

A map of the state of Uttarakhand is shown in white, centered within a blue rectangular area. The map is framed by a red border. Overlaid on the map is the title text in red.

**Revised Memorandum
To The
Fifteenth Finance
Commission**

**Government of Uttarakhand
July 2020**

Table of contents

Executive Summary	5
Chapter 1: Overall economic scenario	19
Chapter 2: Terms of reference and the first report of the 15th Finance Commission	27
Chapter 3: State profile	39
Chapter 4: Inadequate compensation from 14th Finance Commission.....	59
Chapter 5: Development disabilities and environmental externalities	73
Chapter 6: Fiscal profile	93
Chapter 7: Revenue and expenditure forecasts	119
Chapter 8: Eco-system services.....	141
Chapter 9: Proposed devolution.....	157
Chapter 10: Natural calamities	173
Chapter 11: Local bodies	187
Annexure 1	199
Annexure 2	209

Executive Summary

Overall economic scenario

1. Government of Uttarakhand had submitted its Memorandum (herein after referred to as the first Memorandum) to the 15th FC in October 2018. Since then, a number of changes in the economic scenario affecting the global economy, the Indian economy and the individual state economies including that of Uttarakhand have taken place. The 15th FC has also submitted its first report for the year 2020-21. Further, the onset of Coronavirus Disease (COVID-19) has adversely affected the economic and fiscal prospects for the Indian economy and the state economy in a significant way.
2. The global economy has been slowing down in recent years and this has been exacerbated by the onset of the COVID-19 pandemic. The World Bank (Global Economic Prospects (8 June 2020)), OECD and the IMF have projected a sharp contraction in global GDP in 2020. While the World Bank and the IMF estimated the contraction at (-)5.2% and (-)4.9% respectively, the OECD projected it to be higher at (-)6.8% on average. In India, real and nominal growth have fallen to 4.2% and 7.2% respectively in 2019-20. With the COVID-19 pandemic causing demand and supply side disruptions in the economy, it is likely that the growth rates may turn out to be tangibly lower.
3. The 15th FC, in its first report, assumed nominal GDP growth at 10% for 2019-20 and 11% for 2020-21 which is higher than the CSO estimates. For Centre's gross tax revenues, the Commission assumed a growth rate of 8.4% in 2019-20 and 12.5% in 2020-21. As against these numbers, the estimates of the Union Budget 2020-21 were at 4% and 12% in 2019-20 and 2020-21 respectively. However, actual growth in central tax revenues in 2019-20 has fallen below the central government's budget estimates and significantly below the 15th FC estimates. The CGA data indicates a contraction of (-) 3.4% in central gross tax revenues during 2019-20. With the actual gross tax revenues of the Centre turning out to be lower than that projected by the 15th FC, it will imply a lower magnitude of central taxes as also the tax revenues of the government of Uttarakhand. This will result in a higher assessed revenue deficit.
4. It is crucial that the 15th FC takes into account these recent developments in designing a suitable scheme of transfers. It may be noted that in times of revenue uncertainty, fiscal transfers that are undertaken through the route of Article 275 grants which includes the revenue deficit grants, are more reliable and these are specified in nominal magnitudes.

5. In recent years, there have been four other critical changes in the economic and fiscal ground realities having a bearing on transfers from the central to state governments. *First*, under the guidance of a Monetary Policy Committee, the CPI inflation has been brought down on trend basis from its high levels prior to 2014-15. *Second*, the plan non-plan distinction has been abolished. *Third*, with the implementation of GST, both states and Centre have agreed to be guided by the GST Council in the determination of GST rates and the definitions affecting coverage of the GST base. To a large extent, states have much less control on their revenue performance as decisions regarding a core tax base have not remained entirely under their control. In particular, the net producing states such as Uttarakhand are losing revenues with respect to taxes merged under GST on a permanent basis. *Fourth*, as the economic impact of COVID-19 unfolds, the central government has considered a relaxation in the FRBM norms, at least temporarily, both for the Centre and states. Already, in the Union Budget for 2020-21, the fiscal deficit target for 2019-20 (RE) and 2020-21 (BE) had been relaxed by margins of 0.5% points each. Further, the central government has announced its revised gross borrowing program for 2020-21 uplifting its budgeted fiscal deficit from 3.5% to 5.7% of estimated FY 2020-21 GDP¹. The borrowing limit for states has also been relaxed from 3% to 5% of their respective GSDPs subject to certain conditions².

Terms of Reference and the first report of the 15th finance commission

6. The 15th FC has been asked to submit its final report covering the period from 2021-22 to 2025-26 by the end of October 2020. Three important considerations led to the issuance of the additional ToR to the 15th FC. One relates to the change in the status of Jammu and Kashmir from that of a state to a set of two union territories (UT), one with legislature and the other without legislature. The second issue relates to the uncertainties in estimating gross tax revenues of the centre and states due to the current economic slowdown and the COVID-19 outbreak as well as the revenue impact of the CIT reforms introduced in October 2019. The third issue relates to the need for creating an earmarked fund for defence and internal security.
7. With respect to the vertical share of states in central transfers, the objective basis for determining this share was not discussed in detail in the first report of the 15th FC. The Commission reduced the vertical share marginally to 41%

¹ https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=49792

² <https://pib.gov.in/PressReleasePage.aspx?PRID=1624661>

from 42%, taking into account the fact that it was now considering only 28 states. We look forward to a detailed discussion of the principles on which the 15th FC may determine the distribution of the sharable pool of central taxes between the Centre and states.

8. In the context of the horizontal devolution, two important changes that the 15th FC made were: (1) use of 2011 population data instead of 1971 and (2) introduction of two new performance criteria namely tax effort and fertility rate. With respect to tax effort, the period over which the tax-GSDP ratio was calculated related to the pre-GST period. Post GST, the tax base and the discretionary space left with the states in raising own tax revenues has drastically changed and hence tax effort criterion may be modified accordingly. Further, instead of using fertility rate for a given year, the Commission may consider rewarding improvement in the fertility rate over a specified period. In this regard, our suggestion is discussed in paragraph 41 of this summary.
9. With respect to the area criterion, the 15th FC continued to use the approach of the 13th and 14th FCs of setting an artificial floor of 2% to states which had a share in total area of less than 2%. The area criterion may be modified so as to reflect cost disabilities relating to forest cover, share of hilly areas, and area reflecting international borders. The criterion for forest cover may be modified to include other ecosystem services such as area under snow and glaciers.
10. The 15th FC, in its first report, continued to provide revenue deficit grants which is a desirable feature in times of revenue uncertainty, a characteristic of the present situation. The revenue deficit grants may be supplemented by equalization grants which was the approach followed by the 12th FC. Further, these grants should be determined by application of normative principles which may be used for assessing state-wise expenditure needs and own revenues.
11. Transfers to states through centrally sponsored schemes and external aided projects were determined using different parameters for the general and erstwhile special category states during the planning era. The 14th FC did not make any distinction between special and general category states while recommending its transfers. As per '**The Sub-Group of Chief Ministers on Rationalisation of Centrally Sponsored Schemes**' committee recommendations, the centre continues the sharing pattern of CSS for NEHS at 90:10 for core schemes and 80:20 for other schemes. **The state**

proposes that the 15th FC in its final report may consider retaining the funding pattern for CSS at 90:10 for NEHS. This is because any increase in these states' contribution to CSS would put added pressure on their already limited resources leading to these states losing out on transfers from the centre on account of CSS due to their inability to contribute their share of resources.

Uttarakhand: socio-economic profile

12. Uttarakhand is characterized by a significant proportion of hilly area in total area, difficult geographical terrain, lack of quality infrastructure, low fiscal capacity, poor connectivity, international borders etc. The economic activity is mainly confined to plain areas. Most of the hilly areas have very low level of economic development and consequently a low tax base.
13. The structure of the economy of Uttarakhand has witnessed gradual changes since 2011-12. Although the state's economy continues to be dominated by the industrial sector, this sector's share has gradually declined from 53.8% in 2011-12 to 50.7% in 2018-19, a fall of nearly 3.1% points. Share of agriculture and allied activities declined from 12.3% in 2011-12 to 8.8% in 2018-19, a fall of 3.3% points. By virtue of being a producing state, the own tax revenues have eroded significantly under the GST regime.
14. Population growth rate in hilly areas is much less than the plain areas. The lower population growth in hilly areas also reflects out-migration of literate male workforce due to factors such as lower employment opportunities, education facilities, health facilities. The state also suffers from relatively low population density. The cost of public provision of basic services including health, education and infrastructure is prohibitively higher in hilly areas as compared to that in the plain areas. This cost disability puts additional pressure on the state's exchequer. This coupled with dispersed population, adverse demographical indicators and difficulties of terrain leads to lower levels of socio-economic development.

Inadequate compensation from 14th FC: over-optimistic projections

15. Uttarakhand lost heavily in the scheme of fiscal transfers recommended by the 14th FC as no revenue deficit grants was given in spite of it being a special category state at that time. This loss to Uttarakhand was due to four reasons
 - (i) Overestimation of centre's tax revenues by the 14th FC.

- (ii) Reduction in share of Uttarakhand in the tax devolution from 1.12% in 13th FC to 1.052% in 14th FC.
 - (iii) Overestimation of Uttarakhand's own tax revenues by the 14th FC.
 - (iv) Underestimation of Uttarakhand's expenditure requirements during the forecast period.
16. The 14th FC had overestimated the own tax revenues of the state government by 68.41% and own non-tax revenue by 22.06%. The revenue expenditure was underestimated by 13.97%. The gap between revenue receipts and revenue expenditure as assessed by the 14th FC was Rs. 16,736 crores while this gap between the actuals turned out to be much higher at Rs. 77,480 crores. The loss to the state of Uttarakhand is evaluated at Rs. 60,741 crores, amounting to an annual average loss of Rs. 12,148 crores for the five-year period under the 14th FC.
 17. Plan grants like NCA, SCA and SPA were discontinued by 14th FC which led to a revenue shortfall of Rs. 2500 crore per annum. Uttarakhand's inter-se share in devolution was also reduced from 1.12% (13th FC) to 1.05% (14th FC) leading to an annual loss of Rs. 350 crores. This coupled with the denial of revenue deficit grant has adversely affected the development expenditure of the state, leading to an increase in revenue and fiscal deficit, and borrowings.
 18. With the introduction of GST in July 2017, the state witnessed a major structural change, with a significant bearing on its fiscal capacity. Previously, for the purpose of revenue generation, states were actively focusing on increasing their production capacities but now due to the introduction of GST, the emphasis has shifted to consumption. Uttarakhand has a low consumption and thus, the overall revenue collection is likely to be low in the future.
 19. Considering these resource constraints faced by Uttarakhand, the state, in its first memorandum to the 15th FC submitted in October 2018, had strongly proposed that it be considered for the provision of revenue deficit grant. After assessing the state's fiscal and economic position, the 15th FC, in its first report has recommended a revenues deficit grant amounting to INR 5,076 crores for 2020-21 for Uttarakhand. It may be noted that the total amount of revenue deficit grants recommended by the 15th FC for 2020-21 is INR 74,340 crores. However, the central government, in its 2020-21 budget had provided for only INR 30,000 crores. It is expected that the balance may need to be provided through a supplementary demand. Furthermore, the

ongoing economic uncertainty coupled with the impact of COVID-19 will have considerable implications on the state's economy and finances. The state urges the 15th FC to consider its revised revenue and expenditure forecasts for determining the revenue deficit grant.

Fiscal profile: structural constraints

20. Total central transfers to Uttarakhand account for more than 50% of its revenue receipts. This implies that risks associated with growth in central tax revenues in the wake of the ongoing economic slowdown accentuated by the impact of COVID-19 pandemic is critical.
21. The implementation of the recommendations of the 14th FC had brought about landmark changes in the system of fund flow from the Central Government to the state governments. However, these recommendations had an adverse impact on the finances of Uttarakhand as it was not considered for the provision of revenue deficit grants even though the state had been running huge revenue deficits.
22. Uttarakhand's own tax revenues relative to GSDP have fallen from a peak of 5.6% in 2016-17 to 5.0% in 2018-19 and is projected to fall even below it in 2019-20 (RE) and 2020-21 (BE). This may be largely attributable to falling GST revenue collections. Uttarakhand has a dominant manufacturing sector accounting for 33.4% of the state GSDP in 2018-19 as compared to 15.1% at the national level. The share of service sector in the state is far lower than the national average. Consequently, the state has lost out on half of the total revenue, which customarily accrued from the goods sector to the state, with only a marginal gain from services sector. For instance, revenues under CST, which later got subsumed in GST, constituted roughly 29.5% of the revenues subsumed within GST in 2016-17, as compared to a national average of 8%. Further revenues arising on account of the 3% input tax credit retained on interstate stock transfers accounted for approximately 5% of tax revenues subsumed within GST in 2016-17. Cumulatively, the state has lost out on 34.5% of revenue streams, as per 2016-17 data, under the GST regime as tax on interstate sales is credited to the consuming state. Under the pre-GST regime the state offered subsidized land and electricity to attract various manufacturing industries through which the state would earn revenue. Several excise duty exemption packages were also provided for hilly states of which Uttarakhand was a beneficiary. However, these incentives have been withdrawn under the GST regime and more importantly, the state has had to bear a permanent loss of the benefit of

larger revenues. It is important to note that such revenue losses under the GST regime is common to hilly states which are manufacturing oriented such as Himachal Pradesh and Jammu & Kashmir.

23. The low consumption base of Uttarakhand is also borne out by the fact that 62% of the total sales in the state in 2016-17 were interstate sales. The state has gained only marginally from services.
24. Although states have been assured of a nominal growth of 14% estimated on a cumulated basis over their 2015-16 actual revenues from the taxes that have been merged in GST, this provision will be available only until June 2022. After that, the states receiving GST compensation may face a revenue shock and the loss to Uttarakhand will be immense. The difference in protected or expected revenues and the revenue earned varies from state to state depending on structural issues mentioned earlier, and how the new tax regime has impacted each of these states. This consideration ought to be given importance while recommending transfers including revenue deficit grants.
25. The pickup in the share of own revenues in 2018-19 and 2019-20 (RE) is on account of an increase in non-tax revenues relative to GSDP while own taxes as a proportion of GSDP have remained at similar levels or fallen. Further, post-GST, the state does not have the same independence and control over policies as was during the VAT regime, and any shortfall in the revenue cannot be made up through policy changes by the state alone.
26. Within the non-tax revenues, the share of general services has been volatile in recent years and is attributable to ad-hoc and delayed release of accumulated pension dues by the Government of Uttar Pradesh (UP) in line with the provisions of the UP-Re-organization Act 2000. The balance due on this account cannot be considered as certain source of non-tax revenue for the state.
27. The share of revenue expenditure has accounted for nearly 84% of the total expenditure (excluding loan repayments) consistently. Higher expenditure commitments on the one hand and shortfall in revenue receipts on the other have led to rising fiscal imbalance in the state. The state's fiscal deficit averaged 2.00% of GSDP during 2010-11 to 2014-15, well within the FRBM limits. However, during 2015-16 to 2019-20 (RE), the fiscal deficit to GSDP ratio averaged 3.01%, increasing by 1% points of GSDP.

Revenue and Expenditure Forecast

28. The 15th FC requires the state governments to provide a detailed assessment of their revenues and expenditures for the period FY 2021-22 to FY 2024-25 for working out their scheme of fiscal transfers in their final report. For making the relevant projections the base year for the expenditure needs and non-tax revenues of the Government of Uttarakhand is 2018-19 (Actuals). Provisional actuals of tax revenues in FY 2019-20, which have turned out to be much lower than FY 2019-20 (RE) due to the unanticipated impact of Covid-19 pandemic, are used to reassess the tax revenues for FY 2020-21. These have further been used as the base for forecasting tax revenues for subsequent years.
29. The main considerations that need to be taken into account are (a) economy-wide slowdown which has affected both the state's own tax revenues and transfers from the centre, (b) fall in GST collections due to erosion of the interstate tax base which accounted for 38.5% of the revenues subsumed under GST in 2016-17 (c) revenue shock that would arise as GST compensation period ends in June 2022 (d) subdued collections from sales tax/VAT on petroleum products on account of the demand slowdown (e) sharp fall in pension apportionment from Uttar Pradesh, and (f) the additional burden of providing pension and gratuity benefits with retrospective effect for 6,268 work-charge employees as per the Supreme Court order.
30. The Covid-19 pandemic has led to a sharp fall in economic activity both at the national level as well as at the state level. The International Monetary Fund (IMF) has estimated India's real GDP to contract by (-)4.5% for the year 2020-21³ a sharp downward revision by 6.5% points from its earlier growth projection of 1.9% in April 2020. It projects a v-shaped recovery in India's real GDP growth which is forecasted at 6.0% in 2021-22. The OECD⁴ also projected India's GDP to contract by (-)3.7% in the single hit scenario and by (-)7.3% in the double hit scenario, where single hit scenario assumes an avoidance of a second outbreak which is factored in the double hit scenario. Taking into account the ongoing economic slowdown and the adverse effect of the COVID-19 pandemic, the nominal GSDP growth of Uttarakhand is estimated to sharply fall to 0.8% for 2020-21 as compared to the growth of 9.0% assumed in the state budget of Uttarakhand and a growth of 10.2% assumed by the 15th FC. In line with the expected pick up in India's GDP

³ IMF World Economic Outlook Update released on 24 June 2020

⁴ OECD Economic Prospects released on 10 June 2020

growth, the nominal GSDP growth in Uttarakhand is assumed to recover to 7.5% in 2021-22 and remain at 8% during the subsequent years.

31. In projecting state own tax revenues, the 15th FC assumed a uniform tax buoyancy of 1.16 for all states for 2020-21. This has turned out to be a significant overestimate on the basis of data on revenue realization. As already noted in paragraph 3, Centre's gross tax revenues showed a negative growth of (-)3.4% in 2019-20. The situation is not much different for the states. Furthermore, manufacturing-driven states such as Uttarakhand face the disadvantage of their relatively larger share of production in the GSDP not actually being reflected in a larger tax base. This is especially important for states which had a large volume of industrial investment during the pre-GST regime due to the well-meaning tax incentives implemented both by the centre and the states to correct regional imbalances. The lower consumption levels in such states adversely impacts their tax buoyancies. To account for such structural differences, it is important to incorporate the significantly lower tax buoyancies of hilly states like Uttarakhand. For the forecast period 2021-22 to 2025-26, we project an overall average buoyancy of 0.8, with buoyancy being close to 1 for most taxes. With respect to GST (excluding compensation cess) we assume a much lower buoyancy of 0.6, reflecting the structural factors affecting the tax base and assuming further improvement in compliance as the economy adjusts to a GST regime. Considering the past growth trend and the future needs, primary revenue expenditure (excluding interest and pension payments) has been projected to grow by 12.8% on an annual basis from 2023-24 onwards with an average growth of 12.2% over the entire forecast period 2020-21 to 2025-26. It may also be noted that Uttarakhand may require increased social sector expenditure particularly on medical and health services for effectively managing and mitigating the impact of COVID-19.

Development disabilities and environmental externalities: case of a hilly and small state

32. Uttarakhand was recognized as an erstwhile special category state and has been considered as a part of the north-eastern and hilly states by the 15th FC also. The need for special dispensation for this category of states has been by and large recognized by most FCs.
33. Uttarakhand is characterized by cost disabilities including difficult geographical terrain and sparsely dispersed population entailing higher per unit cost of provision of public and merit services such as education and

health, high cost of creation and maintenance of infrastructure, environmental constraints because of large forest areas, inclement weather, disaster proneness and weak infrastructure. Amongst the small and hilly states, Uttarakhand has the lowest per-capita expenditure on health and has the fourth lowest per-capita expenditure on education due to lack of resources.

