values of ESS estimated for tropical forest and temperate/boreal forests has been considered to be safe for estimating an indicative value of various forest ESS of the state (Singh 2007). As shown in Table 2, with an average value of about \$1150 ha-1 yr-1 the total value of ESS from the forests of Uttarakhand (area under forest cover 3,465,057 ha) works out to be approximately \$3.98 billion yr-1 or Rs.17,732 crore yr-1. The magnitude of the value coming out of the valuation exercise mentioned above at first glance, look quite large. The report from which these estimates are taken qualifies the results by saying that they are rough-cut estimates.

Table 8.2: Annual Value of Various Forests Ecosystem Services of Uttarakhand

<b>Ecosystem Services</b>	Value in \$ha <sup>-1</sup> yr <sup>-1</sup> (\$1=Rs. 44.5)
Climatic Regulation	167.6
Disturbance Regulation	2.3
Water Regulation and Water	5.2
Supply	
Erosion Control	114.6
Soil Formation	11.6
Nutrient Cycling	429.6
Waste Treatment	102.7
Biological Control	2.3
Food Production	50.7

Raw Materials	164.0
Genetic Resources	18.5
Recreation	78.6
Cultural	2.3
Total	1,150

(Note: The mid-point values given above were calculated from various parameters given from tropical and temperate forests in Costanza et, al., 1997)

8.1.23 Another way of looking at the issue would be to measure the opportunity cost for preserving forest resources. The finance division of the Planning Commission worked out an interesting index called the 'forest disability index' based on the reasoning that on account of keeping large area under forest there has been a loss of Rs.1,2,91,420 per km<sup>2</sup> net revenue from forest conservation in relation to agricultural income (Table 3). This translates into an overall loss of Rs. 4,474.8 crore annually to the state on account of forest conservation. The contribution of the forest sector to the GSDP is Rs. 569 crore (2005-06). If we subtract this contribution from the value at par with agriculture i.e. Rs.4,474.8 the final annual loss to the state on account of forest conservation comes to Rs. 3,905.8 crore. However, while calculating the opportunity cost it will be unrealistic to assume that the entire area under forest in Uttarakhand irrespective of its slope, terrain, soil etc could have been used for agricultural purposes. In our view, a more realistic way of calculating the opportunity cost of forests in case of Uttarakhand would be to assume that at least the area under forest in the foothills districts of Udham Singh Nagar, Haridwar and Dehradun could have been put to agricultural use fairly easily. The total area under forest in these three districts works out to be 3,680 sq km<sup>2</sup>. Thus the revenue loss from forest conservation as against agricultural income works out to be Rs. 475.2 crore. Correcting it further for contribution of forest sector<sup>2</sup> this amount becomes Rs. 343.9 crore.

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As the contribution of the forest sector to GSDP is not available at the district level, we have calculated the per district contribution of the forest sector to GSDP by dividing the state level contribution of the forest sector to GSDP by the number of districts in the state (Rs. 569/13 = Rs. 43.8).

Table 8.3: Computation of Forest Cost Disability Index for Uttarakhand

Sl. No	Item	Uttarakhand
1	Total Area of the State (km2)	53,483
2	Area Under Forest (km2)	34,650
3	Forest as a % of Total Geographical Area of the Sate	64.79
4	Per unit cost of Maintenance (Rs./km²)	41,856
5	Total cost of Maintenance (Rs Crore)	145.0
6	NSDP from Agriculture (Rs Crore) (2005-06)	4,619.8
7	Agricultural Income Less Forest Cost (Rs Crore) (6-5)	4,474.8
8	Revenue Loss (Rs/km2) (7/2)	1,2,91,420

- **8.1.24** Thus even after allowing for significant downward bias in the estimates flowing from the state's forest resources, our calculation suggests that the state must be compensated to the tune of Rs. Rs. 343.9 crore annually from the national pool to offset the inherent incentive that local/state beneficiaries have to exploit their forests.
- **8.1.25** Clearly, we are not in position to suggest a complicated formula of accounting, but the existing one can be improved upon. A state whose ESS serve hundreds of million of people should be given more value than a state whose ESS serve no one, even if they have similar forest cover. The mechanism of money transfer from the Centre to the state needs to consider it.