34. Being a predominantly mountainous state, Uttarakhand is characterized by relatively lower economic activity and livelihood opportunities. Major growth drivers of the state like agriculture, horticulture, industry, hydro power, tourism etc. are constrained by geographical, environmental, regulatory and religious factors over which the state has no control. This results in a low fiscal capacity. Fiscal capacity has also been adversely affected after the implementation of GST.
35. It is proposed that the 15th FC incorporates the cost disabilities and the low fiscal capacity of the state of Uttarakhand while designing the formulae for intergovernmental transfers. In this context, it is proposed that the 'equalization approach' both on the revenue and expenditure side may be followed as it takes into account the inter se differences among the states both in terms of fiscal capacity which is linked to per capita income levels and differences in unit costs because of user and cost disabilities. It would also be relevant to benchmark individual states against their group averages with the two groups being small and hilly states and general states (including Assam). This would give due emphasis to the disadvantages faced by states like Uttarakhand.

Role of ecosystem services

36. Uttarakhand provides eco-system services to the nation through its large forest cover, glaciers etc. Himalayas are the 'water tower' of the country and provide innumerable ecosystem services including climate regulation and carbon sequestration. Positive contributions of the eco-system services are enjoyed by the residents of the state as also people from other states. However, the costs of maintaining these ecosystems are largely borne by states where these are housed.
37. Several studies have raised concerns about depleting glaciers in Uttarakhand during last two decades. The report on Uttarakhand Action Plan on Climate Change 2014, observed that "*Glaciers are threatened systems and must be preserved for the water security of the subcontinent*" and as part of the Soil and Water Conservation measures, Uttarakhand will maintain a close watch on glaciers and minimize human interference in the ecology of glaciers. For this, Rs. 55.26 crore was allocated to be spent over the next five years.
38. Forests have positive externalities associated with them in terms of provision of goods and ecosystem services. However, there are negative externalities relating to forgone economic opportunities, the costs of which have to be borne by the forest-rich states. There are difficulties in obtaining environmental clearances for developmental projects in forest areas leading to delays and cost escalations. Recognizing the importance of forests and the need for compensating states which bear the burden of maintaining large forests, in its first report, the 15th FC retained the criterion relating to share of forest area in the horizontal devolution formula. In fact, it has increased its weight to 10% from 7.5% as per the devolution scheme of 14th FC.
39. Uttarakhand suggests the 15th FC to take into account, the positive externalities generated by these eco-system services and provide adequate compensation for the opportunity cost borne by the state. The state has a significant area under forests and glaciers which limits the land use for revenue generating economic activities. It is proposed that the state should not be penalized for maintaining these eco-systems. It is proposed that the state should be adequately compensated on this account through both unconditional general fiscal transfers and grants. Particularly, in the devolution formula, the 'forest and ecology' criterion may be modified to include 'area under snow and glaciers'. The Commission may also recommend unconditional grants, enabling the state to prioritize the usage of these funds.

Modifying design of fiscal transfers

40. With respect to vertical devolution, excessive use of cesses and surcharges by the Centre has led to an increasing difference between the recommended and effective share of states in central taxes. For the 14th FC period, covering the period from 2015-16 to 2019-20 (RE), the average effective share of states in central taxes was 34.4% as compared to the recommended vertical share of 42%. For the 15th FC, effective share of states in gross central taxes is estimated at 32.4% as per the budget estimates of the Union Budget for 2020-21 as compared to the recommended share of 41%. In this context, it is suggested that the vertical devolution may be increased from 41% to 50%.
41. As small and hilly states are characterized by a low fiscal capacity, narrow economic base, and cost disabilities, it is suggested that 30% of the total vertical devolution may be earmarked for such states.
42. With respect to the horizontal devolution, it is suggested that the forest cover criterion may include area under forests as well as area under snow and glaciers. The area criterion may be modified such that a higher weight is given to the share of hilly area in total area reflecting larger unit costs of providing services in the hilly and sparsely populated states.
43. It is also proposed that the performance criterion relating to fertility rate may be modified. Demographic performance may be considered as improvement over time and not as a given level in a given year. For this purpose, change in the total fertility rate (TFR) of states from 2001 to 2011 may be considered. In fact, latest data on TFRs may be sourced from National Family Health Survey (NFHS) and compared with a suitable benchmark. Addition of credit deposit (CD) ratio in the devolution formula has also been suggested.
44. The suggested formula and the weights of individual criterion are summarized in table E1.

Table E1: Suggested Horizontal Devolution			
#	Criteria	FC 15 (first report)	Proposed weight
1	Population	15	15
2	Demographic Change/Performance	12.5	12.5
3	Distance	45	25
4	CD ratio	-	15
5	Area	15	15
6	Tax Effort	2.5	2.5
7	Forest and ecology	10.0	15

Natural calamities

45. Uttarakhand is vulnerable to various forms of disaster. Due to unavailability of sufficient resources from the SDRF in the past combined with its weak fiscal position, the state has had to cut back on expenditure in the event of a disaster. It is noteworthy that besides providing for disaster management, the 15th FC has introduced a separate disaster mitigation fund (SDMF) which may be used for those local level and community-based interventions which reduce the risks and promote environment-friendly settlements and livelihood practices.
46. The 15th FC has also introduced an innovative concept of developing a disaster risk index (DRI) to determine the inter-se shares of states. However, despite Uttarakhand being more frequently affected by drought than several other states including those which have received the highest score of 15, it has received a zero value against this parameter. It is proposed that the 15th FC may provide Uttarakhand a score of 10 under this disaster category while constructing the DRI in its final report.
47. In view of the ongoing outbreak of COVID-19, the health infrastructure of the state assumes a critical role. It may be noted that the state currently lacks the kind of facilities including the number of doctors, hospital beds, quarantine facilities, etc. needed to contain such an outbreak. The 15th FC may consider these factors and also take cognisance of the need to provide for mitigation and containment of such outbreaks while recommending grants for disaster risk management.
48. Taking into account the hazard and vulnerability profile of the state and specific problems faced by the state, the 15th FC is requested to provide funds to the tune of Rs. 7,910 crores to the state over the award period.
49. In addition, we request a special grant of Rs. 1,000 crores during 2020-21, if not for future years, to cope with the unanticipated outbreak of COVID-19. Depending on how the country is able to deal with this pandemic and how quickly economic recovery takes place, the FC may consider additional grants to deal with COVID-19 and its aftermath on the remaining period covering 2021-22 to 2025-26.

Local bodies

50. The inter-se distribution of grants for local bodies amongst different states needs a micro and more localized approach because of large scale local variations in socio-economic geographical circumstances. The inter-state

differences in the unit cost of providing local public goods and services may be considered while determining the inter-state distribution of local body grants.

51. In the context of extensive use of area for distribution of grants amongst local bodies, it is recommended that the 15th FC may use 'modified area' which gives a higher weight to the share of hilly area in the total area of the state. Further, conditionalities associated with local body grants may be minimized.
52. As per the recommendation of the 15th FC for 2020-21, Uttarakhand has not been given any grant for million plus cities. It is suggested that the concept of million plus cities may be modified to include capital cities along with million plus cities. Since, the capital city is the nerve center for the state and it has to cater to the needs of the entire population, its importance to the state economy cannot be downplayed by the fact that its population is lesser than a notional value (a million). Hence, it is important to consider all state capital cities in addition to the million plus cities for provision of grants. This would provide for resources for developing infrastructure and other amenities particularly in the capital cities of small and hilly states.
53. The 15th FC may consider incentivizing the constitution of State Finance Commission (SFC) and the status of the implementation of their recommendations in determining intra-state allocation of local body grants. Five SFCs have been constituted in Uttarakhand and the recommendations of four of them have largely been implemented.
54. The state government has to provide resources to the local bodies in line with the recommendations of the 4th SFC. Given the limited resources of the state, resources to the tune of Rs. 14,619 crores as untied transfers would be needed for (1) establishment of training and research institutes, (2) purchase of land for solid waste management, (3) installation of LED lights, (4) construction of storm water drainage, (5) construction of parks in ULBs, (6) strengthening of IT infrastructure in local bodies, (7) infrastructure up-gradation & Drinking Water Supply in Mussoorie and Nainital, (8) maintenance of roads of ULBs, (9) master planning study of all ULBs, (10) construction of way side amenities, (11) construction of modern bus stands in ULBs, and (12) beautification of parks and tourist ULB towns.

Chapter 1

Overall economic scenario

- 1.1 Government of Uttarakhand had submitted its Memorandum (herein after referred to as first Memorandum) to the 15th FC in October 2018. Since then, a number of changes in the economic scenario affecting the global economy, the Indian economy and the state economies have taken place. The 15th FC has also submitted its first report for the year 2020-21. Since then, the onset of COVID-19 has significantly adversely affected the economic and fiscal prospects for the Indian economy and the state economy.
- 1.2 The global economy has been slowing down in recent years. The World Bank (Global Economic Prospects (8 June 2020)), OECD and the IMF have projected a sharp contraction in global GDP in 2020. The World Bank, the IMF and the OECD have recently revised their earlier global growth forecasts downwards. While the World Bank and the IMF estimated the contraction at (-)5.2% and (-)4.9% respectively, the OECD projected it to be higher at (-)6.8% on average. This downward revision is largely attributed to the deleterious health and economic impact of COVID-19 pandemic on the global economy.
- 1.3 The adverse consequences of this global pandemic are significant, including the direct disruption to global supply chains, weaker final demand for imported goods and services, and the wider regional declines in international tourism and business travel. Further, risk aversion has increased in financial markets, commodity prices have dropped sharply, and business and consumer confidence have also fallen significantly.
- 1.4 Apart from this, frequent policy changes in trade agreements, the shift away from trade liberalism, and a ceaseless backlash to globalization would decrease the confidence in free market and may slowdown the growth. Higher tariffs imposed on US-China bilateral trade over the past two years continue to be important factors behind the weakness of global demand, trade and investment. Some progress has recently been made in the US-China bilateral trade. The “mini trade deal⁵” between the US and India has also not materialized yet. Besides, the disruptive innovation coupled with job replacing technological advances, aided by Big Data is changing the whole scenario. Upon the advent of this new eco-system, the challenges we would face are realignment of regulatory systems across the

⁵ Under the mini trade deal, India would get exemption from high duties imposed by the US on certain steel and aluminium products, resumption of export benefits to certain domestic products under the Generalised System of Preferences, and greater market access for its products from sectors like agriculture, automobile, auto components and engineering. In return, the US expects reduced tariffs on information and communication technology imports into India, greater accessibility to the Indian markets for medical devices, and removal of price caps.

world, accompanied by retraining and skilling of the manpower in adaptation strategies. In this context, with a rapidly changing environment, the task of forecasting any future trend becomes even more challenging and complex.

- 1.5 In India, growth has fallen year after year since 2016-17. As per the provisional estimates released by the CSO in May 2020, the real GDP growth for 2019-20 has been estimated at 4.2%, falling from the peak of 8.3% in 2016-17. It is not only the real GDP growth but also the nominal GDP growth which has fallen to a level of 7.2% in 2019-20, the lowest level since 1971-72 when it was at 7.1%. With the COVID-19 pandemic causing both demand and supply side disruptions in the Indian economy, it is likely that the growth rates may even turn out to be lower than these estimates.
- 1.6 The nominal GDP growth has a direct impact on tax revenues of the Centre and similarly for the states. It is the combination of tax buoyancy and nominal GDP growth that determines the growth rate of Centre's gross tax revenues.
- 1.7 The 15th FC made projections for Centre's gross tax revenues as well as states' own tax revenues based on nominal growth and buoyancy assumptions. It was recognized both by the commission and the central government that Centre's gross tax revenues have been facing significant revenue uncertainty in the wake of the ongoing economic slowdown and the revenue cost of the recent CIT reform. This is now accentuated by the COVID-19 outbreak. To mitigate the impact of this pandemic, the central government has announced a nation-wide lockdown leading to a temporary halt to the economic activity. This is expected to have an adverse impact on tax and non-tax revenue collections of both central and state governments. The economic impact of COVID-19 will be a function of the magnitude and speed at which it spreads and duration over which it lasts within India and across the globe.
- 1.8 The commission has assumed a nominal GDP growth of 10% for 2019-20 and 11% for 2020-21 as compared to a much lower provisional estimate by CSO at 7.2% in 2019-20. The Commission assumed a buoyancy for Centre's gross tax revenues at 0.84 for 2019-20 and 1.14 for 2020-21. Both these assumptions have proved to be overestimates. Accordingly, the Commission has estimated the central gross tax revenues to grow by 8.4% in 2019-20 over the 2018-19 actual collections. Centre's gross tax revenues are projected to grow by 12.5% in 2020-21. These growth rates have exceeded the corresponding growth as envisaged in Centre's budget for 2020-21. As per the Union Budget 2020-21, Centre's gross taxes are estimated to grow by 4% in 2019-20 (RE) and by 12% in 2020-21 (BE). However, even the 2019-20 (RE) for gross central taxes have proven to be optimistic. From the CGA, Centre's gross tax revenue data for the fiscal year 2019-20 shows a contraction of (-) 3.4%.

- 1.9 The 15th FC has given its forecast for Centre's gross tax revenues for 2020-21 from a base of 2019-20. If Centre's gross tax revenue turns out to be lower than that forecasted by the 15th FC for 2020-21, it will imply a lowering of the divisible pool of states and therefore a lowering of the assessed share in central taxes of individual states. This will imply that the assessed revenue deficits by the 15th FC for individual states may turn out to be significant underestimates.
- 1.10 Given the revenue uncertainty particularly due to the potential adverse impact of COVID-19 on the Indian economy both in real and nominal terms, it is suggested that the 15th FC may re-examine its forecast for the year 2020-21 which will serve as the base year for the forecast of the next five years. It may be noted that in times of revenue uncertainty, fiscal transfers that are undertaken through the route of Article 275 grants which includes the revenue deficit grants, are better as the amounts are more reliable as these are specified in nominal magnitudes.
- 1.11 In recent years, there have been critical changes in the economic and fiscal landscape and policy framework which have a bearing on transfers from the central to state governments. First, there is a change in the overall macro-economic management due to the introduction of inflation targeting by setting up a Monetary Policy Committee (MPC) and adopting a monetary policy framework⁶. The MPC consists of three members from RBI and three independent members. The monetary policy framework targets CPI inflation at an average of 4% with a range of (+/-) 2% points. Accordingly, after the MPC has been set up the CPI inflation rate has been brought down significantly. From an average of 10.1% in 2012-13, CPI inflation has been brought down to an average of 3.4% in 2018-19. It has also been noted that the implicit price deflator-based inflation, which is relevant for estimating GDP/GSDP growth rates, moves closely with the CPI inflation but is lower on average as compared to the CPI inflation. This change in the framework for managing inflation in the economy has implications for the projection exercises undertaken by the state and central governments as well as by the Finance Commissions.
- 1.12 Second, the plan non-plan distinction has been abolished and replaced with more relevant revenue and capital classification. It may be noted that the 14th FC increased the share of states in Central Taxes from 32% to 42%. One of the reasons for this sharp increase was the discontinuation of plan grants channelized through the Planning Commission, namely Normal Central Assistance (NCA), Additional Central Assistance (ACA) and Special Plan Assistance (SPA). Due to this change as well as a modification in the number and funding pattern of plan schemes, Uttarakhand has suffered a loss of around Rs.2,500 crores per year. Uttarakhand suffered more relative to other states because it was a part of the erstwhile special category states and used to receive a higher proportion in these

⁶In February 2015, a Monetary Policy Framework was agreed upon by the Government of India and the RBI which stipulated a CPI target range of 2-6% for 2016-2017 and beyond

grants. It may also be emphasized that the distinction between general and special category states was an important dimension of the plan process.

- 1.13 The erstwhile planning commission as well as various finance commissions have considered Uttarakhand as a Special Category State/north eastern and hilly state. The 12th FC made a distinction between these two categories of states in their analysis of state finances. In fact, they made a comparison of individual states in each category with the corresponding group averages within the category. The 13th FC utilized the distinction between special and general category states in a more substantive way. In particular, they utilized this distinction in their tax devolution formula where the income distance formula was substituted by a 'capacity distance' formula. In this formula, the distances of the per capita GSDP of individual states were measured in relation to the highest per capita GSDP state within the groups of special and general category states. The 14th and the 15th FCs have utilized the earlier approach of the 12th FC in the estimation of the distance formula.
- 1.14 There is a strong reason to make a distinction between Small and Hilly (SH states) states which effectively covers almost all of the erstwhile special category states and general states which represent the erstwhile general category states⁷. The 15th FC has made a similar distinction between states dividing them into two groups namely, north-eastern and hilly states and general states covering the remaining states. The hilly states suffer from well recognized cost and user disabilities and a relatively lower fiscal capacity. The average tax GSDP ratio for SH states is tangibly lower than that for the ML states while the per capita density of population and the average cost of providing public services are relatively much higher in the SH states. Therefore, there is a strong case for recognizing this difference between the two groups of states in the design of fiscal transfers.
- 1.15 The third important change is the implementation of GST. This has changed the management of federal fiscal relations because both states and centre have agreed to be guided by the GST council in the determination of GST rates and the definitions affecting coverage of the GST base. To a large extent, states have much less control on their revenue performance as decisions regarding a core tax base have not remained entirely under their control. The distinction between the so-called net-producing and net-consuming states has also become paramount. In particular, the erstwhile net producing states such as Uttarakhand are losing revenues with respect to taxes merged under GST on a permanent basis.
- 1.16 The fourth change is the new focus of the central government on fiscal consolidation through an amended FRBM Act. The amended Act has shifted the fiscal discipline anchor to debt-GDP ratio while fiscal deficit target has been

⁷ Small and Hilly states include Arunachal Pradesh, Goa, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttarakhand

retained as an operational target. Accordingly, the consolidated debt-GDP ratio ceiling has been determined at 60% while the Centre's debt-GDP ratio ceiling has been fixed at 40% by implication, the debt-GDP target for the combined debt of the state government is 20%.

- 1.17 As the economic impact of COVID-19 unfolds, the central government may consider a relaxation in the FRBM norms, at least temporarily both for the Centre and states. Already, in the Union Budget for 2020-21, the fiscal deficit target for 2019-20 (RE) and 2020-21 (BE) had been relaxed by margins of 0.5% points each. Further, the central government has announced its revised gross borrowing program for 2020-21 uplifting its budgeted fiscal deficit from 3.5% to 5.7% of GDP⁸. The borrowing limit for states has also been relaxed from 3% to 5% of their respective GSDPs subject to certain conditions⁹.
- 1.18 Uttarakhand has been affected in a substantive way by these changes. It is a relatively young state and had concerted to improve its industrial sector, giving a powerful boost to manufacturing and production. This proved to be a very prudent strategy, as under the Constitution, the power to levy sales tax on goods was vested exclusively with the states. At that point of time, GST was not envisioned and hence the policies devised by the state helped it to rapidly industrialize and capitalize on the gains. The Central Government actively promoted this growth with its incentive package, which encouraged many industries to relocate to Uttarakhand and avail the benefits of the central package. The basic intention of the Union Government in these endeavors was to bridge the regional disparities owing to the geographical disadvantages, cost disabilities and human resources drain, faced by the state. The state also benefited considerably from the employment created by industrialization.
- 1.19 On the other hand, this division of taxation power between the Union and the states was eroding the competitiveness of India in the world market. Thus, with the consensus of states including Uttarakhand, GST was rolled out which has improved the overall efficiency in supply chains, the result of which will be tangible in the near future. Here it is worth considering that the precept of the new taxation system is not in sync with the unidirectional developmental formula hitherto adopted by the states i.e., to industrialize is not in sync with the new taxation system. Pre-GST industrialization, especially manufacturing sector contributed both to tax revenue and increased employment. Uttarakhand also gained immensely due to the special industrial package of the Central Government. Due to its efforts towards industrialization, Uttarakhand today is a manufacturing surplus state. However, in the post-GST regime, tax accrues financial benefits only to the consuming states. In case of Uttarakhand, this has resulted in a huge drain on Uttarakhand's previously assured and hard-earned revenue resources. The

⁸ https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=49792

⁹ <https://pib.gov.in/PressReleasePage.aspx?PRID=1624661>

investment done by the state, till now in development of industrial estates, providing low cost electricity and other infrastructure would not bring the anticipated returns in the future. Not having a strong service sector has also led to shortfall in revenue for the state. Uttarakhand's revenue forecast, post GST compensation period, is very dismal and is only half of the revenue that was being realized during VAT period. This cannot be attributed to poor tax enforcement or treated as an aberration that could be ironed out over a period of time. Rather, this would have a lasting impact owing to the structural changes brought about by GST. Being a manufacturing state, Uttarakhand lost out on 34.9% of its revenue base as CST was subsumed under GST and no longer accrued to the producing state. Uttarakhand's loss on this account has been far higher when compared to any other state. This has reflected in the fact that Uttarakhand has consistently been among the highest revenue losing states under GST regime.

- 1.20 Also, as the area-based exemptions no longer exist, it is imperative that as a state Uttarakhand moves towards such sectors in which it has an innate strength vis-à-vis other regions. It is also in the interest of the state to promote the production of those goods for which Uttarakhand has a comparative advantage. The window period available for this transition is very short. By end-June 2022, the GST compensation would cease to exist and the state would need to find ways to bridge this revenue shortfall. The scope for increasing the revenue from GST is not very encouraging in Uttarakhand as consumption is not likely to increase due to low consumption base of the state. Hence, the only way to improve the revenues is to create an ideal environment within the state for investment in services sector, which was hitherto not emphasized enough. To our advantage the state is endowed with the potential to grow in these sectors.
- 1.21 From times immemorial Uttarakhand is known for its natural beauty and more importantly its religious importance as a pilgrimage centre for the entire subcontinent. But due to inadequate infrastructure and lack of investments, the state has not been able to benefit much from this tourist interest and pilgrimage inflow. Now the vision of the state is to develop the required infrastructure for tourism as an all year destination for the country. Similarly, human resource intensive service industries like education, wellness, health would be given priority, along with more emphasis on industries using locally available agricultural and horticultural inputs.
- 1.22 In Uttarakhand, there is an abundant scope for diversified tourism activities like river rafting, trekking, camping, mountaineering, para gliding etc. Many places in Uttarakhand have mythological references which also find mention in the great epics. These places are etched in the collective consciousness of our people and are a natural attraction with a built-in brand value. Uttarakhand also has a lot of assimilated knowledge in the practice of Yoga, Ayurveda and meditation. In this era of lifestyle challenges, the state can certainly capitalize on this inherent

wisdom. This is a rapidly growing sector worldwide in which Uttarakhand can have a head start. The state can be an ideal location for health tourism and other related facilities with its core strength in detoxification, rejuvenation and convalescence. The environs in Uttarakhand is also conducive for making it an educational hub. It already has the presence of well-known international schools. IT sector with emphasis on BPOs, backend offices for financial services etc. can be a major driver of growth. The peaceful and cosmopolitan environment of the towns of Uttarakhand is an added advantage for the growth in these sectors. Thus, industries which are human resource intensive have to be promoted which would gainfully employ the existing highly educated population of Uttarakhand.

- 1.23 Due to resource availability within the state, food processing holds high potential for economic growth of the state. Due to the climatic advantage and unpolluted environment, organic farming and production of non-seasonal vegetables can be a huge strength of the state.
- 1.24 The factors hindering our capacity to facilitate the growth of these sectors/ destinations are weak infrastructure, further exacerbated by cost disability, poor connectivity & communication facilities, non-availability of land due to stringent forest regulations, over regulations due to presence of eco-sensitive regions and shortage in skilled man-power.
- 1.25 Uttarakhand, being a Himalayan state, has an added burden on account of the responsibility to maintain and protect natural resources including forests, mountains, water sources, biodiversity and general environmental heritage. There are specific challenges that the state faces on this front. For instance, the area under snow and glaciers in Uttarakhand is fast depleting. This has serious ecological consequences and also leads to catastrophic hazards such as landslides and debris flow. A growing concern relates to Glacial Lake Outburst Floods which is a potential hazard to human population residing in the lower valleys. Further, its economic impact reflects in reduced tourism activities such as mountaineering and trekking¹⁰. According to Envi Stats 2018, MOSPI, during 2005-06 to 2010-11, the stock of snow and glaciers in the state depleted by 20,154 km² (24% fall) with an average annual rate of depletion of close to 4%. This adversely impacts the hydrological cycle of Uttarakhand as well as the availability of water resources in the country. Thus, the Himalayan eco-system needs to be preserved for long term sustainable development of the country and the state requires adequate resources to be able to do that. This is discussed in greater detail in Chapter 8 of the Memorandum.

¹⁰ "State of Glaciers in the Bhagirathi River Basin, Uttarakhand", Wadia Institute of Himalayan Geology, Dehradun (report shared by the government of Uttarakhand)

- 1.26 After the roll out of GST, Uttarakhand lost its pioneering position in VAT revenue growth (CAGR of 19.75%). GST has affected different states differently. It has affected the manufacturing surplus states most adversely. In this backdrop, it would be very difficult for the state to provide for the existing commitments and legal entitlements of its citizenry. Also, as explained in the following chapters, Uttarakhand lost hugely with respect to grants given by the 14th FC. Though it was given the status of a special category state, it was not granted any benefit which could be shown to its advantage. Added to this, Uttarakhand had to recover from the debilitating effects of the natural calamity which struck the state in 2013. In addition to the disadvantages of being a mountainous state, the development of the state is also curtailed due to the regulations imposed on the 70% forest cover and the abutting areas coming under the influence zones of the sanctuaries and national parks. The state has never been recompensed for the sacrifices it is required to make for providing the ecological services to the country at the cost of its own development. The origin of Ganga and most of its tributaries is in Uttarakhand. Ganga is declared as a national river, and the added regulations which come with it have further restricted the avenues for capitalizing the full potential of hydro-power generation. The regulations have also restricted the local people from engaging in revenue generating economic activities around the river. In a mountainous territory, the limited areas available for development are adjoining the river basin. Thus, in every sphere the state is confronted with formidable challenges.
- 1.27 Uttarakhand is willing and capable of resuming its growth trajectory but requires the forthcoming support of the Union in re-orienting its economy with an emphasis on the service sector. It would entail considerable amounts of capital, human resource training and institutional support in the interim period which if provided in the right time can stimulate growth in the right direction. The support should not be perceived as a market distortion of the foregone era, but as a cost incurred for keeping a healthy eco-system. This would enable Uttarakhand to transit to an economically progressive & ecologically responsive state and transform into an environment friendly service sector economy and an active contributor to the economy of the country.

Chapter 2

Terms of reference and the first report of the 15th Finance Commission

The Fifteenth Finance Commission (15th FC) has been constituted under Article 280 of the Constitution. It has submitted its first report covering the year 2020-21 on 5 December 2020. The final report covering the five-year period from 2021-22 to 2025-26 is to be submitted by the Commission by the end of October 2020. This six-year period under the 15th FC followed from the additional Terms of Reference (ToR) that was given in July and November 2019. Contextually, two important considerations led to the issuance of the additional ToR to the 15th FC. One relates to the change in the status of Jammu and Kashmir (J&K) from that of a state to a set of two union territories (UT) of which J&K became a UT with legislature and Ladakh became a UT without legislature. The second issue related to the uncertainties in estimating Centre's gross tax revenues as a result of the continuing current economic slowdown and the COVID-19 outbreak as well as the revenue impact of the corporate income tax (CIT) reforms introduced on October 2019.

- 2.1 The Finance Commission has the constitutional mandate to give recommendations on the distribution of taxes between centre and state, the allocation of taxes amongst the states, the grants-in-aid to be provided to different states and any other issues that have been referred to it in the terms of reference (ToR).
- 2.2 The constitutional provision under Article 270 for sharing of union taxes is based on the recognition of the fact that for reasons of comparative advantage, like ensuring a country wide market with uniform tax laws and rates which is efficiency enhancing, a centralised collection of taxes is a better option but the proceeds do not belong entirely to the union and must be shared with the states to enable them to fulfil their constitutional mandate of providing goods and services in an efficient manner.
- 2.3 Like the “principle of subsidiarity” in public administration and governance, economic decentralisation is based on the principle that lower tier governments can assess the needs of the local population better because of their proximity and the expenditure responsibilities can be handled more efficiently leading to welfare gains. This automatically implies trust in the working of sub-national and local governments as their accountability is more direct and proximate, and at the same time there is a need for

providing them with adequate resources by way of fiscal transfers to meet their important expenditure responsibilities.

- 2.4 Thus, in a federal system, vertical fiscal gap is often deliberately created for efficiency gains that result from relative assignments and fiscal transfers are used to balance the situation and close the gap.
- 2.5 Over the years, the ToRs have mandated the Commissions to deal with a number of matters other than the core tasks listed under Article 280, namely, devolution of taxes, grants in aid to states, and measures to supplement the consolidated fund of the states to supplement the resources of rural and urban local bodies. This has been done under clause (d) of Article 280 which mandates Finance Commissions to make recommendations under Article 280 (d)- “Any other matter in the interests of sound finance”.

Original and additional ToR

- 2.6 There are some notable features in the original and additional ToRs of the 15th FC. Among the original ToR, these relate to (1) need for examining the vertical share of the Centre and states as recommended by the 15th FC, (2) shift from 1971 to 2011 population, (3) rationale for continuing with revenue deficit grants, (4) emphasis on introducing performance grants particularly relating to central objectives, and (5) need for examining the fiscal roadmap for controlling government debt and deficit and linking it to higher inclusive growth, principles of equity, efficiency and transparency. The additional ToR made reference to (1) revenue uncertainty and by implication, the need for making reliable forecasts by the Commission and (2) need for creating an earmarked fund for defence and internal security.

Implications of the original ToR

1. Vertical sharing of central taxes

- 2.7 States’ share in central taxes constitutes the core of fiscal transfers under the recommendations of the FC. It has two dimensions namely, vertical and horizontal. While the vertical dimension relates to the transfer of resources from the Centre to the aggregate of states, the horizontal dimension relates to the inter-se distribution of transfers among the states. The actual vertical share which gets devolved is dependent on the actual performance of the shareable central taxes. Thus, devolution is a pro-cyclical instrument, partially dependent on performance and policies of the central government, more so in GST regime. Grants on the other hand, are fixed in nominal

terms. Being relatively more counter-cyclical in nature, the states are assured of certain specified amounts and it leads to better fiscal planning. In periods of uncertainty attached to the growth of central revenues as is the case currently, these are safer instruments of transfer to the states.

- 2.8 Further, while states' share in central taxes cannot be fine-tuned as these are determined by a limited number of factors, grants can be more fine-tuned and can take into account the specific circumstances of a state in the past.
- 2.9 As far as so called "substantially enhanced devolution" from 32% (as recommended by the 13th FC) to 42% (as recommended by the 14th FC) is concerned, it is not as substantial as it prima facie appears to be. Since in the devolution, the plan grants under the Gadgil formula amounting to 5.5% of the divisible pool and environmental grants amounting to 1.5% of the divisible pool were subsumed, so it was effectively raised from 39% to 42%. Also, the 14thFC analysis showed that union governments spending on the state subjects increased from 14% during 2002-2005 to 20% during 2005-11 and increase in spending on items in concurrent list was up from 13% to 17%. The increase of 3% from 39% to 42% points was only to give the states greater flexibility. In order to achieve the goals under "New India 2022", it is critical to offset the fiscal disabilities of the states and take them on board in the spirit of cooperative federalism as a partner in the programme.
- 2.10 In its first report for 2020-21, the 15th FC made a marginal change, reducing the vertical share of 42% for the states under the 14th FC dispensation by 1% point, taking into account the fact that it was now considering only 28 states. For J&K, the Commission set aside 1% point arguing that had it been considered under the earlier arrangement as a state, it would have been entitled to a share of 0.85% of the divisible pool. J&K's share in the horizontal distribution formula used by the 14th FC would amount to 0.779% of the divisible pool. The figure of 0.85% may be with reference to the application of 15th FC criteria to the divisible pool. As such, the reduction from 42% to 41% of the share of 28 states amounts to a marginal reduction of their aggregate share over and above what could be ascribed for the combined territories of J&K and Ladakh. The 15th FC may determine the vertical share by assessing the relative needs of the Centre and states.. It may be noted that the excessive use of cesses and surcharges by the central government in recent years, has reduced the divisible pool, thereby reducing the transfers to state.

- 2.11 Over the recent years the gap between the recommended and effective vertical share has widened as a result of the increasing share of cesses and surcharges. For the 14th FC period, covering the period from 2015-16 to 2019-20 (RE), on an average only 34.4% of the gross central taxes constituted the share of all states as compared to the recommended share of 42%. This is shown in Table 9.1 in Chapter 9 on Proposed Devolution. There have been instances where the Centre has cut the extant excise duties and levied cess/ surcharge in its lieu, thus protecting its own revenue at the cost of the states. Various FCs have made specific observations regarding this practice and have suggested that these instruments namely cesses and surcharges should be levied for limited periods for the stated objectives and once the objectives have been met, these should be discontinued. In case they are to be continued for longer periods, we request that the 15th FC should also look into the sharing of cess/ surcharges amongst the Union and states.

2. Principles for horizontal devolution

- 2.12 In the context of the horizontal distribution of the sharable taxes, there are some changes which were necessitated by the 15th FC's ToR. In particular, the population that has been used is that of 2011 instead of 1971. The commission also introduced two new performance criteria. The first one is based on total fertility rate estimated using 2011 census and the second one relates to estimation of tax effort. Further, some weights of individual criteria were marginally changed.

a. Shift from 1971 to 2011 population

- 2.13 The role of population in deriving the share of states by the successive FCs in different criteria has been to serve as a “scaling” factor, that is, larger the size of the population, the larger is the share of a state in the divisible pool of central taxes. In principle, these shares under each criterion are determined in per capita terms and then scaled up to cater to the entire population living in the state. The use of dated information distorts this exercise since it does not reflect the number of people actually living in a state. Fiscal transfers are made to provide services to people actually living in the states and not some imaginary population. The relative size of population changes not only because of differential growth rates of fertility/mortality rates but also due to net migration. In fact, a population bulge and the related demographic dividend arise because of a relatively faster decline in the mortality rates. States may not be penalized for improvement in mortality rates and/or

migration. In fact, fiscal transfers should facilitate access to health and education services for the entire population up to an acceptable standard to ensure its efficient participation in economic growth. In this sense, the shift to the latest available census figures for determining the relative shares of states in central taxes should be considered rational and justified. No other major federation uses dated population in determining transfers to the states.

b. Distance criterion

- 2.14 In the case of the distance criterion, four states at the upper end of the per-capita GSDP distribution were given the same per-capita distance. These states are Goa, Himachal Pradesh, Haryana and Sikkim. This per-capita distance was calculated with reference to the difference between per-capita GSDP of Himachal Pradesh and Haryana. Haryana was used as the benchmark state. In the case of previous commissions, the benchmark distance was usually calculated between two non-special category states..

c. Performance criteria

(i) Tax effort

- 2.15 With respect to tax effort, the period over which the tax-GSDP ratio has been calculated i.e. 2014-15 to 2016-17 relates to the pre-GST period. After the implementation of GST, the tax base and the discretionary space left with the states in raising own tax revenues has drastically changed. In the case of GST, it is not GSDP but final consumption expenditure of goods and services within a state that are more relevant. Given that the autonomy of the states to fix tax rates and the scope of tax bases for taxes subsumed under GST has now moved to the GST Council and the states have adopted uniform rate structures, the relevance of the pre-GST calculation of the tax effort does not seem to be justified. The tax effort criterion should be modified, and the GST and non-GST taxes should be considered separately for the estimation of tax effort.

(ii) Fertility rate

- 2.16 Although the first report of the 15th FC does not directly consider the ToR relating to “efforts and progress made in moving towards replacement rate of population”, it sought to incorporate consideration of the fertility rate as a criterion. Fertility rate has been estimated using the 2011 census data. However, it is recommended that demographic performance should be considered as improvement over time and not as a given level in a given year. Further, demographic performance should be measured in relative

terms rather than absolute terms. In the formulation given by the 15th FC, no state is compared with any other state. The 15th FC has scaled up this performance variable by 1971 population. The scaling factor should have been 2011 population which would have been consistent with the commission's mandate.

d. Area criterion

- 2.17 In the case of area criterion, the distortionary approach of the 13th and 14th FCs of giving an artificial floor of 2% to states which have a share in total area of less than 2%, has been continued. The weight of this criterion is as high as 15%. The area criterion should be meant to serve the purpose of reflecting cost differentials amongst states. Similarly, there are various other factors reflecting cost disabilities such as forest cover, area under glaciers, share of hilly areas and area reflecting international borders. These affect different states differently, but may all be incorporated in the area criterion by redefining it.

Distinction between general states¹¹ and small and hilly (S&H) states in the scheme of transfers

- 2.18 Until the 14th FC, states were categorized between general and special category states although for purposes of tax devolution, all states were treated on par. In the first report of the 15th FC, a distinction is made between general states and north-eastern and hilly states (NEHS). This categorization is not different from that of the general and special category states which was relevant for plan assistance. In spite of the fact that for purposes of tax devolution, the 15th FC treated all states on par, the overall scheme of transfers has been so designed as to give on average, one group of states namely S&H states a much higher per capita transfers as compared to general states (including Assam). Table 2.1 shows that per capita transfers for the S&H states are much larger than that for general states.

¹¹ This categorization is different from that of general states and north eastern and hilly states in the sense that in the S&H states, Goa is included and in the general states, Assam is included

Table 2.1: Per capita recommended transfers for general states (including Assam) and S&H states (INR)

S&H States			General States (including Assam)					
#	State	Per-capita recommended transfer (INR)	#	State	Per-capita recommended transfer (INR)	#	State	Per-capita recommended transfer (INR)
1	UK	14,280	1	HR	4,039	11	PB	8,139
2	ML	20,388	2	MH	5,154	12	JH	8,228
3	GA	22,023	3	GJ	5,172	13	AP	8,917
4	TR	23,509	4	TS	5,719	14	MP	9,087
5	HP	25,921	5	TN	5,899	15	OR	9,721
6	MN	26,467	6	KA	6,296	16	KL	9,933
7	NL	42,088	7	UP	7,405	17	AS	10,744
8	MZ	49,830	8	RJ	7,458	18	CH	10,766
9	SK	57,631	9	WB	7,720	Per-capita transfer (S&H)		26,794
10	AR	93,398	10	BR	7,897	Per-capita transfer (general states including Assam)		7,396

Source (basic data): Report of the 15th FC

- 2.19 On average, per capita transfers in S&H group is 3.6 times as large as the transfers for general states (including Assam). There is also a noticeably large dispersion around the mean per capita transfers with per capita transfers in Arunachal Pradesh at INR 93,398 crores and that in Uttarakhand at INR 14,280 crores. In the case of general states, the per capita transfers vary from INR 4039 for Haryana and INR 10,766 crores for Chhattisgarh. The relatively higher per capita transfers for the S&H group is on account of higher unit cost of providing services in the S&H states. These cost differentials arise, from among other reasons, higher costs for serving population which is dispersed across the state in low density clusters. The cost differentials also reflect ecological costs in terms of providing forest cover as well as large transportation costs. The S&H group of states is also relatively more vulnerable to natural disasters. Most of these states have international borders and ecological vulnerability due to the presence of glaciers.
- 2.20 Transfers to states through centrally sponsored schemes and external aided projects were determined using different parameters for the general and erstwhile special category states during the planning era. While for general category states, a contribution of 40% was needed for availing 60% of funds from the centre, erstwhile special category states were required to contribute only 10% to avail 90% of funds from the centre. The 14th FC did not make

any distinction between special and general category states while recommending its transfers. However, as recommended by the ‘**The Sub-Group of Chief Ministers on Rationalisation of Centrally Sponsored Schemes**’ committee¹², the centre continues the sharing pattern of CSS for NEHS at 90:10 for core schemes and 80:20 for other schemes¹³. The 15th FC in its first report has not addressed this issue. **The state proposes that the 15th FC in its final report may consider retaining the funding pattern for CSS at 90:10 for NEHS.** This is because any increase in these states’ contribution to CSS would put added pressure on their already limited resources. This could lead to these states losing out on transfers from the centre on account of CSS due to their inability to contribute their share of resources.