## **SECTION II: TOURISM**

- 8.2.0 Tourism in Uttarakhand can be classified into two broad categories viz. pilgrimage tourism and leisure tourism. Uttarakhand is home to Haridwar, Rishikesh, the Char Dhaam and the sacred Ganga & Yamuna. Beside these there are many other pilgrim sites like Hem Kund Sahib, Nanak Matta, Peeran Kaliyar etc. and sites of historical and religious importance. These pilgrimage sites are a national heritage and play an important role in promoting national unity and integrity.
- **8.2.1** Although pilgrimage has traditionally been the major tourism related activity in the state, the state has enormous potential for cultural, adventure, wildlife, nature, leisure and eco-tourism. There also exists potential for a wide variety of entertainment and sporting activities that attracts modern tourist.

## ISSUES AND DEMAND-FOR-GRANTS FOR LEISURE-RELATED TOURISM

- **8.2.2** Despite the wealth of the scenic beauty, the tourism industry of Uttarakhand has yet to exploit the vast potential of this sector. Its contribution therefore to the economy of the area and the people is suboptimal, although Trade Hotel and Restaurants contribute about 17 percent to the GSDP of the State.
- **8.2.3** The Uttarakhand government has taken a number of steps to boost tourist activities within the state. It is the first state to have created a Tourism Development Board by legislation as the highest body to function as the promoter, adviser, regulator and licensing authority for tourism in the state.
- **8.2.4** To attract leisure tourists, the state will have to step up its spending on tourism related infrastructure. It will have to both upgrade as well as set up new tourism related infrastructure. Although the endeavour of the state is to attract more private investment in tourism and related activities, the state will still have to shoulder the responsibility of providing basic infrastructure like roads, electricity, sanitation, cleanliness at the tourist spots etc. Moreover, it will also have to focus on conserving the ecology and environment of the state.

**8.2.5** Although pilgrimage has traditionally been the major segment of tourism in Uttarakhand in the past, it is endowed with enormous resources for cultural, adventure, wildlife, nature, leisure and eco-tourism. Also the potential for a wide variety of entertainment and sporting activities that attracts the modern tourist also exists.

There lies need to promote both new and already known tourist destinations. Although the state offers a number of pilgrimage destinations, the tourist activity is concentrated in a few of them. Also the inflow of Yatra tourist is concentrated around a specific time of the year. Thus, besides promoting the Yatra tourism, there lies vast potential in promoting adventure and leisure tourism. The unexploited capacity can be observed from the minimal level of growth in the tourist inflow of about 18 percent in relatively well-developed tourist destinations like Mussoorie and Corbett National Park "between 1999-2002".

# ISSUES AND REQUIREMENT OF GRANTS FOR YATRA TOURISM

- **8.2.6** The tourism on the Yatra Routes (yatra tourism) puts tremendous pressure on the local infrastructure. As a consequence, the tourists as also the permanent residents of the state have to bear the brunt of cracking infrastructure.
- **8.2.7** Every year a large number of devotees visit the Char Dham region and the number is growing with each passing year. However, to visit each of the Char Dham one has to undertake a minimum stretch of 200-300 km of the hilly terrain, the condition of which further degrades during the rains. Although the state has made an effort to provide basic facilities like drinking water, accommodation, electrification etc, these have turned out to be insufficient considering the heavy rush in the summers.
- 8.2.8 The pressure of yatri inflow mounts during the May-November period when most of the shrines become accessible. Moreover, in recent past, the July-August period has begun to witness huge influx of Shiva devotees known as *Kanwars*. Their numbers are so large that often normal traffic to Haridwar has to be suspended or diverted to make way for them. While the number of tourists has increased from 12.9 million in 2003 to 22.3 million in 2007, the population of the state is only 8.5 million as per the 2001 Census. Thus, the floating population puts enormous pressure on urban

infrastructure in the state. The local authorities (Nagar Palika etc), who have the responsibility to maintain civic infrastructure, sanitation and drinking water, health and medical facilities besides law and order, come under tremendous stress more so during summer, rains and autumn. As the average spending power of *yatris* or *kanwars* is very low the onus of providing these services become even more critical for the local authorities. Further, since a significant portion of the Char Dham or Kanwar Yatra is undertaken on foot, safety of the tourists has also become a major concern for local authorities. Thus while the state's revenue earnings from these *yatris* is very little or negligible due to their low spending power, the state has to incur huge expenditure in providing them basic infrastructure. As the planning norms of local authorities have to give due consideration to the floating population, the state will need help and support from the Centre to handle the situation arising out of tourist influx more effectively and efficiently.

- 8.2.9 The state government has a detailed master plan listing out the activities that needs to be taken up in the government sector for augmenting infrastructure facilities on the Char Dham Yatra routes. Similarly, development plan of five Prayags (Devprayag, Nandaprayag, Kareprayag, Rudraprayag and Vishnuprayag) are also ready. This include development of old ghats, improving of road junctions, development of parking lots, slope stabilisation, construction of suspension bridge, basic/emergency accident relief infrastructure, development of landscape gardens, developing SOS notification posts with emergency communication lines etc.
- **8.2.10** Besides the char Dham and the prayags, there are a number of other pilgrimage sites and sites of historical and religious importance which attract a lot of visitors. Also the kanwar mela has emerged as major activity, which attracts over 50 lakh pilgrims in the month of August. This not only becomes a charge on the state's limited resources but also restricts economic activity, as the national highway (between Haridwar and Meerut) remains closed for almost two weeks. The requests for grants to cope up these special problems are detailed in Volume IV.
- **8.2.11** In view of the tourist related special problems, the commission is requested to grant a sum of Rs. 114.15 crores for up-gradation of tourism infrastructure. The detailed break up of the schemes is given in Vol IV.

# SECTION III: VULNERABILITY AND CALAMITY RELIEF

- **8.3.0** Uttarakhand by virtue of its geo-tectonic setting, physiographic conditions and extreme seasonal precipitation is vulnerable to a large variety of disasters. The state faces the fury of flashfloods and landslides during monsoons. Avalanches, hailstorms and forest fires are other common disasters in the state. Though enhanced by anthropogenic activities, most disasters are caused by natural geological processes and it is not always possible to prevent them. The impact of these natural events can, however, be greatly reduced by careful planning and timely and effective meditative action and thus we can reduce human sufferings.
- 8.3.1 North and Northeasterly drift of the Indian plate, its collision with the Eurasian plate and its subsequent subduction beneath the same resulted in squeezing, kneading, folding, faulting and metamorphism of the sediments hitherto deposited in the intervening sea (the Tethys Sea). This process gave birth to the Himalayas. This process has rendered the terrain highly vulnerable to disasters. From South to North these are Himalayan Frontal Thrust (HFT) separating the Indo-Gangetic plains from the Shivalik foothills, Main Central Thrust (MCT) separating the Lesser Himalayas the Central Crystalline and the Tethyan Fault separating the Central Crystalline from the Higher (Tethyan) Himalaya.
- 8.3.2 North and Northeasterly movement of the Indian plate responsible for the evaluation of Himalayan mountain range has not yet seized and sudden release of strain built up due to this motion is responsible for earthquakes in this belt. The whole of the state falls in Zone V and Zone IV of earthquake risk map of the country. The region has not at the same time witnessed a major earthquake (magnitude 8 on Richter scale) for more than 200 years. It thus falls in seismic gap of 1905 Kangara earthquake and 1934 Bihar-Nepal earthquake (both of magnitude > 8 on Richter scale). The strain built up in the region due to the plate movement has thus not been released yet and this further enhances seismic risk in the region.
- **8.3.3** Moderate magnitude earthquakes that struck the state in the previous decade have exposed the level of seismic vulnerability of the state. Uttarkashi earthquake on 28 October 1991 and Chamoli earthquake of March 29 March 1999 took toll of 768 and

- 100 human lives respectively. These quakes caused injury to thousands of people and inflicted significant damage to cattle, property, land and infrastructure like road, bridge, telephone, water and electricity supply.
- 8.3.4 Slope instability is another cause of concern for the state government and the state regularly witnesses massive losses due to landslides particularly during monsoons. In 1998, the state witnessed two major landslides one at Malpa in Pithoragarh and another at Okhimath in Rudraprayag. This took toll of 219 and 109 human lives respectively. Though spared of landslides of that magnitude, the state has been experiencing regular landslides leading to loss of 290 human lives in the past seven years. Permanent loss due to landslides is a major issue in the hills and around 100-odd villages in the state have been rendered unfit for human habitation due to landslides. Resources are required for rehabilitating these villages.
- 8.3.5 Agriculture is the mainstay of the people in many part of the state. The landholdings are small and fragmented. Overdependence of agriculture on rainfall makes the state quite vulnerable to crop failure. In 2006 winter rains were deficient by 79.1 percent and 63 tehsils of 11 districts faced the wrath of drought. Consequently an assistance of Rs. 284 crore had to be sought from the Centre under the National Calamity Contingency Fund (NCCF). Similarly in 2008, 45 tehsils faced drought conditions for which an assistance of Rs. 241.56 crore had been sought from the Centre out of the NCCF. The deficient rainfall is not the only problem that subsistence farmers face in the state, they also suffer crop losses due to sever winter and frost. As these losses are not covered by Calamity Relief Fund (CRF) guidelines, the affected farmers do not receive adequate compensation.
- **8.3.6** As per the terms of reference of the 13<sup>th</sup> Finance Commission, the Commission may review the present arrangements as regards financing of disaster management with reference to the NCCF and CRF and the funds envisaged in the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon.'
- **8.3.7** The Uttarakhand government, therefore, after carefully reviewing the performance of the CRF would like to suggest some modifications in order to extend its coverage and to enlarge its scope. These changes will help the states like Uttarakhand to mitigate certain pressing difficulties that arise from time to time.