3. Rationale for revenue deficit grants

- 2.21 Another important issue in the ToR of 15th FC relates to ‘whether revenue deficit grant be provided at all’. The constitution makes specific provisions for grants in aid of revenue of a state. Clause (1) of the Article 275 states as follows: “Such sums as Parliament may by law provide shall be charged on the Consolidated Fund of India in each year as grants-in-aid of the revenues of such States as Parliament may determine to be in need of assistance, and different sums may be fixed for different States”. Any suggestion that grants to supplement a state’s revenues may not be provided is tantamount to asking the commission to ignore Articles 275 and 280-3(b). Furthermore, often the legitimacy of grants under Article 282 for central schemes has been questioned and Article 275 has been opined to be the only legitimate channel. The purpose of grants, revenue deficit or up-gradation grants for specific purposes etc., is to channelize funds from relatively richer jurisdiction to poorer ones based on an equalization formula that measures the “fiscal need” and “fiscal capacity” of states. It provides a more level playing field for inter jurisdictional competition. Tax devolution based on revenues and cost disabilities often leaves some of the states which have limited fiscal capacity and high expenditure needs with a revenue gap which needs to be bridged by way of grants.
- 2.22 While in the past, post devolution non- plan revenue deficits were obtained by adding the respective state’s share in central taxes to the pre-devolution

¹²<https://niti.gov.in/writereaddata/files/Final%20Report%20of%20the%20Sub-Group%20submitter%20to%20PM.pdf>

¹³ <https://pib.gov.in/newsite/PrintRelease.aspx?relid=136681>

deficit assessed in a normative manner, so as to obviate the effect of inadequate revenue effort or excessive expenditure. However, since the distinction between plan and non-plan has been obliterated, the methodology to assess the gap needs to be worked out, wherein the interests of the states are duly protected.

- 2.23 It is desirable that in the determination of revenue deficit grants, normative principles be applied in the assessment of state-wise expenditure needs and own revenues. These norms should be based on realistic assumptions and benchmarking should be done with appropriate group averages namely small and hilly states (S&H) and general states including Assam. This is because the S&H states usually have higher costs of providing services because of the hilly terrain and they also have special fiscal needs.
- 2.24 The 15th FC has continued with revenue deficit grants following the earlier FCs. In fact, the share of revenue deficit grants as recommended by the 15th FC (first report) is the highest amongst recent commissions starting from the 10th FC. This share is 7% in the case of the 15th FC as compared to 3.1% for 14th FC and 2.2% for 13th FC. As discussed in para 2.8, this is a desirable feature in times of revenue uncertainty in center's gross tax revenues which is characteristic of the present situation.
- 2.25 However, the 15th FC has determined revenue deficit grants by the application of certain growth rates. In the case of own taxes of states, as far as GST is concerned, the first year of the award period is governed by the application of the growth guarantee of 14% on the base year number of 2015-16 relating to actual tax revenues raised with respect to taxes subsumed under GST. In the case of non-GST taxes, uniform buoyancy of 1.16 has been used. In the case of own non-tax revenues, the 15th FC has grown them according to GSDP growth rates¹⁴. Interest payments are driven by the base year numbers of FY20, on which certain growth rate has been applied. Similar approaches apply to salaries and pensions and other expenditure items.

4. Performance grants

- 2.26 In the context of grants, the Commission suggested one sector specific grant relating to nutritional achievement levels. However, this recommendation was not accepted by the union government. The other performance related matters referred to the Commission in the original ToR have not been considered by the 15th FC in their first-year report. They may be considered

¹⁴ See paragraph 2.41 of the First report of the 15th FC.

fully or partially in their final report. The 15th FC has expressed its desire for recommending grants for a number of sectors including health, pre-primary education, judiciary, rural connectivity, railways, statistics and police training and housing.

- 2.27 While the ToR provides for the commission to adopt a more incentivised approach for making transfer to states, there does not appear any such attempt to influence the behaviour of the Union Government. Tax is an issue relevant to both Union and the state governments, but now that the power to levy GST and take policy decisions rests with the GST Council, hence the states have limited manoeuvrability.
- 2.28 Populism has always been a bane of the electoral politics, an offshoot of political economy based on patronage and patron-client relationship in an evolving democracy. It is equally undesirable for union as well as states. However, a detailed analysis of micro data compiled over a long time period of outlays, outputs and outcomes would be able to bring forward populist trends in the budgetary process. Here the paucity of data is a big limiting factor. In the absence of objective criterion and transparent data it is likely to get subjective, circumstantial, and perceptual. Any incentive or disincentive on this account must take into consideration the vagueness of the definition of 'populism' without specific acceptable objective criterion.
- 2.29 As regards various performance-based incentive related issues under Para-4 of the original ToR, we would like to submit that this measurement of performance will become very subjective. Different states are at different levels of development and have different geographical, institutional and structural issues, thus to measure all the states with one yardstick is not advisable. Nonetheless we have stated our position on the above performance-based incentives in Annexure-1 of this memorandum.

5. Consideration of Centre and states' debt and deficit

- 2.30 The 15th FC has not considered the issue of government debt and deficit in its first report. However, in its final report, there is a need to consider some additional changes largely in Centre's FRBM. The following five issues need to be considered in this regard: (1) need for better measurement of fiscal deficit, (2) need for transparency, (3) need for restoring the importance of revenue deficit as a target, (4) need for correcting asymmetry between Centre and states' respective debt and deficit targets and (5) need for including a more effective countercyclical provision.

Key features relating to additional ToR

1. Dimensions of revenue uncertainty

- 2.31 The reason that the 15th FC was asked to give only a one-year report relates to revenue uncertainties pertaining to union finances and the difficulties that the Commission is facing in making robust forecasts of union tax revenues for the next five years. As discussed in Chapter 1, In its first report, the 15th FC made assumptions about GDP growth and the growth of union tax revenues which have already proved to be optimistic. The magnitude of union tax revenues in FY20 may fall well short of both the RE given in the budget and the FC estimates for FY20. This will also reflect in the magnitudes for FY21 since FY20 revenues provides the base year figures. This will lead to an overestimation of the divisible pool of states and an underestimation of assessed revenue deficit of individual states.

2. Defence and internal security

- 2.32 From the viewpoint of economic theory, defence and internal security can be considered as examples of pure public good, satisfying the criteria of non-excludability and non-rivalry in consumption or use. As such, individual consumers cannot be excluded from the benefit of the service of defence and internal security provided by the government. The property of non-rivalry means that the consumption of the concerned good or service by one individual does not reduce its availability for another. This happens for jointly consumed goods or services. Such services should be financed by taxation. If it is a subject belonging to the union government alone, then it should be financed by a tax listed under the Union List. However, after the 80th amendment to the Constitution, there is no union tax except the taxes listed under articles 268, 269 and 269A that are not sharable with the states. The relevant share(s) of the shareable taxes are required to be decided on the basis of recommendations of the FC. The main exception to this rule is cesses and surcharges.
- 2.33 ToR 9A of the 15th FC mandates the commission to examine whether a separate funding mechanism for defence and internal security ought to be setup. Since cesses are earmarked for a purpose and should ideally be levied for a short period of time, a financing mechanism the form of a cess may not be considered as a permanent source of funding. Excessive usage of cesses and surcharges have had an impact of lowering of the divisible pool in recent years.

- 2.34 Carving out one expenditure head from the items listed in the Union List of the Seventh Schedule for special treatment creates issues of asymmetry in relation to other central government responsibilities. It is the state's view that the allocation of funds for defence and internal security is the responsibility of the central government who can make the necessary allocation from within its own share of the divisible pool, non-sharable resources such as non-tax revenues, borrowing and non-debt capital receipts. The central government can also create any fund for defence and internal security from within its own resources. If the 15th FC carves out this expenditure head from within the divisible pool, there may be a reduction of resources allocated to the states. Many small and hilly states are already facing huge financial crunch and are reliant on the revenue deficit grants. If the share in central taxes further comes down due to separate allocation for defense within the divisible pool, these states will be further pushed towards financial crisis. Hence, the Government of Uttarakhand recommends the existing mechanism to be continued.

Chapter 3

State profile

This chapter profiles the state of Uttarakhand in terms of its economic structure, geographic characteristics and certain critical social, demographic and infrastructure parameters.

- 3.1 In this chapter the focus is on indicators that are critical for the fiscal issues of Uttarakhand. The economic structure determines the tax base and thereby influences the revenue potential of the state. The social and demographic parameters, when seen in a comparative context, justify the need for expanding the provision of public services, which implies higher expenditures for critical departments such as health, education, drinking water, housing and road communications, so as to provide the people better services and access to markets.
- 3.2 The topography of the state also has direct expenditure implications. The terrain does not support large clusters of households. As a consequence, the state is characterised by a relatively large number of 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 characterises many of these services. Some threshold levels of capital and operating expenditures have to be made to achieve even small levels of service delivery. 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 difficult terrain itself increases the cost of delivery.

Basic Geographical Features

- 3.3 The state of Uttarakhand was carved out of Uttar Pradesh on 9th November 2000, as the 27th state of the Indian Union. Uttarakhand is predominantly a mountainous state in the Central Himalayan region and has international border with China and Nepal. Its different altitude zonation and complex geographical diversity represent a wide array of climatic and vegetative regions of the world. The total geographical area of the state is 53483 km² out of which 46035 km² (86.07%) is hilly and 7448 km² (13.93%) is plain. It can be divided into Tarai-Bhabar, the plain region below 500 metre altitude covering 15.52% area of the state, the mid Himalayas, between 500 to 3000 metre which is 55.59% of the area and High Himalayas, i.e. above 3000

metre altitude including glaciers, alpine meadows and snow clad mountains covering 28.89% of the area.

- 3.4 The state can be separated into four main drainage basins:
- Western basin drained by Yamuna river and its main tributary Tons river.
 - The Central basin drained by Ganges and its main tributaries Bhagirathi and Alaknanda.
 - The North Eastern basin drained by Kali river and its tributaries.
 - Southern basin drained by the Kosi and Ramganga rivers and their tributaries.
- 3.5 In view of the factors like predominantly hilly and difficult geographical terrain, lack of quality infrastructure, low fiscal capacity, low connectivity, international borders etc. **the state has been designated as a Special Category State.**

Geographical, Administrative and Demographic Profile of State

- 3.6 Table 3.1 shows the geographical, administrative and demographic profile of the state.

Table 3.1: Geographical, Administrative and Demographic profile of Uttarakhand

S.No.	Item	Unit	Value
1.	Area	Sq. Kms	53483
	(i) Plain	Sq. Kms	7448 (13.93%)
	(ii) Hill	Sq.Kms	46035 (86.07%)
2.	Population	Nos.	10086292
	(i) Scheduled Caste	%	18.76
	(ii) Scheduled Tribe	%	2.89
3.	Decennial Growth of population	%	18.81
4.	Density	Person/Km ²	189
5.	Urban Population	%	30.23
6.	Rural Population	%	69.77
7.	Literacy	%	78.8
8.	District	Nos.	13
9.	Division	Nos.	2
10.	Tehsils	Nos.	110
11.	Community Development Blocks	Nos.	95
12.	Gram Panchayats (2017)	Nos.	7955
13.	Inhabited Villages	Nos.	15745
14.	Un-Inhabited Villages	Nos.	1048
15.	Towns/Urban Local Bodies (2018)	Nos.	92

Source: (i) Registrar General of India, Census, 2011, GoI, (ii) Economic Survey 2017, GoUK

Table 3.2: Villages by population size class – Uttarakhand (Census 2001 & 2011)

Population Size Class	No. of Villages	
	2001	2011
Total No. of Inhabited Villages	15761	15745
Less than 200	7797	7846
200-499	4902	4670
500-999	1878	1819
1000-1999	752	823
2000-4999	350	470
5000-9999	69	96
10000 and above	13	21

Source: Directorate of Economic & Statistics, GoUK, 2015-16

3.7 Table 3.2 indicates that more than 75% of villages in Uttarakhand have a population of less than 500 persons. In hilly areas only 1% villages have a population of more than 2000. The average village population in Uttarakhand (447) is much below the national average (approx. 1300) and this implies higher cost and difficulties in delivery of services.

3.8 The district wise decadal changes are shown in table 3.3:

Table 3.3: District wise decadal change in population

District	1981 (%increase in last decade)	1991 (%increase in last decade)	2001 (%increase in last decade)	2011 (% increase/ decrease in last decade)
Almora	15.80	08.88	03.68	-1.28
Bageshwar	19.58	14.92	09.22	4.18
Chamoli	24.83	21.97	13.87	5.74
Champawat	25.34	26.38	17.60	15.63
Dehradun	31.93	34.66	25.00	32.33
Hardwar	32.72	26.31	28.70	30.63
Nainital	38.08	30.22	32.72	25.13
Pauri	15.45	08.60	03.91	-1.41
Pithoragarh	16.38	14.11	10.95	4.58
Tehri	24.67	16.53	16.24	2.35
Udham Singh Nagar	48.05	38.30	33.60	33.45
Uttarkashi	29.19	25.54	23.07	11.89
Rudraprayag	25.13	18.13	13.43	06.53
State	27.48	23.11	20.41	18.81

Source: Statistical Abstract Uttarakhand, Directorate of Economic & Statistics, GoUK, 2015-16

3.9 Table 3.3 highlights that the population growth rate in hill areas has been much less than the plain area. The lower population growth in hill areas also reflects lack of employment opportunities leading to out-migration of male workforce whose literacy level is reasonably high (Bora, 1996 and Report of

Migration Commission, Uttarakhand). The migration in Uttarakhand is firstly due to **aspirational level** of its population, but predominantly it is because of **distress migration** from the hill areas due to lower employment opportunities, education facilities, health facilities and various other factors.

Dependency and Workforce Participation

- 3.10 Population density of Uttarakhand in comparison to other special category states (SCS) and all India has been given in table 3.4:

Table 3.4: Population Density

States/Union Territories	2001	2011
Arunachal Pradesh	13	17
Assam	340	398
Himachal Pradesh	109	123
Jammu and Kashmir	100	124
Manipur	97	115
Meghalaya	103	132
Mizoram	42	52
Nagaland	120	119
Sikkim	76	86
Tripura	305	350
Uttarakhand	159	189
Average SCS	125	146
All India	325	382

Source: Registrar General of India, Census, 2001 & 2011, Gol

- 3.11 Population density is an important factor affecting unit costs that are higher for areas having a lower density of population. A clear implication of the lower population density in Uttarakhand is higher per person cost in the provisioning of services provided by the government, particularly those relating to administration, social services, education and health which should be factored into any devolution criteria.

Dependency Ratio

- 3.12 The dependency ratio is defined as the ratio of population of the dependent age group to the population of the working age group. The dependency ratio in Uttarakhand is quite high. The estimated young age, old age and total dependency ratios based on the census 2011 are presented in table 3.5. It can be seen that the total dependency ratio 0.67 is slightly higher the all India dependency ratio at 0.66:

Table 3.5: Dependency Ratio in Uttarakhand

Age group	Per thousand	Population 2011	Actual group population	Child dependency ratio	Old age dependency ratio	Total dependency ratio
0-14	352	10086292	3129008	0.52		
15-59	561	10086292	6039867			
60 and above	88	10086292	900809		0.15	
0-14 and 60+	440	10086292	4029817			0.67

Source: Registrar General of India, Census, 2011, Gol

3.13 The 11th FC had taken cognizance of the age profile of the population while reassessing the expenditure requirements of the state. The Commission 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”.* (Chapter 5, Para 5.5). The high child and old age dependency ratio in Uttarakhand thus implies the higher need for government spending on education, nutrition, health and medical infrastructure in the state.

Work Participation Rates

3.14 Table 3.6 shows the number of workers and non-workers of Uttarakhand for the years 2001 and 2011.

Table 3.6: Working and non-working population

Census year	Total Population	Total Workers	Percentage (3/2)	Total Non-Workers	Percentage (5/2)
1	2	3	4	5	6
2001	8489349	3134036	36.92	5355313	63.08
2011	10086292	3872275	38.40	6214017	61.60

Source: Registrar General of India, Census, 2001& 2011, Gol

3.15 Table 3.6 shows that the potential change in demographic patterns, which in turn would require a different kind of expenditure (spending on development and job creation) to enable the government to realize the potential of demographic dividend.

3.16 Status of workforce in the state is shown in table 3.7.

Table 3.7: Status of Workforce in State

Region/ District	Total Workers	Main workers	Cultivators and % over main workers	Agricultural labourers	Female participation in total work force
Plains/lower hills					
Dehradun	582768	488161	60373 (12.37%)	20424 (4.18%)	123934 (21.27%)
Hardwar	578121	495152	87950 (17.76%)	75953 (15.34%)	80311 (13.89%)
U S Nagar	591458	450762	94677 (21%)	107603 (23.87%)	146880 (24.83)
High Hills					
Chamoli	180940	115115	69612 (60.47%)	1072 (0.93%)	87108 (48.14%)
Pithoragarh	216490	145481	87189 (59.93%)	2204 (1.51%)	102951 (47.55%)
Rudraprayag	113032	78950	56884 (72.05%)	1519 (1.92%)	60693 (53.70)
Uttarkashi	157276	128367	96836 (75.43%)	2389 (1.86%)	73011 (46.42%)
Mid Hills					
Almora	298211	201078	132129 (65.71%)	4025 (2.00%)	155751 (52.23%)
Bageshwar	123638	78085	54056 (69.23%)	2733 (3.50%)	64930 (52.52%)
Champawat	99566	62698	31971 (50.99%)	1980 (3.16%)	39139 (39.31%)
Garhwal	274152	164439	75253 (45.76%)	4154 (2.52%)	126779 (46.24%)
Nainital	376181	296424	101221 (34.15%)	19618 (6.62%)	119246 (31.70)
Tehri Garhwal	280442	165912	97523 (58.78%)	3582 (2.16%)	139621 (49.79%)

Source: Registrar General of India Census, 2011, Gol

3.17 The percent share of cultivators and agricultural labourers to the total main workers shows a great degree of disparity among the districts. The share of cultivators to main workers is much higher in the hilly areas as compared to the plain areas. This coupled with the fact that the primary sector constitutes a higher proportion of GSDP in hill areas, along with low agriculture production and productivity, inherently indicates that most of the workers in the hill areas are trapped in low paying primary sector.

3.18 As shown in table 3.7, there exists a wide gender gap in work participation rates. High hill districts have very low gender gap in work participation rates. The hill occupational pattern suggests a strong inclination towards the primary activities and mainly it's the women folk, who are involved in the high drudgery work of agriculture sector.