- a) The Disaster Management Act 2005 defines in its totality and covers almost all the incidences adversely affecting human interest but the disaster related guidelines circulated by the Union home ministry allow only the victims of 10 notified disasters to be compensated by the CRF. As noted above the state is affected by extreme cold conditions and the farmers in the state often loose their agriculture crops due to frost and cold waves and today there is no provision to compensate these losses. At the same time due to extreme cold conditions the state government has to make provisions of bonfires at public places but it does not have resources to meet these expenses. It is therefore necessary that the norms of the CRF as issued by Union home ministry are amended to cover all the disasters that fall within the definition of the Disaster Management Act.
- b) The present time limit for reconstruction of damaged assets is unrealistic in view of the ground realities in hilly states like Uttarakhand. In view of the difficult terrains and problems relating to resource mobilisation the time limits for the reconstruction of damaged assets should be extended from 30-45 days to three months in the plains and for the hills these should be revised from 45-60 days to six months.
- c) In order to facilitate quick response at the time of disaster the state government should be allowed to utilise at least one percent of the CRF funds for meeting the cost of resource mobilisation, hiring experts and others.
- d) In accordance with the provision of the Disaster Management Act, the state government has formulated state and district disaster response and mitigation funds. guidelines with regard to the sharing of these funds needs clarification.
- c) Section 19 of the Disaster Management Act provides for the revision of the relief package for the same. The Act, however, does not spell out budgetary provisions for the same. The state should either be provided with additional resources to meet this deficit or it should be allowed to use the funds available under the CRF for the same.
- d) Uttarakhand faces the challenge of rehabilitating around 100-odd villages that have been rendered unsafe for human habitation. Funds available with the state under CRF can be utilised only for immediate relief and there exist no provision for the rehabilitation of the disaster victims. The state should be permitted to use the CRF funds for rehabilitation.

- 8.3.8 Unlike in the plains, disasters often render habitation in the mountainous regions permanently unfit for human habitation. Landslides and flash floods change the physiography and cause permanent loss of land. The victims of these disasters have to be rehabilitated at alternative safe locations. At present, neither there is a provision nor policy for the rehabilitation of disaster victims. Formulation of a 'national rehabilitation policy' for disaster victims that is backed by a 'rehabilitation fund' at the disposal of the state would ensure quick and speedy redressal of rehabilitation related issues.
- **8.3.9** On the one hand disasters put very heavy pressure on public exchequer and on the other hand relief provided to the disasters victims as per the CRF norms usually are not enough. Thus the disaster management policy should change from extending relief to compensation. To start with the Finance Commission can consider insuring infrastructure and lives of the people who fall in the category of BPL out of the funds available under the CRF. This scheme subsequently should be extended to cover the entire society with provisions of cost sharing by other sections of the society.
- **8.3.10** Taking lead from the results of the Emergency Operations Centre set up under the Union home ministry–UNDP DRM programme, the state government has set up EOCs in all the districts. These EOCs, however, lack infrastructure and instruments. A minimum sum of Rs 1 crore would be needed to furnish and equip each EOC. The state would thus require resources to the tune of Rs 14 crore to furnish and equip its 13 districts and one state level EOC.
- **8.3.11** In view of the above, we request the Finance Commission to take cognizance of both the disaster management as well as relief aspects stemming from the vulnerability of the state and increase the allocation to the vulnerable states like Uttarakhand.

- **8.4.0** Although the terms of reference of the 12<sup>th</sup> Finance Commission do not explicitly require it to take into account the requirements of the states for up-gradation of the standards, this in no way binds the Commission not to consider these under Article 275(1) of the constitution.
- **8.4.1** The up-gradation grants issue was referred to for the first time in the terms of reference of the Sixth Finance Commission. As per the presidential order it was asked to consider:

"the requirements of states which are backward in standards of general administration for upgrading the administration with a view to bringing it to the level obtaining in the more advanced States over a period of ten years"

- 8.4.2 As pointed out by Vithal and Sastry (2001), the Commission took the view that the provision of fund to states that are backward in administrative and social services falls within the purview of Finance Commission and that the specific mention of this in terms of reference was only a confirmation of this view. After that the 7<sup>th</sup> and the 8<sup>th</sup> Finance Commissions had similar terms of reference with respect to up-gradation of standards. The terms of reference of the 9<sup>th</sup> Finance Commission, however, did not specifically refer to the up-gradation of standards of administration. The 9<sup>th</sup> Commission did not recommend up-gradation grants for the five years spanning 1990-1995. The terms of reference of the 10<sup>th</sup> and 11<sup>th</sup> Finance Commission were similar to those of 7<sup>th</sup> and 8<sup>th</sup> with regard to up-gradation grants and both the Commissions made recommendations with regard to these. The terms of reference of the 12<sup>th</sup> Finance Commission also did not refer to up-gradation and special problems but the Commission recommended these grants for the period 2005-2010.
- **8.4.3** The Finance Commissions in the past have also recommended grants for the **special problems** in the states. These grants are different from up-gradation grants. The Eighth Finance Commission had identified special problems in 10 states and accordingly recommended grants to overcome these problems. The Ninth

Commission had recommended Rs. 122.25 crores for the Bhopal gas tragedy. The Tenth Commission identified special problems in 24 states and recommended Rs. 1246 crores for the period 1995-2000. The 12<sup>th</sup> Finance Commission has also recommended grants for State Specific Needs.

**8.4.4** Thus, system of transfers under 'special purpose and up-gradation grants' has evolved over time and the various Commissions have adopted flexibility in this regard. In view of the special circumstances/problems arising out of reorganization of the state and the dire need for up-gradation of standards in Uttarakhand, we request the Commission to take a sympathetic view in this regard and recommend these grants, request for which is detailed below. The same have been elaborated in Volume IV of the memorandum.

## FOREST AND WILDLIFE

- **8.4.5** The contribution of Uttarakhand forest to the eco system has already been covered earlier. However, special problems persist in the following areas:-
  - Conservation and Development of traditional water sources in the forest areas.
  - Assisting Natural Regeneration (ANR) of different forest types for maintaining Biodiversity.
  - Implementation of prescriptions of Management Plans.
  - Habital Management and biodiversity conservation.
  - Mobility and facilities for Forest Protection (Against Forest Fire, Encroachment, Illicit Felling, Poaching etc).
  - Infrastructure development of Roads/Bridges/Bridle paths/ Non Residential Buildings/Residential Building.
  - Plantation of trees outside reserve forest.
  - Provision of sustained livelihoods and their daily need for forest fringe villages.
  - Management and development of Van Panchayats.

The detail of the plans has been given in part IV of the memorandum. The Commission is requested to recommend a grant of Rs. 300 crores.

## **ELECTION**

**8.4.6** With the changing pattern of conducting election like introduction of electronic voting machines, photo identity cards etc., permanent buildings are required at central and district levels. The Commission is requested to recommend a grant to Rs. 70 crores.

# **NURSING**

8.4.7 Absence of a nursing training college in the state has led to acute shortage of nursing staff in the State. It is proposed to establish 5 nursing training colleges. The Commission is requested to recommend a grant of Rs. 100 crores.

## **CULTURE**

**8.4.8** The state does not have a state level museum and a suitable auditorium at the state capital which are a must for every state. The commission is requested to recommend a sum of Rs. 25 crore for state level museum and Rs. 20 crore for the construction of auditorium at Dehradun.

## **LIBRARY**

8.4.9 The state needs a good library system having a chain of libraries in the state with a State Central Library at a apex and other libraries at district, block and village levels having good connectivity with other libraries. The Commission is requested to recommend a grant of Rs. 38.52 crore.

# ESTATE DEPARTMENT

**8.4.10** The State needs a new Assembly Building in the Capital. At present it is functioning from a make shift building pending declaration of the permanent state capital. The Commission is requested to recommend a grant of Rs. 28 crores for construction of a new Assembly Building.