Human Development

- 3.19 Human development today is defined as a process of enlarging people's choice. Its main dimensions are the formation and upgradation of human capacities through improved health, knowledge, skills and the use people make of their capabilities.

Health

- 3.20 Improvement in health status of the population has been one of the cornerstones of the state government's development policy. The state has an extensive network of health care institutions (table 3.8). Although, there has been considerable expansion in the health care services, yet some gaps still remain to be filled to cater to the sparsely dispersed population of the state.

Table 3.8: Government Health Institutions in the State

S.No.	Type of Health Institutions	Nos.
1.	District Hospitals	13
2.	CHCs	85
3.	PHCs	257
4.	Allopathic Dispensaries	319
5.	Ayurvedic Hospitals	544
6.	Homeopathic Dispensaries	110
7.	Health Sub Centres	1897
8.	Medical Colleges (Govt.)	3
9.	Total No. of Beds in Allopathic Instn.	9232
10.	Total No. of Beds in Ayurvedic Instn.	2049
11.	Total No. of Doctors	874
	Sanctioned	2511
	Vacant	1637 (65%)
12.	Total No. of paramedic staff	3242
	Sanctioned	4289
	Vacant	1047 (24%)

Source: (i) Department of Medical Health & Family Welfare, GoUK, 2017,

(ii) Directorate of Economic & Statistics, GoUK

- 3.21 As against a vacancy of more than 1637 doctors in FY 2017-18 the state has filled the posts of 478 doctors in the last one year, and the state government is continuously trying to fill up the remaining vacancies but this would consequently raise the revenue expenditure of the government.

3.22 The table 3.9 gives an outline of various health indicators of Uttarakhand and other states.

Table 3.9: Major Health Indicators¹⁵

S.No.	Health Indicator	Uttarakhand	Himachal	Kerala	UP	All India
1.	MMR	165*	-	46	258*	130
2.	IMR	38	25	10	43	34
3.	Life expectancy	71.5	72.3	74.9	64.8	68.7
4.	TFR	1.9	1.7	1.8	3.1	2.3
5.	Female Per thousand of Males (2011)	963	972	1084	912	943

Source: (i) Registrar General of India, Census, 2011Gol, (ii) SRS Bulletin, 2012-16
(iii) * AHS 2012-13

3.23 Table 3.9 shows that, Uttarakhand has done well in improving its health parameters as compared to its parent state of UP. In fact, in some parameters, the performance is better than the all India average, but still its indicators are far behind the leading states like HP and Kerala. Hence the state has to invest a lot in health infrastructure and services and this would entail increase in both capital and revenue expenditure in the health sector in the coming years.

3.24 The outbreak of Covid-19, a pandemic, has placed considerable stress on the healthcare system across the globe and even in India. With the number of cases increasing by the day, the union government has been swift in introducing several measures on the healthcare front including (a) encouraging private hospitals to treat the affected patients, (b) directing National Health Authority to firm up the protocol and health packages under Ayushman Bharat health insurance schemes for the poor and (c) issuing advisories/guidelines to the hospitals and medical educational institutions such that they are better prepared for any possible influx of patients on account of Covid-19. As per the provisions of the Epidemic Disease Act 1897, the union government has also authorized the state governments to take preventive measures to control the spread of virus.

3.25 Given the size of India's population, these measures may prove to be highly inadequate if the outbreak spreads uncontrollably. Moreover, it has been observed that there are significant disparities in the availability of health care facilities amongst states in India, particularly amongst the low per-capita

¹⁵ http://censusindia.gov.in/vital_statistics/SRS_Bulletins/SRS_Bulletin-Rate-2017-_May_2019.pdf

income states and amongst the north-eastern and hilly states. These state governments may not be able to provide necessary health care facilities, if Covid-19 cases are to spread rapidly. Uttarakhand is no exception to this. The state government needs to focus on building a resilient public health system that can prevent diseases, promote good health, and respond quickly to contain the spread of such diseases and also minimize loss of life when faced with an outbreak of this magnitude.

Education

3.26 The Literacy levels in Uttarakhand have nearly doubled from 46.06% to 78.8% in a period of three decades since 1981. The progress made in achieving female literacy is also impressive. Though female literacy has more than doubled from 25.0% in 1981 to 70.0% in 2011, there still exists a considerable gap between female and male literacy rates. The Right to Education Act, mandates opening of government elementary schools within certain distances which implies the need for higher revenue expenditure for employing teachers and non-teachers for schools.

3.27 Literacy rate, gender gap in literacy during the year 2001, 2011 and status of schools is shown in table 3.10:

Table 3.10: Educational Status of Districts in Uttarakhand

Region/ District	Literacy rate % 2011	Gender Gap 2011	Gender Gap 2001	No. of Primary School per lac population	No. of Upper primary school per lac population	No. of Higher Secondary School Per lac population
Plains/lower hills						
Dehradun	84.2	10.9	14.7	88	41	28
Hardwar	73.4	16.3	21.7	84	33	14
U S Nagar	73.1	16.6	21.8	90	29	18
High Hills						
Chamoli	82.7	21.1	28.1	277	80	66
Pithoragarh	82.2	20.5	27.5	285	72	55
Rudraprayag	81.3	23.5	30.2	235	52	62
Uttarkashi	75.8	26.4	36.9	233	70	38
Mid Hills						
Almora	80.5	22.9	28.6	234	26	58
Bageshwar	80.0	23.3	30.7	252	62	45
Champawat	79.8	23.6	33.1	245	60	53
Garhwal	82.0	20.1	25.2	262	65	66
Nainital	83.9	12.8	16.7	136	32	25
Tehri Garhwal	76.4	25.5	35.9	273	78	54
Uttarakhand	78.8	17.4	27.0	158	45	34

Source: (i) Registrar General of India, Census, 2001 & 2011 Gol,
(ii) Directorate of Economic & Statistics, GoUK, 2015-16

3.28 Thus, though the state has made impressive strides in the field of education and its indicators are much above the national average but a lot of work still

needs to be done to achieve universal literacy levels. There also exists a huge challenge of providing **quality education** in the state which would entail even more investment in human resources and infrastructure across the state in education sector.

Level of Urbanization

3.29 The intra state disparity gets further aggravated by considering the urbanization levels in the state. The overall level of urbanization in the state is 30%, which is comparable to the national average. However, within the state, there is high degree of disparity in urbanization and this is show in table 3.11.

Table 3.11: Level of Urbanization

Region/ District	Level of urbanization (Urban) % 2011	Level of urbanization (Urban) % 2001
Plains/ lower hills		
Dehradun	55.52	52.9
Hardwar	36.66	30.9
Udham Singh Nagar	35.58	32.7
High Hills		
Chamoli	15.17	13.7
Pithoragarh	14.40	12.1
Rudraprayag	4.10	1.2
Uttarkashi	7.36	7.8
Mid Hills		
Almora	10.01	8.6
Bageshwar	3.49	3.1
Champawat	14.77	15.1
Garhwal	16.40	12.9
Nainital	38.94	35.3
Tehri Garhwal	11.33	9.9

Source: Directorate of Urban Development, GoUK

3.30 Among the districts, the level of urbanization varies from as high as about 56% in the Dehradun to a low of just 3.49% in Bageshwar in 2011. Decadal change in urbanization rate is also low across the hilly districts as compared to the plains. The low level of urbanization in hill areas implies provisioning of citizen centric public goods and services to a large rural population scattered in small habitations in the remote areas and this means higher per-capita cost of providing these services.

Physical Infrastructure

3.31 The physical infrastructure status of various districts of the state is given in table 3.12:

Table 3.12: Road Network of the State

Region/ District	Length of metalled Roads per thousand sq.km (Km) 2017	Length of metalled Roads per lakh of population (Km) 2017	Distance of District H.Q from the nearest Rail Head (Km)	Percentage village with road connectivity (2017)
Plains/lower hills				
Dehradun	1727.33	265.74	0	86.94
Hardwar	1570.73	167.05	0	97.01
Udham Singh Nagar	1588.15	205.91	5	100.00
High Hills				
Chamoli	305.61	580.04	213	50.95
Pithoragarh	322.99	461.14	154	52.62
Rudraprayag	542.10	443.90	139	80.28
Uttarkashi	147.18	337.90	151	55.11
Mid Hills				
Almora	1280.31	650.60	90	57.70
Bageshwar	308.01	259.70	184	65.37
Champurawat	810.39	505.18	75	70.89
Garhwal	909.60	571.85	106	72.73
Nainital	989.57	385.22	36	81.14
Tehri Garhwal	1163.68	675.25	75	79.57

Source: Directorate of Economic & Statistics, GoUK

3.32 Table 3.12 shows, the percent of villages with road connectivity varies from about 50.95% in Chamoli to almost 100% in Udham Singh Nagar. The figure ranges from 50.95 to 81.14% for the mid and high hill districts which indicates a lot of intra state disparity. The distance of the district headquarters from the nearest rail head **also serves as a good indicator of the prevailing disparity in the access to physical infrastructure**. The distance is as high as 213 km in district of Chamoli and 154 km in Pithoragarh, while Dehradun, Hardwar and Udham Singh Nagar are at the railhead.

3.33 Table 3.12 also indicates that a high degree of disparity in physical infrastructure is observed across the districts of Uttarakhand, which can be associated to their hilly terrain and locational disadvantage. Low connectivity of villages implies a low penetration of government services like health, education, agriculture extension etc. in the hill areas and reluctance on the part of the government employees to serve in these areas. Sustained efforts and investment in physical infrastructure are required for the overall and consistent development of the entire region, especially the hill areas.

Land Holding Pattern

3.34 Land holdings are small in the hill areas of the state and thus are not able to contribute much to the total yield. The scope of application of modern technologies is also restricted in the hilly regions, where the scarcity of

irrigation facilities further hampers implementation of new techniques. Status of land holdings in the state is shown in table 3.13

Table 3.13: Land holding in Uttarakhand

Size of Holding (Ha.)	Type of Holding	No. of holdings in lac (% to total holdings)	Area of Holdings in lac ha. (% to total Area)	Average size of holding (ha.)
Less than 1 ha.	Marginal	6.72 (62.57%)	2.96 (36.32%)	0.44
1-2 ha.	Small	1.57 (14.62%)	2.25 (27.61%)	1.43
2-4 ha.	Semi medium	0.64 (5.96%)	1.75 (21.47%)	2.73
4-10 ha.	Medium	1.7 (15.83%)	0.94(11.53%)	0.55
10 ha. & above	Large	0.11 (1.02%)	0.25 (3.07%)	2.27
Total		10.74	8.15	7.41

Source: Agriculture Census 2010-11, Department of Agriculture, GoUK

3.35 The district wise status of sown area and irrigated area are shown in table 3.14:

Table 3.14: Status of Sown Area and Irrigated Area (Ha.)

S.No.	District	Area Sown		Irrigated Area		% of Irrigated area to sown area	
		Gross	Net	Gross	Net	Gross	Net
1	2	3	4	5	6	7	8
1	Uttarkashi	42182	30251	8840	4821	20.96	15.94
2	Chamoli	47408	33433	2936	1574	6.19	4.71
3	Tehri Garhwal	81095	53809	14240	7739	17.56	14.38
4	Pauri Garhwal	82364	62087	10064	6176	12.22	9.95
5	Dehradun	57134	39443	29681	21043	51.95	53.35
6	Rudraprayag	31410	20821	3825	2538	12.18	12.19
7	Pithoragarh	71368	41891	7732	4259	10.83	10.17
8	Almora	115796	78278	10077	5751	8.70	7.35
9	Nainital	71849	44005	38246	26545	53.23	60.32
10	Bageshwar	39710	24295	9904	5033	24.94	20.72
11	Champawat	26182	16921	3147	1655	12.02	9.78
12	Udham Singh Nagar	253591	139120	248726	135224	98.08	97.20
13	Hardwar	162615	114059	153581	107479	94.44	94.23
	Uttarakhand	1082704	698413	540999	329837	49.97	47.23

Source: Directorate of Economic & Statistics, Uttarakhand, 2015-16

3.36 Table 3.14 shows that the percentage of irrigated area is much lower in the hill area leading to lower production and productivity. This coupled with information from table 3.7, that the majority of workers in the hill areas are working in the primary sector, implies that the per capita income of majority of workers in the hill areas is very low.

Economic Profile of Uttarakhand

3.37 Table 3.15 shows that the structure of the economy of Uttarakhand has undergone gradual change during the last eight years since 2011-12. As per the provisional estimates of GSVA and GSDP for 2018-19, released by the Directorate of Economics and Statistics, Government of Uttarakhand, the

share of both agriculture and industrial sectors has fallen while that of services sector improved. Although the state's economy continues to be dominated by the industrial sector the sector's share has gradually declined from 53.8% in 2011-12, to 50.7% in 2018-19, a fall of nearly 3.1% points. This can be largely attributed to a falling share of manufacturing sector from 40.3% in 2011-12 to 37.5% in 2018-19, a decline of 2.8% points (Table 3.15). In addition, the share of construction also fell by 0.3% points from 8.2% in 2011-12 to 7.9% in 2018-19. Similarly, the share of agriculture and allied activities declined from 12.3% in 2011-12 to 8.8% in 2018-19, a fall of 3.3% points.

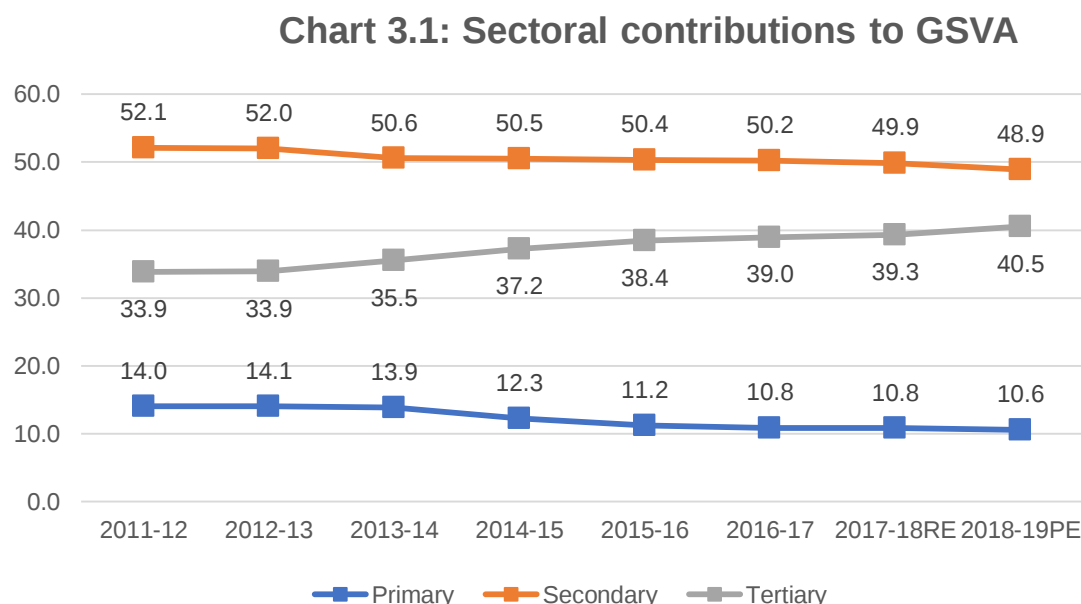
Table 3.15: Sectoral composition of GSVA (Nominal)

S.N o.	Sector	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 (RE)	2018-19 (PE)	2018-19 minus 2011-12
1.	Agriculture, forestry and fishing	12.3	12.4	11.3	10.7	10.0	9.4	9.2	8.8	-3.4
2.	Mining and quarrying	1.7	1.7	2.5	1.6	1.2	1.4	1.6	1.7	0.0
3.	Manufacturing	40.3	41.1	39.0	39.0	38.9	39.1	38.6	37.5	-2.8
4.	Electricity, gas, water supply & other utility services	3.7	3.4	2.7	2.9	3.4	3.2	3.3	3.5	-0.2
5.	Construction	8.2	7.6	8.9	8.6	8.0	7.9	8.0	7.9	-0.2
6.	Transport, storage, communication & services related to broadcasting	6.4	6.6	6.7	7.1	7.8	7.2	6.2	6.0	-0.4
7.	Trade, repair, hotels and restaurants	11.0	11.4	11.6	11.9	12.5	13.5	14.2	15.0	3.9
8.	Financial services	2.7	2.6	2.6	2.7	2.7	2.5	2.6	2.6	-0.1
9.	Real estate, ownership of dwelling & professional services	5.4	5.4	5.3	5.4	5.2	5.1	5.1	5.1	-0.4
10.	Public administration	3.7	2.5	3.5	4.0	4.1	4.2	4.3	4.4	0.7
11.	Other services	4.6	5.4	5.9	6.1	6.2	6.4	7.0	7.4	2.8
12.	Total GSVA at basic prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Aggregate sectors										
1	Agriculture	12.3	12.4	11.3	10.7	10.0	9.4	9.2	8.8	-3.4
2	Industry	53.8	53.7	53.1	52.1	51.6	51.6	51.6	50.7	-3.2
3	Services	33.9	33.9	35.5	37.2	38.4	39.0	39.3	40.5	6.6

Source: Directorate of Economic & Statistics, GoUK

3.38 Table 3.15 shows that the share of services sector improved gradually from 33.9% in 2011-12 to 40.5% in 2018-19, an increase of 6.6% points. This was largely on account of an increase in the share of trade, repair, hotels and restaurants from 11.0% in 2011-12 to 15% in 2018-19, an increase of 3.9% points. The share of financial services and real estate sector (including ownership of dwelling and professional services) remained broadly stable averaging 2.6% and 5.2% respectively during the period 2011-12 to 2018-19.

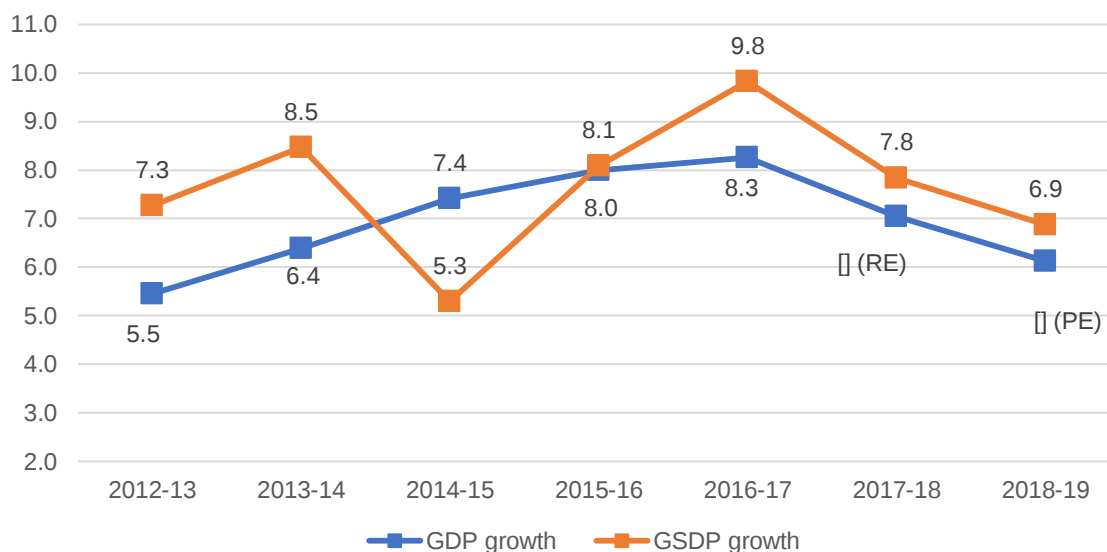
3.39 Chart 3.2 depicts the contribution of primary, secondary and tertiary sector to the state economy covering the period between 2011-12 and 2018-19 (PE). The State's economy continues to be dominated by secondary sector while tertiary sector is catching up quickly. Meanwhile, the share of primary sector has come down substantially, similar to the trends observed at the national level.