# POLICE AND FIRE SERVICES

8.4.11 Maintenance of law and order in the state is of prime concern in any state. Construction of 6 Police Stations Building, 46 reporting police station buildings, 44 watch and ward buildings, 11 police headquarters buildings, 4 transit camp, 13 traffic police out post, 10 police tourist out post, 6 border out post, 13 Mela out post, 6 museum and library, 13 recruitment training centre, 6 finger print bureau/ mini F.S.L lab etc, requires a sum of Rs. 135.65 crores. In addition to this Rs. 114.60 is required for special repair and renovation of administrative buildings and fire station office buildings etc. The Commission is requested to recommend a grant of Rs. 230.55 crores.

# PRIMARY AND SECONDARY EDUCATION

**8.4.12** The primary and secondary school infrastructure needs urgent up-gradation particularly in the areas of girls toilets and common rooms, libraries and rain water harvesting to provide required potable and non-potable water in the schools. This would require an amount of Rs. 191.95 crores.

# **TECHNICAL EDUCATION**

**8.4.13** After the creation of the State, Board of Technical Education has been established in 2004, but it lacks sufficient infrastructure and till now it is running in temporary buildings. For construction of building for Board Rs. 17 crore in needed.

# **SPORTS**

**8.4.14** 10 stadiums, 8 indoor halls and 2 swimming pools of the state government needs urgent up-gradation as they have very outdated facilities. A national level stadium is also required in the state. A sum of Rs. 35 crore is needed for these works.

# MEDICAL AND HEALTH

- 8.4.15 The state needs urgent up-gradation in health services. Due to budgetary constraints it is not possible to carry out time bond maintenance/ repair. The state requires Rs. 50 crore for maintenance/ repair of residential and Non-residential building, Rs. 100 crore for up-gradation of government hospitals, Rs. 10 crore for construction of Gandhi Shatabdi Eye hospital and Rs. 50 crore for construction of residential building.
- 8.4.16 Ayurvedic system of medicine is gradually becoming popular in the state and the state has been awarded the title of 'Herbal State'. National and International patients come to the state for Ayurvedic treatment. Hence there is an urgent need to upgrade the Ayurvedic hospitals, dispensaries and colleges. Rs. 75 crores is required for equipments and capital works.

  Homoeopathic treatment is getting popular with masses. Establishment of State Homoeopathic Medical College in Government sector is essential as there is not a single such college in Uttarakhand. This college will fullfill the existing gap of trained man power in Homoeopathy Sector. The proposed scheme will provide job opportunities in both public and private sector. An

amount of Rs. 15 crore is needed for setting up this college.

## TRANSPORT & CIVIL AVIATION

8.4.17 Being a hilly State, road transport is the main means of transportation within the State. Compared to the planes, road accidents are higher in hill areas. To minimise and control the number of road accidents, infrastructure support in needed. For establishing 3 driving training school Rs. 18 crore is needed. Establishment of automated testing lanes for computerised mechanical inspection of the vehicles, Rs. 25 crore is needed and Rs. 5 crore is needed for installation of simulator for driving tests.

# **IRRIGATION**

**8.4.18** The maintenance cost of medium and minor irrigation canal system in the hilly areas is very high as the canals get badly damaged due to landslides, cloud burst etc. For one time major repairs Rs. 22 crore is required.

## CONSERVATION OF HERITAGE AND HISTORICAL SITES

**8.4.19** In Uttarakhand there are a large number of places of historical and cultural importance. Out of 89 sites, 42 sites like Baghnath Temple, Batal Bhuwnehwar etc. are under the control of State Government. Due to paucity of funds these sites are getting neglected. For conservation and renovation of these sites Rs. 25 crore is required.

## SEWERAGE SCHEMES FOR DEHRADUN AND PAURI

**8.4.20** Lack of Sewerage system in Dehradun and Pauri is a serious problem. To provide for the severage and sewerage treatment plants for these towns, Rs. 202 crores is required.

## SAINIK KALYAN

**8.4.21** Very large number of serving and retired army personnel belong to Uttarakhand. One of the requirements of the state is to establish ex-soldiers rest houses and welfare centers. The projected demand is of Rs. 20.40 crore for the same.

## PUBLIC WORKS DEPARTMENT

**8.4.22** Up-gradation of Dehradun Mussoorie and Nainital, Haldwani routes and road safety work on the Char Dham and other link routes are needed. A sum of Rs. 56.88 crores is needed for the same. Apart of this, up-gradation of other roads, which include maintenance of roads, requires a sum of Rs. 55.62 crores.

# **Summary and Conclusion**

- 9.0 Uttarakhand was born on November 9, 2000. Given the specificities of its terrain, economic structure, etc, it was carved out of Uttar Pradesh as the 27th state (10th special category state) of the Indian Union. While it's split from Uttar Pradesh allowed the state to start on a clean slate in some respects, the challenges before it continues to be daunting.
- 9.1 The fiscal situation of a state is an outcome of the economic structure of the state as well as its fiscal practices. The revenue raising capability and the expenditure needs of a state are critically linked to its economic and demographic profile. The following fiscal implications emanate from the economic and demographic profile of Uttarakhand.
  - The structure of the state economy has changed significantly since it came into existence in 2000. The share of industry in GDP has increased from 19.7 per cent in 1999-00 to 30.8 per cent in 2006-07. While this has indeed enhanced the tax revenue potential of the state, we must not forget that this transformation has come about on a very low base. This simply means that from a negligible industrial base, the state has been able to create some industrial base. The tax revenue potential, therefore, continues to be relatively weak as compared to other states or even its nearest comparator Himachal Pradesh.
  - Lagging industrialisation and higher proportion of population having completed higher secondary education as compared to special category states/ all India average has led to heavy out migration among adult males. This has resulted in high incidence of both child and old age dependence. Further, the health indicators of women and children are relatively weak. The infant mortality of the state, which was lower than the all-India average in 1998-99, has become higher than all-India average in 2005-06. In fact, the terrain and habitation patterns do not allow the state to exploit scale economies in public service delivery. All these simply mean that to raise the level and quality of public services the state will have to deploy more resources.
  - Partly due to terrain, but also because of relatively low levels of investment, the state still suffers from a weak infrastructure base. In the present era where private,

institutional and external investment usually favours states with better infrastructure, this is certainly a cause of concern for the state. Thus, in order to improve the situation, the state would have to undertake substantial investment in infrastructure. Transfer calculations, therefore, will have to take into account not only the need but also the increased exposure of the state in operating and maintaining these assets in coming years.

- 9.2 The fiscal situation of the state gradually improved and was much better than other special category states till 2005-06. State achieved revenue surplus as also primary surplus in 2006-07. However, due to the impact of sixth pay commission its fiscal situation has again turned adverse in 2008-09. This has also worsened the debt scenario of the state. It is almost clear that with sixth pay commission burden the state will not be able to achieve its debt to GSDP ratio of 25 per cent as stated in its Fiscal Responsibility Legislation (FRL) by 2014-15. We, therefore, request the Finance Commission (FC) to sympathetically examine circumstances leading to Uttarakhand's current fiscal stress and award suitable debt relief. This will allow the state not to get bogged down by the liabilities arising out of the impact of sixth pay commission and continue to focus on various developmental activities that are priorities of the state.
- 9.3 Despite the fiscal disadvantages implicit in its profile, Uttarakhand has done reasonably well in revenue raising efforts ever since it came into existence. The per capita own tax revenue collection of the state is better than most of the special category states. This shows state's commitment towards tapping and broad-basing its own revenue collection effort.
- 9.4 Power had the potential to emerge as an important source of revenue for the state and the state had initiated a number of efforts in this direction as well. But, now due to a change in the power policy (erstwhile highest premium bid has been replaced by lowest tariff bid); power has ceased to be an important source of non-tax revenue.
- 9.5 The expenditure requirements of the state is higher both on account of higher cost of delivery of services (due to terrain) and also because of its efforts to bridge the gap with more prosperous states. Thus expenditure levels of the state will rise in future. However, the endeavour of the state would be to spend money in productive areas viz. creation of physical infrastructure, promotion of tourism and focus on social sectors. These efforts,