Source: Directorate of Economic & Statistics, GoUK

3.40 Uttarakhand's economic growth (GSDP) measured at 2011-12 prices is seen to be broadly following the real GDP growth trend at the national level but has remained higher than that of the GDP growth, except during 2014-15 (Chart 3.3). Uttarakhand's real GSDP growth fell to a low of 5.3% in 2014-15 from 8.5% in 2013-14 due to a sharp slowdown in the growth of industrial sector, lower growth in the services sector and continued contraction in the agricultural sector. From this level, the economic growth recovered and reached a peak of 9.8% in 2016-17 which coincides the year in which the national GDP growth peaked at 8.3%. Since then, however, the State's real GSDP growth fell for two consecutive years reaching a low of 6.9% in 2018-19. Although the trends in the GSDP and per capita GSDP depict high levels of economic growth, two factors are to be borne in mind. One, this high growth rate was on a relatively low base and in recent years the growth rate has come down to all India level. Secondly the growth was highly skewed with rising inter district and intra district disparities.

Chart 3.2: GDP and GSDP growth (real)

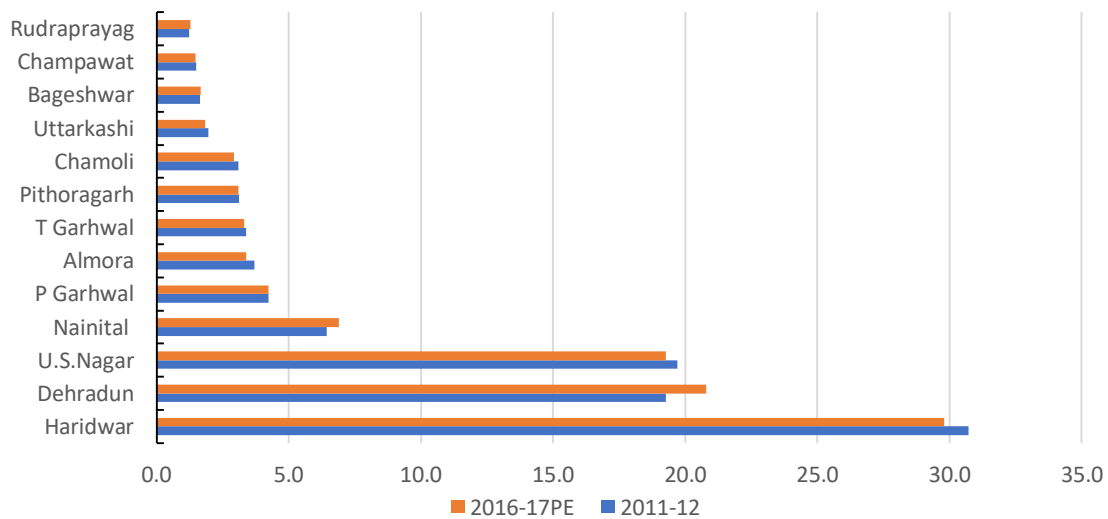


Source: MOSPI and Directorate of Economic & Statistics, GoUK

Low economic development in hill areas

3.41 Chart 3.3 shows the share of district wise gross domestic product in total nominal GSDP of Uttarakhand for 2011-12 and 2016-17 (PE). It can be clearly seen that out of thirteen districts, top five districts namely Haridwar, Dehradun, U S Nagar, Nainital, P Garhwal accounted for over 80% of total GSDP of Uttarakhand indicating a skewed distribution of economic activity. Moreover, top three districts namely Haridwar, Dehradun, U S Nagar accounted for close to 70% of the total GSDP of Uttarakhand suggesting high degree of concentration of economic activities amongst these three districts.

Chart 3.3: Gross District Domestic Product at Current Prices:
District wise share



Source: Directorate of Economic & Statistics, GoUK

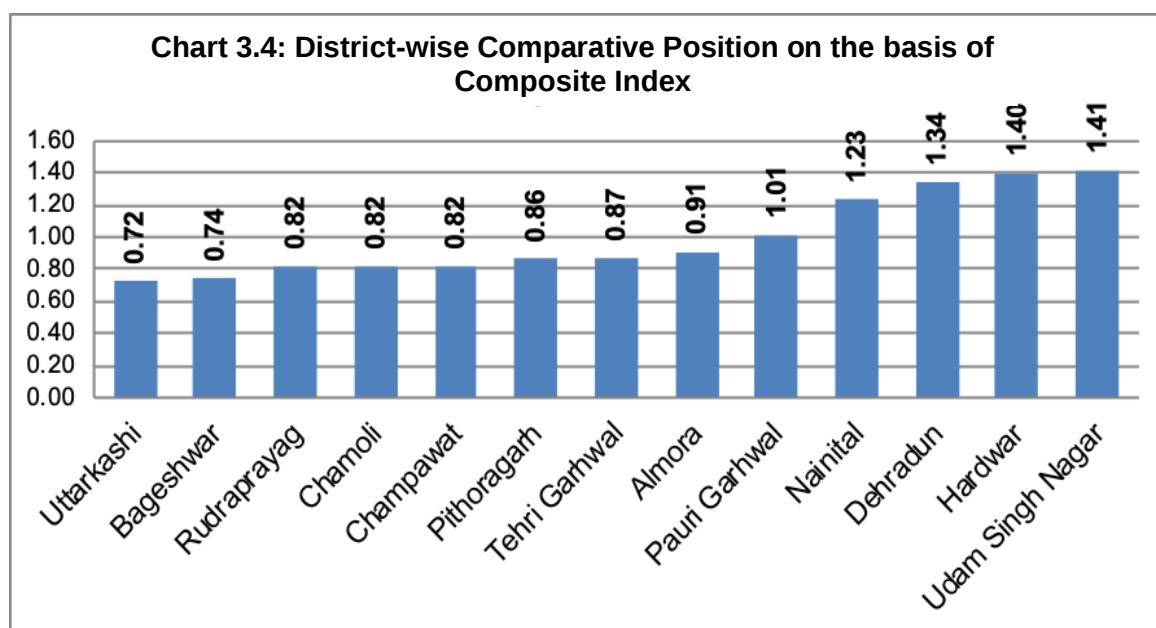
- 3.42 In addition, it has been observed that the hilly region account for a very low share in the state's economy. In fact, the four hilly districts of Uttarakhand including (commonly referred to as high hills) Uttarkashi, Chamoli, Rudraprayag and Pithorogarth together accounted for only 9.2% of the total nominal GSDP of Uttarakhand in 2016-17 (PE). In fact, the share of hilly districts in total GSVA has fallen year after year from a recent peak of 9.9% in 2013-14 to 9.2% in 2016-17. The ratio of total gross district domestic product of non-hilly districts to hilly districts in 2016-17 was at 9.9, higher than 9.1 in 2013-14. This indicates divergence in the economic growth of hilly vis-à-vis non-hilly districts. This may be attributed to the concentration of economic activity in the non-hilly districts. At the same time the cost of providing public services relating to health, education, infrastructure are relatively high in hilly districts, thereby limiting their pace of economic activity.
- 3.43 In per capita terms, only three districts namely Haridwar, Dehradun and U S Nagar had the per capita income higher than the average per capita income of Uttarakhand at INR 1,60,795 in 2016-17(PE). The per capita income of Haridwar in 2016-17 (PE) was the highest at INR 2,54,050 while that of Rudraprayag at INR 83,521 was the lowest. The ratio of highest per capita income district (Haridwar) to that of the lowest per capita income district (Rudraprayag) at 3.0 reflects high degree of inter district income disparity.

- 3.44 Although the trends in the GSDP and per capita GSDP depict high levels of economic growth, the district GDP shows a skewed economic growth and huge disparities among the hill and plain districts. The GDP of plain districts is very high as compared to hill districts. This can partly be explained on account of concentration of working population as well as economic activities in the plain areas. All the industries which were established in the state have been in the plain areas. The agriculture sector and services sector are also more robust in the plain areas. Thus, the hill areas have lagged behind in economic development and consequently have lower per capita income as compared to the plain areas.
- 3.45 Majority of the population in the hill areas is primarily dependent on mountain agriculture which is not even subsistence agriculture, and does not fully meet the food requirements of a family. The scope for modern input intensive agriculture in hill areas is constrained due to various physical, geographical environmental and structural reasons.

Migration

- 3.46 The low economic development in hill area has resulted in large scale out-migration from the hill areas. Due to out-migration of male population, the rural women become yet another vulnerable group having a large share in the agricultural workforce and allied activities like fuel and fodder collection etc. It also leads to lot of high drudgery work, which combined with nutritional deficiency and lack of adequate health care facilities leads to various health related risks for womenfolk.
- 3.47 The out-migration from hill areas was also evident indicated by table 3.3, where the decadal growth rate of population is much lower in the hill areas, in fact Almora and Pauri district show a negative decadal growth rate. The impact of migration on local economy and society has been significant. Most of the migrants from the rural areas of the hill regions get employment in unskilled low paid salaried jobs as domestic servants, security guards, office attendants etc. in the plain areas. Remittances sent back by them are significant from the point of view of low-income group of poor households but are largely spent on daily consumption expenditure and is unable to generate any multiplier effect at the village economy level.
- 3.48 In the hilly areas due to geographical factors, lack of irrigation facilities, low population density, poor infrastructure, disaster vulnerability, man animal conflict because of proximity to the forest, leave little scope for large scale development, mechanized input intensive modern agriculture as well as

market-based institutions. The primary concern therefore is to provide livelihood opportunities in the limited service sector where even private investment is shy and most of the dependence is on public spending.



Source: Directorate of Economic & Statistics, GoUK

3.49 On the basis of five components of socio- economic development namely basic amenities, demography, education, health & nutrition and economic development, a composite index has been worked out in order to analyse that backwardness of various districts in Uttarakhand.

3.50 It is apparent from chart 3.5 that all the hill districts have lagged behind the plain districts in all facets of development.

Table 3.15: Comparative Poverty Estimates in Hill and Plain Districts

District	Rural	Urban
Hill	19.59	14.91
Plains	17.70	10.67

Source: Directorate of Economic & Statistics, GoUK

3.51 Table 3.15 shows that the poverty levels in hill districts are higher than the plain districts of the state. Similarly, the poverty level in rural area is also higher than the urban area.

3.52 Credit Deposit (CD) ratio, which reflects the investment being done in the district also shows the above disparity. The district wise CD ratio is highest for Udham Singh Nagar district at 102% and lowest for Almora district at 22%. Out o 13 districts the CD ratio is above the state average for only 03

districts namely Udham Singh Nagar, Hardwar and Dehradun which are all plain districts and below for all the other 10 hill districts.

- 3.53 The special problems confronting the various development aspects of the state and the corresponding up-gradation grants have been outlined in brief Annexure-2 of this memorandum and a separate booklet containing the relevant details will be separately presented to 15th FC.
- 3.54 **The geographic, demographic as well as economic profile of the state is unique in certain respects which have a critical bearing both in terms of fiscal capacity and fiscal needs of the state.** The economic activity is mainly confined to plain areas. Most of the hilly areas have very low level of economic development and consequently the potential tax base is very low. The cost of public provision of basic services including health, education and infrastructure is relatively higher in hilly areas as compared to that in the plain areas. This cost disability puts additional pressure on the state exchequer. This coupled with adverse demographical indicators and difficulties of terrain leads to low level of socio-economic development. Most of these factors are not within the control of the state government or its people. **Thus, to ensure equalization in the level of services to all citizens within the state of Uttarakhand, the cost and capacity differentials due to geographic, demographic and economic profiles may be taken into account in designing the scheme of fiscal transfers.**

Chapter 4

Inadequate compensation from 14th Finance Commission

In the first Memorandum to the 15th FC, the government of Uttarakhand had highlighted the issue of inadequate compensation from the 14th FC. The 15th FC in its first report did make a partial correction for the issues that were raised. While appreciating the approach of the 15th FC we would continue to emphasize the issues that led to inadequate compensation for Uttarakhand. In our first memorandum, we had analyzed the impact of the recommendations to the state finances using the data available for only first three years under the 14th FC period. Now that the data is available until 2019-20 (RE) for both the central and state finances, the analysis has been updated and the loss to the state has been estimated accordingly.

The state was formed in 2000 after a long-sustained demand from the people of the region. The geography of the terrain inherently limits the resource generating capacity of the state and increases the cost of providing basic services to the people. Thus, the successive Finance Commissions have given the state special category status. The 15th FC has also considered Uttarakhand as a part of the North Eastern and Hilly States (NEHS) which is not different from the erstwhile special category states.

- 4.1 Prior to the creation of the state, the award of 11th FC had been implemented and Uttarakhand was deprived of the revenue deficit grant during this period, which was availed by all other special category states. The need for special dispensation for Uttarakhand as a special category state due to its low fiscal capacity has been by and large recognized by most of the Finance Commissions, for example apart from special problem and up-gradation grants, 11th FC recommended a revenue deficit grant of Rs. 17 crore to Uttar Pradesh for this region, 12th FC recommended a grant of Rs. 5117 crore for its award period and 13th FC recommended an incentive grant of Rs. 1000 crore to Uttarakhand. However, the grants recommended by the 14th FC have been very unfavorable to the state, for example the other special category states got substantial relief through revenue deficit grant, but, Uttarakhand though being a special category state was denied its due share of revenue deficit grant. To a large extent this was due to unrealistic projections of 14th FC without due consideration to ground realities which will be discussed in this chapter.

- 4.2 Table 4.1 shows the average annual per-capita total transfers of erstwhile special category states recommended by some of the recent FCs including the first year of the 15th FC. **It is clearly seen that average annual per-capita transfers to Uttarakhand were the lowest during the 14th FC period while it was next to the lowest in the remaining FC periods. The recommended per capita transfers per year to Uttarakhand was lower than the average for NEHS.** The ratio of average annual per capita transfer of the highest recipient state to Uttarakhand was at 3.6 during the 12th FC period, increasing to 3.9 in the 13th FC period and further to 8.6 during the 14th FC period. Although this ratio has relatively fallen to 6.5 in the first year of recommendation of the 15th FC period, it remains higher than that during the 12th and 13th FC periods, indicating a high degree of disparity in per capita transfers amongst NEHS.

Table 4.1: Per-capita recommended transfers				
State	12th FC	13th FC	14th FC	15th FC
AR	5,525	12,750	70,800	93,398
MZ	9,146	15,523	49,489	49,830
SK	6,251	14,576	45,536	57,631
NL	7,519	13,662	36,535	42,088
MN	5,195	9,179	21,311	26,467
HP	4,393	6,231	19,809	25,921
ML	3,209	6,414	16,018	20,388
TR	4,809	7,013	15,704	23,509
NEHS - total	2,969	5,386	14,436	18,965
AS	1,648	3,632	8,449	10,744
UK	2,568	3,943	8,244	14,280
Ratio of Highest to UK	3.6	3.9	8.6	6.5

Source (basic data): various FC reports, MOSPI, RBI

- 4.3 The Economic Survey 2014-15, in its chapter 10, based on the recommendations of 14th FC has assessed and quantified the implications for the revenues of states. In this analysis, the revenue implications are reassessed based on more recent data (for FY 2014-15) and slightly differing assumptions about GDP growth, tax buoyancy and other fiscal parameters. The estimated benefits (both from tax devolution and FFC grants together), based on certain assumptions related to both FY 2014-15 and FY 2015-16, are shown in table 4.2.
- 4.4 In relative terms Uttarakhand was a notable revenue losing state even under the so-called enhanced tax devolution. The comparison with other erstwhile special category states (SCS) is even more stark. The figures of devolution for J&K is Rs. 13970 crores, HP is Rs. 8533 crores in contrast to Uttarakhand for which it is Rs. 1303 crore only (Table 4.2). Similarly, the benefits per

capita are Rs. 11140, Rs. 12430 and Rs. 1292 for J&K, HP and Uttarakhand respectively. Likewise, the benefits as percentage of OTR and NSDP is the lowest for Uttarakhand when compared to HP and JK.

Table 4.2: Additional FFC Transfer (in 2015-16 over 2014-15)

State	Category	Benefits from FFC (Rs. in crore)	Benefits Per Capita (Rs.)	Benefits as % of OTR	Benefits as% of NSDP
1	2	3	4	5	6
Andhra Pradesh (United)	GCS	14620	1728	27.40	2.20
Arunachal Pradesh	SCS	5585	40359	1758.10	51.00
Assam	SCS	7295	2338	95.50	5.80
Bihar	GCS	13279	1276	105.30	4.90
Chhattisgarh	GCS	7227	2829	67.50	5.20
Goa	GCS	1107	7591	44.10	3.00
Gujarat	GCS	4551	753	10.30	0.80
Haryana	GCS	1592	628	7.80	0.50
Himachal Pradesh	SCS	8533	12430	207.70	14.60
Jammu & Kashmir	SCS	13970	11140	294.40	22.40
Jharkhand	GCS	6196	1878	89.10	4.80
Karnataka	GCS	8401	1375	18.10	1.80
Kerala	GCS	9508	2846	37.00	3.10
Madhya Pradesh	GCS	15072	2075	55.90	4.50
Maharashtra	GCS	10682	951	12.20	0.90
Manipur	SCS	2130	8286	578.70	19.50
Meghalaya	SCS	1381	4655	198.00	8.60
Mizoram	SCS	2519	22962	1410.10	33.30
Nagaland	SCS	2694	13616	886.50	18.70
Odisha	GCS	6752	1609	50.20	3.20
Punjab	GCS	3457	1246	18.30	1.40
Rajasthan	GCS	6479	945	25.50	1.60
Sikkim	SCS	1010	16543	343.70	10.70
Tamil Nadu	GCS	5973	828	10.00	0.90
Tripura	SCS	1560	4247	181.80	6.90
Uttar Pradesh	GCS	24608	1232	46.80	3.50
Uttarakhand	SCS	1303	1292	23.20	1.40
West Bengal	GCS	16714	1831	67.00	3.00
Total		204198	1715		

Source: Chapter 10, Economic Survey Report, 2014-15.

4.5 Uttarakhand among the erstwhile SCS was the state receiving the least benefits. This is also clear from table 4.3.

Table 4.3: Total surplus /shortfall after transfer under CAS but preserving the fiscal space for Centre

State	CAS over and above legally backed schemes(in crore)	Surplus/short fall after transfer under CAS but preserving the fiscal space for centre			
		Absolute (Rs. in crore)	Per capita (Rs.)	% of NSDP	%of OTR
Andhra Pradesh (united)	5062	10134	1198	1.50	19.00
Arunachal Pradesh	2555	4572	33038	41.80	1439.20
Assam	5860	4378	1403	3.50	57.30
Bihar	6998	8783	844	3.20	69.60
Chhattisgarh	2673	5258	2058	3.80	49.10
Goa	180	995	6820	2.70	39.60
Gujarat	4179	2454	406	0.40	5.50
Haryana	1509	714	282	0.20	3.50
Himachal Pradesh	3593	6826	9944	11.70	166.20
Jammu & Kashmir	8185	10679	8515	17.10	225.00
Jharkhand	2870	4650	1410	3.60	66.90
Karnataka	4873	5300	867	1.10	11.40
Kerala	2778	7834	2345	2.50	30.50
Madhya Pradesh	7959	10389	1431	3.10	38.50
Maharashtra	5365	7496	667	0.60	8.60
Manipur	2029	1250	4861	11.40	339.50
Meghalaya	1536	661	2229	4.10	94.80
Mizoram	1157	1967	17925	26.00	1100.70
Nagaland	2019	1839	9293	12.70	605.00
Odisha	6826	3497	833	1.70	26.00
Punjab	1820	2478	893	1.00	13.20
Rajasthan	6618	2423	353	0.60	9.50
Sikkim	1415	489	8006	5.20	166.30
Tamil Nadu	2376	2644	366	0.40	4.40
Tripura	2139	458	1246	2.00	53.30
Uttar Pradesh	9110	18716	937	2.70	35.60
Uttarakhand	3014	-48	-48	-0.10	-0.90
West Bengal	8386	11365	1245	2.00	45.60
Total	113081	138198			

Source: Chapter 10, Economic Survey Report, 2014-15.