- while have immediate expenditure implications, its benefits to the state would accrue only in the medium to long run.
- 9.6 The 12th FC increased the share of states in the net proceeds of the shareable Central taxes to 30.5 per cent as against 29.5 per cent recommended by the 11<sup>th</sup> FC. However, this is still not enough to finance the various social and economic expenditure commitments that States have. FC should increase the share of states in the Central taxes from the present 30.5 per cent to 50 per cent.
- 9.7 The existing devolution formula needs to be suitably modified, as in its current form it is unlikely to do justice to the states like Uttarakhand. While it is important to incentivize the revenue transfers to states to promote efficiency, it is equally important to ensure that the criteria used is objective and reliable. While per capita income is a good criteria for determining the revenue raising capacity of a state, structure of the economy also plays a critical role and should be given due weightage in the devolution formula.
- 9.8 Use of infrastructure index as a criterion for the devolution of taxes is important as it recognizes the disabilities of states with poor infrastructure particularly in attracting investments. This assumes greater significance in the context of the present regime of liberalization and de-licensing, where infrastructure related factors are influential in shaping the investment decisions of private investors. However, 12th FC chose to drop it. We would, therefore, urge the Commission to reintroduce the infrastructure index into the tax devolution criteria and assign it a suitable weight.
- 9.9 About 61 per cent of Uttarakhand's area is under forests and it should be treated as a special feature with important implications for centre-state financial transfers. Drawing upon contemporary economic perspectives of ecosystem services (ESS) it has been argued that the benefits from the state's ESS flow to a set of stakeholders far beyond its boundaries. It is often suggested that as long as ecosystem services are not included in market system, governments should incorporate them in their accounting systems so that the service providers have economic rewards for their conservation efforts. Taking note of this, 12th FC allocated a sum of Rs 1000 crore spread over the award period 2005-10 for maintenance of forest under grants-in-aid, of which Uttarakhand's share was Rs 35 crore. While this is, no doubt, a step in the right direction, the next step should be differentiation of forest cover across states on the basis of ESS flow. This simply means

- rewarding those states more whose ESS serve hundreds of million of people as against the ones whose ESS serve no one, even if they have similar forest cover. In the light of the difficulty in determining value of the ESS flow in different states, forest cover may be given 10 per cent weight in the devolution formula.
- 9.10 Tourism has been identified as a thrust area in Uttarakhand. Tourism in the sate can be classified into two broad categories viz. pilgrimage tourism (Yatra tourism) and other tourism (leisure related). The state is host to Haridwar, Rishikesh, the Char Dhaam and the sacred Ganga & Yamuna. Beside these there are many other pilgrimage sites and sites of historical and religious importance. These pilgrimage sites are a national heritage and play an important role in promoting national unity and integrity.
- 9.11 The tourism on the Yatra Routes (Yatra Tourism) put tremendous pressure on the local infrastructure. As a consequence the tourists as also the permanent residents of the state have to bear the brunt of cracking infrastructure. The pressure of yatri inflow mounts in the months of May to November when most of the shrines become accessible. Moreover, in recent past, the month of July and August has begun to witness huge influx of Shiva devotees known as 'Kanwars'. Their numbers are so large that often normal traffic to Haridwar has to be suspended or diverted to make way for them. Due to the massive floating population local authorities (Nagar Palika etc) often find it difficult to maintain civic infrastructure and provide adequate sanitation, drinking water, health and medical facilities to both local and floating population. Moreover, state's revenue earnings from these 'Yatris' or 'Kanwars' are very little or negligible due to their low spending power. Thus state will need adequate help and support from centre for handling the situation arising out of this tourist influx more effectively and efficiently. Besides this significant expenditure is also required to create infrastructure in new tourist sites as well as strengthen/upgrade the existing ones.
- 9.12 The state is constantly exposed to major hazards like earthquakes, landslides, cloud burst, avalanches and forest fires. These calamities not only disrupt normal life by cutting off communication and choking essential supplies but also result in loss of life and property. For a disaster prone area Uttarakhand, which is also fiscally disadvantaged, the central assistance should come in the form of 100 per cent grant instead of 75 per cent grants.

- **9.13** Although the TOR of the 13<sup>th</sup> FC do not explicitly require it to take into account the requirements of the states for up-gradation of its administrative machinery, but this has not prevented FC in the past to not consider these. In view of the special circumstances/problems arising out of reorganization of the state, which still has not stabilized, the state is in dire need of upgrading its administrative machinery. We request the FC to sympathetically consider this request as well.
- 9.14 Finally, the state is committed to improve its fiscal health over the years. This can also be gauged from the fact that it had primary surplus for two consecutive years 2005-06 and 2006-07. However, due to the financial burden arising out of implementation of the recommendation of Sixth Pay Commission, its fiscal health has again worsened. The revenue and expenditure projection show that pre-devolution revenue deficit of the state is expected to reach Rs. 54,755.9 crore for the period 2010-11 to 2014-15. Similarly, the pre-devolution non-plan revenue deficit is expected to reach Rs. 39,397.4 crore. Therefore, the support of the FC will be critical for the state to regain and put its fiscal health on track.