4.6 Thus, Uttarakhand was the only state which had a shortfall both in absolute as well as in per capita terms and percentage of NSDP, not only among the special category states but among all the states of the country.

Reasons for loss to Uttarakhand in 14thFC

It is straight forward to see that the loss to Uttarakhand was due to four reasons

- Overestimation of centre's tax revenues in the projection period of the 14th FC
- Reduction in share of Uttarakhand in the tax devolution from 1.12% in 13th FC to 1.052% in 14th FC

- iii. Overestimation of Uttarakhand's own tax revenues by the 14th FC
- iv. Underestimation of Uttarakhand's expenditure requirements during the forecast period.

Over projection of Centre's tax revenues:

4.7 Table 4.4 shows the gross central tax revenues as projected by the 14th FC along with the corresponding actuals and RE (for 2019-20) covered under the recommendations of the 14th FC. It is clear that for gross central tax revenues there was a substantial over projection done by the 14th FC amounting to Rs. 12,69,381 crores. In deriving the divisible pool, the 15th FC also projected the amount of cesses and surcharges that were to be deducted from the gross central tax revenues along with other relevant components including cost of collection of central taxes.

Table 4.4: Projection of gross Central Tax Revenue by 14th FC

S. No.	Items	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	(2015-20) Total
14th FC Projections (Rs. crore)							
1	Divisible Pool**	1379243	1591488	1838820	2127215	2463679	9400445
2	Centre's Gross Tax Revenue	1567373	1802787	2076193	2393939	2763456	10603748
3	State's share in central taxes	579282	668425	772304	893430	1034745	3948186
Union Budget (actual, Rs. crore)							
S. No.	Items	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	Total (2015-16 to 2019-20 RE)
4	Divisible pool (derived)	1205221	1447619	1602395	1812988	1562014	7630238
5	Centre's Gross Tax Revenue	1455648	1715822	1919009	2080465	2163423	9334367
6	State's share in central taxes	506193	608000	673006	761455	656046	3204700
7	Over-projection of divisible pool (1-4)	174022	143869	236425	314227	901665	1770207
8	Over-projection of Centre's gross tax revenues (2-5)	111725	86965	157184	313474	600033	1269381
9	Over-projection of state's share in central taxes	73089	60425	99298	131975	378699	743486

Source: (basic data) report of the 14th FC, Union Budget documents

4.8 Because the 14th FC under-projected the cesses and surcharges, the extent of over-projection of the divisible pool has turned out to be even larger. Looking at the actual divisible pool for the five years under the award period of the 14th FC, the total over projection of the divisible pool amounted to Rs. 17,70,207 crore This implies a loss for every state including Uttarakhand. In the case of Uttarakhand this loss is derived by multiplying Uttarakhand's share (1.052%) by the amount of over projection. It can be seen that the amount of loss during this period comes out to be Rs. 18, 622.6 crore

Loss due to tax devolution

- 4.9 The decline of share in Central Taxes, of the state due to 14th FC award from 1.12% to 1.052% shows a decrease of 0.068% from the previous 13th FC, which led to annual loss of about Rs. 350 crores at 2014-15 prices.

Loss due to discontinuation of plan grants

- 4.10 The 14th FC increased the share of states in Central Taxes from 32% to 42% thereby increasing the untied revenue receipts from the Central Government, but, on the other hand, the plan grants channelised through the **Planning Commission, namely Normal Central Assistance (NCA), Additional Central Assistance (ACA) and Special Plan Assistance (SPA) were abolished** and changes were also made in the number of schemes and funding pattern of plan schemes. Due to this, Uttarakhand has suffered more than other states as it was part of the erstwhile special category state and used to receive a higher proportion in the above three grants. The quantum of loss has been shown in table 4.5.

Table 4.5: Year wise plan grants received

Rs. in crore				
Year	NCA	SPA	SCA/ACA	total
2010-11	1154.38	300.00	24.61	1478.99
2011-12	1235.31	99.90	32.98	1368.19
2012-13	1355.03	300.00	33.65	1688.68
2013-14	1463.49	515.00	46.51	2025.00
2014-15	1384.13	810.12	700.00	2894.25

Source: Uttarakhand Finance Accounts, AG, Gol.

- 4.11 Thus, the state suffered a loss of around Rs. 2500 crore every year due to the discontinuation of NCA, SPA and SCA/ACA.

Composition of Devolution in 12th, 13th and 14th FC.

- 4.12 J&K, Himachal Pradesh and Uttarakhand are Himalayan states with similar geographical and economic profile. The devolution for above three states in 12th, 13th and 14th FC is given in table 4.6.

Table 4.6: Composition of devolution in 12th, 13th and 14th FC of various states

State	12 th FC (Rs. In crore)	13 th FC (Rs. In crore)	Rank in % enhancement from 12 th to 13 th FC	Per capita devolution in 13 th FC (Rs.)	14 th FC (Rs. in crore)	Rank in % enhancement from 13 th to 14 th FC	% increase of overall grant in 14 th over 13 th FC	Per capita devolution in 14 th FC (Rs.)
J & K	20880	40438	23	32244	124482	7	208	99258
UK	12194	20308	26	20134	45405	26	123	45017
HP	14450	21691	28	31599	72035	4	232	104938
India	755751	1706676		14353	4485540		163	37723

Source: 13th and 14th FC report.

- 4.13 Column 8 of table 4.6 indicates that the percentage rise in devolution from 13th FC to 14th FC was 208% for J&K, 232% for HP but only 123% for Uttarakhand. Even the overall rise for the whole country was 163%. The column 9 in table 4.6 also clearly shows that in per capita terms the devolution for Uttarakhand is half that of HP and J&K. **On an average, the per capita devolution for special category states is Rs 1,57,161 whereas for Uttarakhand it is only Rs. 45,017.**

Revenue Deficit Grant

- 4.14 All special category states except Uttarakhand have received substantial non plan revenue deficit grants over the award period of the 14thFC. As shown in table 4.7, comparable states like Himachal Pradesh has received a revenue deficit grant of Rs. 40,625 crores, while Jammu & Kashmir received a grant of Rs. 59,666 crores.

Table 4.7: Revenue deficit grant given to various states by 14th FC

Rs. in crore

S.No.	State	2015-16	2016-17	2017-18	2018-19	2019-20	2015-20
1	Andhra Pradesh	6609	4930	4430	3644	2499	22113
2	Assam	2191	1188	0	0	0	3379
3	Himachal Pradesh	8009	8232	8311	8206	7866	40625
4	Jammu & Kashmir	9892	10831	11849	12952	14142	59666
5	Kerala	4640	3350	1529	0	0	9519
6	Manipur	2066	2096	2091	2042	1932	10227
7	Meghalaya	618	535	404	213	0	1770
8	Mizoram	2139	2294	2446	2588	2716	12183
9	Nagaland	3203	3451	3700	3945	4177	18475
10	Tripura	1089	1089	1059	992	875	5103
11	West Bengal	8449	3311	0	0	0	11760
	Total State	48906	41308	35820	34581	34206	194821

Source: 14thFC report.

- 4.15 Table 4.7 indicates that Uttarakhand, though being a SCS did not receive any revenue deficit grant, thereby putting the state finances under severe strain.

Unrealistic projections by 14th FC

- 4.16 The state did not receive the revenue deficit grant due to unrealistic projections of the 14th FC of GSDP growth rate and Tax GSDP ratio. A

comparison between the 14th FC assumed GSDP growth and actual GSDP growth and assumed tax GSDP ratio and actual tax GSDP ratio is given in table 4.8.

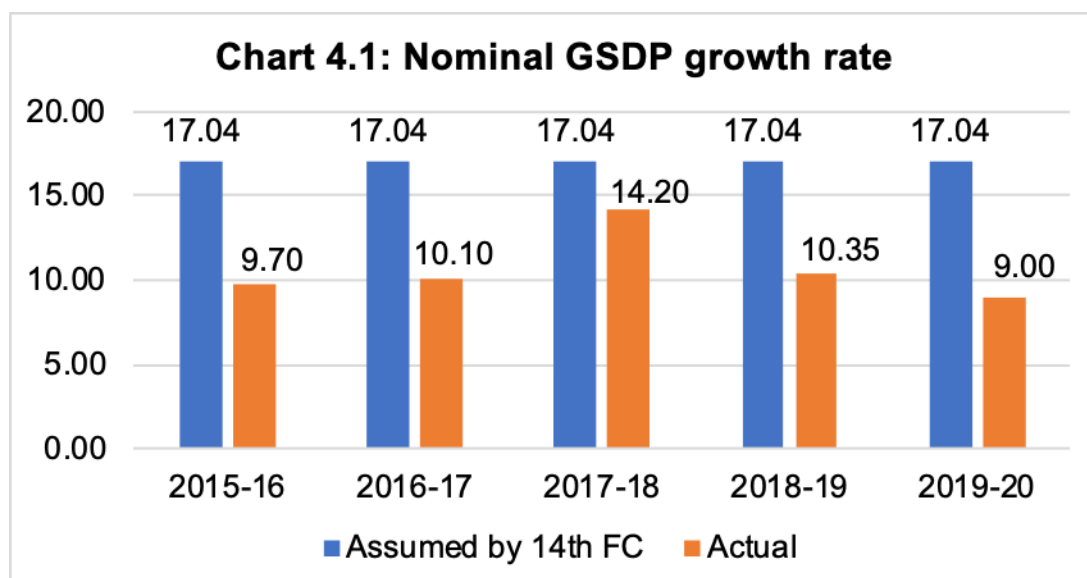
Table 4.8: Comparison of 14th FC assumption with actual figures

Uttarakhand	2015-16	2016-17	2017-18	2018-19	2019-20	Avg.
14 th FC assumed GSDP growth rate	17.04%	17.04%	17.04%	17.04%	17.04%	17.04%
Actual GSDP growth rate	9.74%	10.14%	14.20%	10.35%	9.0%	10.7%
14 th FC assumed tax to GSDP ratio	6.86%	7.36%	7.89%	8.26%	8.32%	7.74%
Actual tax to GSDP ratio	5.30%	5.58%	4.56%	4.96%	4.64%*	5.01%

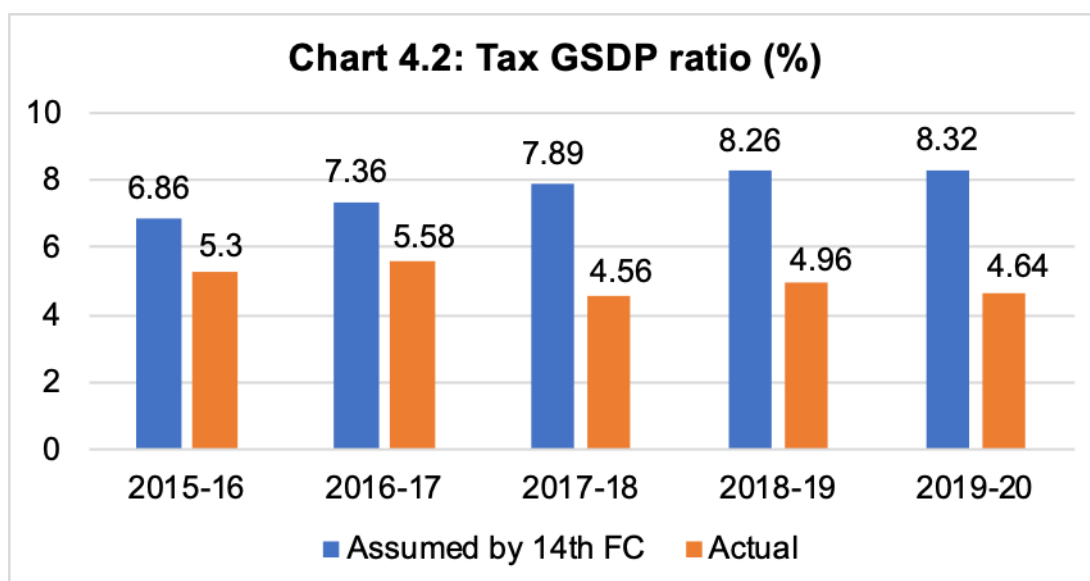
Source: Budget Documents, GoUK; *RE

Note: Actual tax (own) to GSDP ratio for 2017-18, 2018-19 and 2019-20 (RE) excludes GST compensation cess revenues.

- 4.17 The projection of GSDP growth rate for the period FY 2015-16 to FY 2019-20 by the 14th FC was 17.04%, whereas, the actual average growth rate of the state for this period was only 10.70% (Chart 4.1).
- 4.18 Similarly, as per the 14th FC, the projected Tax GSDP ratio was envisaged to increase from 6.86% in FY 2015-16 and to 8.32% in FY 2019-20, whereas the average actual tax GSDP ratio for this period was only 5.01%.



Source: (i) 14th FC report, (ii) Budget Documents, GoUK



Source: (i) 14th FC report, (ii) Budget Documents, GoUK

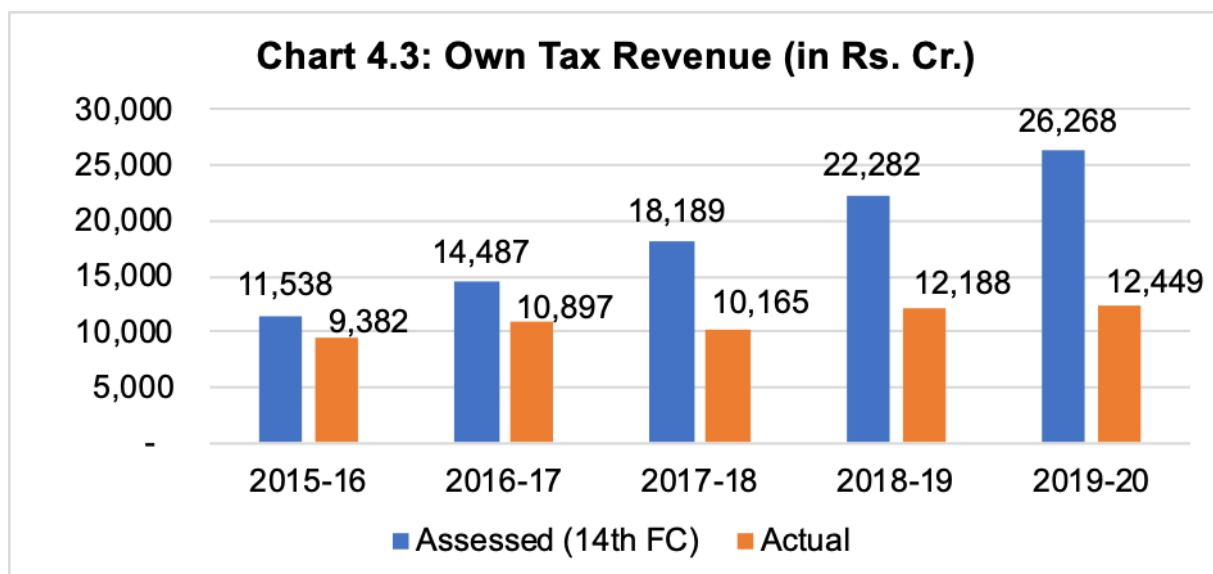
4.19 Thus, as shown in table 4.8, the 14th FC made quite unrealistic assumptions of the GSDP growth rate and the own tax growth rate of the state.

4.20 Similarly, the assumption of 14th FC regarding the non-tax estimates of the state, the overall revenue as well as the under estimation of the revenue expenditure were also off the mark as given in table 4.9.

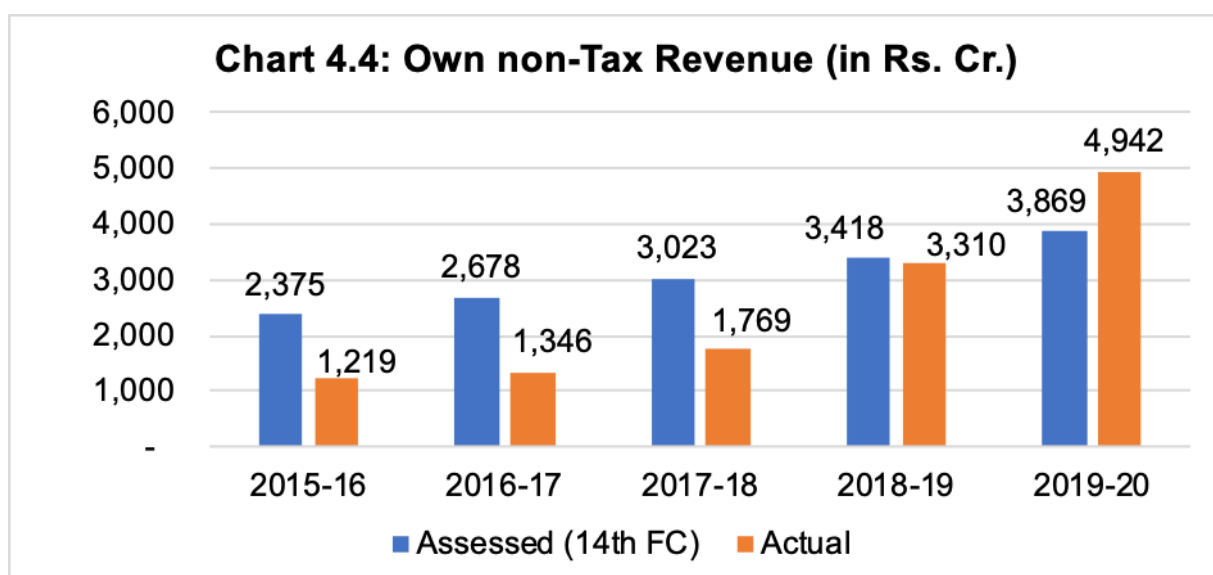
Table 4.9: Over estimation of resources and under estimation of expenditure by the 14th FC

Rs. in crore								
S.No.	Item	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2015-20	%of over estimation or under estimation
1	2	3	4	5	6	7	8	9
1	GSDP							
2	GSDP (Actual)	177163	195125	222836	245895	268025	-	-
3	By FC	168270	196938	230490	269758	315716	-	-
4	Difference	-8893	1813	7654	23863	47691	-	-
5	Own tax revenue							
6	Own tax revenue (Assessed by FC)	11538	14487	18189	22282	26268	92764	-
7	Actual	9382	10897	10165	12188	12449	55081	-
8	Difference	-2156	-3590	-8024	-10094	-13819	-37683	68.41% over estimation
9	Non-tax revenue							
10	Non-tax revenue (Assessed by FC)	2375	2678	3023	3418	3869	15363	-
11	Actual	1219	1346	1769	3310	4942	12586	-
12	Difference	-1156	-1332	-1254	-108	1073	-2777	22.06% over estimation
13	Revenue Expenditure							
14	Revenue Expenditure (Assessed by FC)	19751	22060	24653	27565	30837	124866	-
15	Actual	23086	25271	29113	32196	35481	145147	-
16	Difference	3335	3211	4460	4631	4644	20281	13.97% under estimation

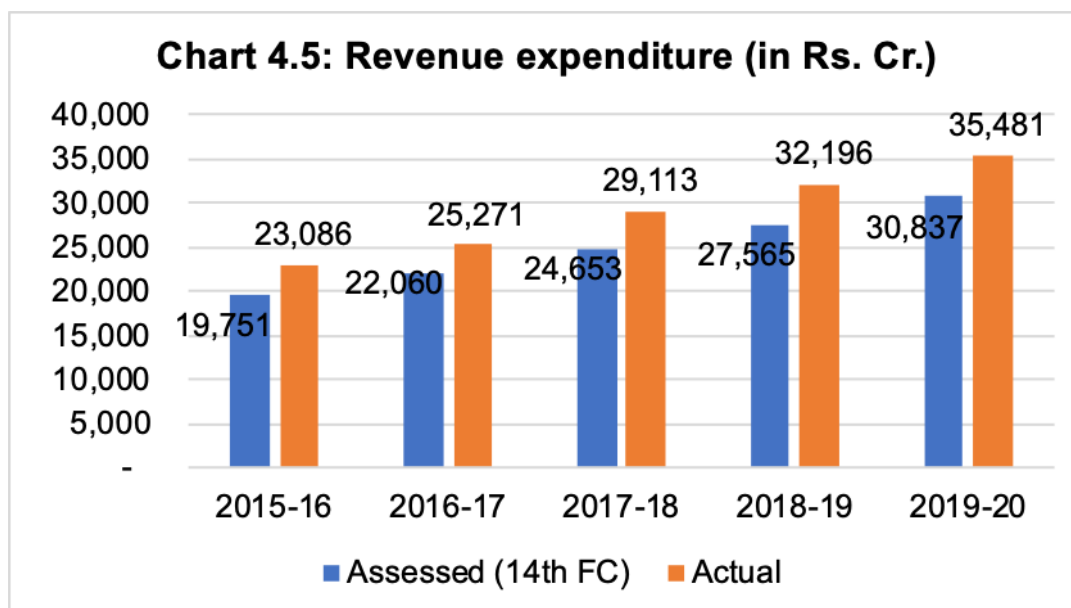
Source: (i) 14thFC report, (ii) Budget Documents, GoUK



Source: (i) 14th FC report, (ii) Budget Documents, GoUK



Source: (i) 14th FC report, (ii) Budget Documents, GoUK



Source: (i) 14th FC report, (ii) Budget Documents, GoUK

- 4.21** Table 4.9 shows that own tax revenue forecasts for the five-year period of the 14th FC is Rs. 92764 crores, whereas the actual receipt was Rs. 55,081crore, which was an overestimation of Rs. 37,683 crores. **Thus, the own tax revenue estimate of the 14th FC is 68.41% higher than the actual.**
- 4.22** Similarly, in serial number 10-12 in table 4.9, the own non-tax revenue forecast for the five-year period by the 14th FC is Rs. 15363crore, whereas the actual receipt was Rs. 12586crore, which was an overestimation by Rs.2777 crore. **Thus, the own non-tax revenue estimate of the 14th FC is 22.06% higher than the actual.**
- 4.23** In serial number 14-16 in table 4.9, it is evident that the revenue expenditure forecast for the five-year period of the 14th FC is Rs.124866 crore, whereas the actual expenditure was Rs.145147 crore, which was an underestimation of Rs.20281 crore **Thus, the revenue expenditure forecast of the 14th FC is 13.97% lower than the actual.**
- 4.24** It is clear that there was an overestimation of revenue receipts by Rs. 40,459 crores and an underestimation of revenue expenditure by Rs. 20,281 by the 14th FC. The gap between revenue receipts and revenue expenditure as assessed by the 14th FC was Rs. 16,736 crores while this gap between the actuals turned out to be much higher at Rs. 77,480 crores which is nearly 4.6 times higher than the 14th FC's assessment of the gap. The loss to the state of Uttarakhand can therefore be evaluated at Rs. 60,741 crores, amounting

to an annual average of Rs. 12,148 crores for the five-year period under the 14th FC.

4.25 The revenue deficit grant given by 14th FC to HP is Rs. 40625 crores and to J&K is Rs. 59666 crores. Thus, it is evident that the state of Uttarakhand, which lost around Rs. 60,741 crores as stated in para 4.24 should also have received revenue deficit grant of Rs. 60,741 crores which is comparable to the grant given to J&K.

4.26 Table 4.10 gives details of overall grants given to the three similar Himalayan states of Uttarakhand, HP and J&K in 14th FC. Thus, it is evident that the major difference in the total transfers amount among the three states is due to revenue deficit not being given to Uttarakhand which has adversely impacted development schemes and capital expenditure in the state.

Table 4.10: Recommended grant by 14th FC

Rs. In crore								
States	RDG	Share in Central Taxes	Disaster	RLBs	ULBs	Total	Per capita grant (Rs.)	Per Capita grant if RDG of Rs. 47278 crore was sanctioned to Uttarakhand
1	2	3	4	5	6	7	8	9
J & K	59666	58779	1268	3463	1306	124482	99258	99258
Himachal Pradesh	40625	28225	1173	1810	202	72035	104938	104938
Uttarakhand	0	41665	1042	1883	816	45406	45017	91505

Source: 14th FC Report

4.27 Thus, if revenue deficit grant of Rs.60,741 crore was sanctioned to Uttarakhand by 14th FC, the per capita grant of Uttarakhand would have been more or less around the grant given to HP and J&K.

4.28 Thus Uttarakhand has lost heavily by 14th FC recommendations on account of changes in the horizontal devolution formula, discontinuation of plan grants, unrealistic assumptions of 14th FC regarding revenue growth rate and expenditure of the state and mainly due to revenue deficit grant being denied to the state. This has adversely impacted the various development schemes of the state and also significantly curtailed capital expenditure, thereby adversely affecting its citizens and the growth prospects of the state.

4.29 Considering these developments and the resource constraints faced by Uttarakhand, the state, in its first memorandum to the 15th FC submitted in October 2018, had strongly proposed that it be considered for the

provision of revenue deficit grant. After assessing the state's fiscal and economic position, the 15th FC, in its first report has recommended revenues deficit grant amounting to INR 5076 crores for 2020-21. Government of Uttarakhand appreciates the approach followed by the 15th FC in its first report and would like to further emphasize that the ongoing economic slowdown combined with the uncertainties relating to COVID-19 is likely to have an adverse impact on the state's revenues and will require increased expenditure on social services particularly on medical and health services. Therefore, the state urges the 15th FC to take into account the revised revenue and expenditure forecasts of the state for determining the revenue deficit grant for its award period covering 2021-22 to 2025-16.

Chapter 5

Development disabilities and environmental externalities: case of a hilly and small state

The creation of the state of Uttarakhand was a culmination of the aspirations of the people of region, wherein it was felt that in a smaller state the policy design will be more in accordance with the local needs and resource availability. Being a remote mountainous region of erstwhile state of Uttar Pradesh, it faced problems of inadequate allocation of resources, unwillingness on the part of the government personnel to work in difficult terrain, and inadequate capacity of its institutions. The region thus faced a kind of '**Development and Infrastructure deficit**' along with insufficient and inefficient delivery systems. This primarily was the 'rationale' for creating a new state and issues regarding resource availability, administrative and economic viability and fiscal capacity etc. were not taken into serious consideration. Since the parent state itself was not quite healthy in fiscal terms, so Uttarakhand inherited more liabilities rather than assets and started its journey with a negative cash balance. It was recognized by the Central Government that the state would need hand holding till such time it is able to stand on its own feet, and therefore it was characterized as a special category state, a dispensation which entailed more grants from the Planning Commission and relatively easier terms of assistance.

- 5.1 During the 11th FC period, while the area under Uttarakhand remained part of the undivided state of Uttar Pradesh, it was deprived of a revenue deficit grant which was being availed by all other special category states. It was partly compensated by additional plan grants and additional borrowings which created a further debt liability.
- 5.2 The need for special dispensation hilly states which were categorized as special category states was by and large recognized by most of the Finance Commissions.
- 5.3 The state is characterized by a difficult geographical terrain with geological surprises at every step along the Himalayan region, sparsely dispersed population, high cost of creation and maintenance of infrastructure, environmental constraints because of large forest area, high transportation costs, inclement weather, disaster proneness and weak infrastructure along with other cost disabilities.
- 5.4 Being a predominantly mountainous state, the economy of the hill region is characterized by lack of robust economic activity and livelihood opportunities, as reflected by low per capita income of hill area. This gets further

aggravated by lack of basic amenities and remoteness, leading to intra state and interstate migration leaving behind an ageing society in rural areas of hills which adversely impacts the consumption pattern. Any remittance sent back home is primarily consumed in subsistence level consumption, leaving no room for any savings to be invested in gainful economic activity.

- 5.5 It is now generally accepted that per capita income by itself as an indicator of development has its own limitations. Nowadays, on the basis of regional profile, micro level strategies for balanced and inclusive development have to be worked out for narrowing the relative gap among the various regions including the sub-national level as an imperative to get rid of backwardness. The second Administrative Reforms Commission (ARC) in its seventh report also recommended addressing the issue of intrastate disparity in development.
- 5.6 Major GSDP drivers of the state like agriculture, horticulture, industry, hydro power, tourism etc. are constrained primarily by geographical, environmental and regulatory factors over which the state has no control.
- 5.7 A view has often been taken that intrastate disparities are the responsibility of the state government. However, if the causative factors are geographical or due to policies formulated at the national level, **then it needs to be factored into any scheme of transfer of resources to the state.**
- 5.8 According to calculations based on GST data and as analysed in the Economic Survey 2017-18 Vol. I, a state's GSDP per capita is highly correlated with its export share in GSDP. In terms of interstate trade, the five largest exporting states are Maharashtra, Gujarat, Haryana, Tamil Nadu and Karnataka. The top five in terms of international export of goods and services are Maharashtra, Gujarat, Karnataka, Tamil Nadu and Telangana - all coastal states with port facilities. Uttarakhand being a land locked state with almost minimal rail network (345 Km), poor air connectivity and poor road connectivity in the hill areas will continue to remain handicapped in this regard.

Agriculture

- 5.9 As compared to neighbouring states like Uttar Pradesh, agriculture in Uttarakhand suffers from serious handicaps and a large part of the population is totally dependent on the public distribution system for its consumption requirements of food.

- 5.10 In the hill areas because of geographical factors, lack of irrigation facilities, low population density, poor infrastructure, disaster vulnerability, man animal conflict because of proximity to the forest, leave little scope for modern development of agriculture sector as well as market-based institutions, thereby leading to low production and productivity.
- 5.11 Niche areas like horticulture, floriculture etc. too are constrained by small size of land holdings, natural calamities, man-animal conflict, low technical knowledge of farmers and poor marketing infrastructure.
- 5.12 According to Census 2011, more than 50% of the state's workforce is engaged in agriculture. However, the per capita GSDP share of the households engaged mainly in agriculture is much lower than those working in the secondary and tertiary sector. At the time of formation, Uttarakhand was primarily an agrarian economy, but the rapid growth achieved has been witnessed primarily in the secondary sector, the growth rate in the primary sector has been very low, thereby adversely affecting the socio-economic life of farmers especially in the hill areas.
- 5.13 The cultivable area in Uttarakhand as a percentage of total area is 25.84% only as compared to an all India average of 59.09%. The mountain cultivators own very small plots of farm land. A total of 76% cultivators are marginal and 17% are small cultivators. The average net irrigated area in the mountainous districts is just about 10% of the net sown area and hill farming relies substantially on monsoon rains for sustenance. Any variation in rainfall wreaks havoc for hill farming thereby adversely affecting the income and livelihood of farmers, who at times are unable to even afford the cost of inputs.
- 5.14 Thus, agriculture in the hills is trapped in a vicious circle of low productivity and low income. Field studies suggest that the returns from farming in the hills are very low and cultivators have to look for off-farm opportunities to fulfil their basic economic needs. Since horticulture yields higher returns than cereal crops, cultivators in the state are gradually switching over to horticulture and other cash crops.

Industries

- 5.15 After the formation of the state, there has been an expansion in the industrial base in the state and this was primarily due to the special industrial package of Government of India. The manufacturing industries were set up mainly in the plain regions of Udham Singh Nagar, Hardwar, Dehradun and Nainital

districts due to the incentives under the industrial package of Government of India, which prematurely came to an end in 2010. After the end of the special industrial package, the possibilities of expansion of industrial base are very low due to geographical, environmental and financial constraints. In Doon Valley industries in red and orange categories are prohibited due to specific environmental restrictions.

- 5.16 Under its own industrial policy, the state government has provided several incentives in the form of concessional finance, energy, industrial land, tax waiver and other basic infrastructure to attract industries. Even these incentives are not enough to attract the industries as there is no competitive/comparative advantage to the industry due to unavailability of raw material, limited size of the domestic market and the high cost of transportation, which adds to the overall cost making most of the products unviable. Similarly, in agro-processing and horticulture processing sector, industries have not succeeded primarily due to diseconomies of scale and limited marketing opportunities.

Hydro Power Scenario in Uttarakhand

- 5.17 After formation of Uttarakhand, the state was conceived as an energy state or '**Urja Pradesh**' owing to its rich hydrological natural resources that could be commercially exploited. Moreover, hydro power development in Uttarakhand could have been the major driver of GSDP growth.
- 5.18 The total estimated hydropower potential of Uttarakhand is approximately 25000 MW. Out of this only 3987 MW has been harnessed so far and 2578 MW is under execution by various agencies like Central Public Sector Undertaking (CPSUs), state-owned utilities, and Independent Power Producers (IPPs).
- 5.19 At present there is a huge gap between power demand and supply in the state. The annual energy demand of the state is about 14000 MU out of which the state power generation utility generates about 35% of total demand. Approximately 35% demand is fulfilled through CGS (Central Generating Stations) and 30% power is procured through open market which costs approximately Rs. 1000 crore per year and is a huge burden on the state, whereas on the contrary, the neighbouring state of Himachal Pradesh with similar geographical and environmental conditions is generating revenues by selling energy worth **Rs.1000 crore annually**.

- 5.20 In view of the directions/ order of Hon'ble Supreme Court, National Ganga River Basin Authority (NGRBA) and Ministry of Environment, Forest and Climate Change (MoEF&CC) the development of various hydro projects in the State of Uttarakhand has been stalled since 2010.
- NGRBA on 1st of November 2010 decided that **“Loharinag Pala, Pala Maneri and Bhairon Ghati hydro-electric power projects on Bhagirathi may be discontinued”** having total capacity of about 1461 MW.
 - MoEF&CC notified the entire watershed measuring about 100 kms along river Bhagirathi from Gaumukh to Uttarkashi covering an area of 4179.59 Km² as eco-sensitive zone vide notification dated 18th December 2012, in which setting up “new” hydroelectric power plants and expansion of existing plants (of capacity over 2 MW) are prohibited. Consequently 15 hydroelectric projects worth 1734 MW capacity will not be available to the state.
 - Hon'ble Supreme Court in its order dated 7th May 2014 has directed that no further construction activities shall be undertaken on 24 hydropower projects on Bhagirathi river. Accordingly, the construction of hydroelectric projects of capacity 2945 MW has been suspended.
 - Ministry of Water Resources (MoWR) has also given directives in October 2015, that clearance of all the projects on Ganga and its tributaries will not be taken up till MoWR decides the norms for releasing minimum environmental flow continuously into the river.
- 5.21 On the basis of above directions/ orders, overall 33 hydroelectric projects, with total capacity of about 4084 MW and project cost of Rs. 22607 crore have been stalled. Presently Rs. 2728 crore have been invested on these projects, out of which state government has invested Rs. 245 crore, Central Public Sector Undertaking (CPSUs) have invested Rs. 1728 crore and private developers have invested Rs. 755 crore. In the absence of non-resolution of the aforesaid issues the expenditure done till date of Rs. 2278 crore has become sunk cost, which will also result in huge escalation of the cost of various projects.
- 5.22 Apart from the financial losses, the nation has lost about 16491 MU of clean energy and the state of Uttarakhand has lost about 6537 MU of energy as free royalty. Due to this Government of India and the state government have

to bear an expected **revenue loss of Rs. 3982 crore and Rs. 2020 crore per annum.**

- 5.23 Thus, it is apparent from the above discussion that hydro power sector which could have been one of the major drivers of economy of the new state is unable to contribute to the economy due to geographical, environmental, regulatory factors and policies of government of India. This has in turn, led to substantial loss in revenue and employment opportunities in the hill areas thereby contributing to migration from the hill areas.

Other Service Sector

- 5.24 Because of poor paying capacity and low returns on investments in the 9 out of the 13 districts of the state, the investment by the private sector in health, education and other service sectors is not likely to be forthcoming due to viability issues.
- 5.25 Tourism as a sector does offer some possibilities for private investment, but almost 70% of the geographical area is under forests governed by stringent regulatory regime. Another constraint is the lack of quality infrastructure which discourages private sector investments due to viability gaps and environmental constraints.

Use Disability: Compensation for Banned Hydro Power Projects

- 5.26 As explained above, Uttarakhand is not able to use the resources available within its domain, due to various reasons like **Policy Mandated Restriction due to environmental reasons, thus resulting in Use Disability.** Another aspect of Use Disability is that a large part of the natural resources that the Himalayan regions have must continue to remain not harnessed, on account of the environmental benefits for the entire nation. For Uttarakhand, hydro power sector and the tourism sector are typical examples of Use Disability and the state should be adequately compensated for it.

Cost Disability of Uttarakhand as a Himalayan State

- 5.27 The need to protect and conserve forests, wildlife and other biodiversity, besides restricting the land use choices and thus causing developmental disadvantages, adversely affects the unit cost of providing public services. The cost of providing public services also varies across states/regions due to a large number of factors such as geographical terrain, population density, extreme and variable climatic conditions, and are referred to as 'cost-

disabilities'. **When 'cost-disabilities' arise from factors that are considered exogenous to a state's control, the states need to be compensated through an additional allocation due to these disabilities, by incorporating these in the formulae for intergovernmental grants.** In a number of developed countries cost disabilities have been inbuilt in the design of intergovernmental grants.

- 5.28 Factors contributing to 'cost-disability' in forested areas of hill states vis-à-vis non-hill states and/or non-forested areas in hill states can be identified as cost escalation in terms of time and institutional costs due to legal requirements and federal restrictions (e.g. Hon'ble Supreme Court rulings on diversion of forest land for non-forest purposes and associated cost for NPV charges, requirement for central clearances for non-forest activities etc.).
- 5.29 The other factors adversely affecting the unit cost of providing public services in hill states are difficult terrain, extreme climatic conditions, fragile ecosystem, higher technological and material requirements for meeting specific rules and regulations, higher costs of transporting materials and supplies through difficult terrain.
- 5.30 Opportunity costs when expressed in terms of forgone developmental alternatives, restrictions on livelihood options, and mark ups on costs of developmental projects are much higher for the state as compared to other states.

Cost Disability of Uttarakhand is mainly due to following reasons:

- i. Cost on Geological and Environment Impact Assessment (EIA) study.
- ii. Cost of site development and slope stabilization.
- iii. High cost of material transportation and service delivery.
- iv. Low density of population and high number of habitations necessitate increased cost of service provision.
- v. More per capita forest cover and villages being interspersed with forest cause more man-animal conflict leading to loss of life & livelihood (damage to crop & horticultural products). The situation has become so alarming that thousands of people have left agriculture as a source of livelihood and migrated to plain areas working in low paying jobs.
- vi. Limitations of agricultural mechanization puts extra pressure on farmer in terms of drudgery and results in low labour productivity. Furthermore

limitations of physical (road, rail and air) & digital connectivity leads to poor market access for farmers.

- vii. In addition to high cost of infrastructure development, frequent repair & maintenance has also to be carried out due to heavy rains, snow fall, frequent landslides and flash floods leading to much higher maintenance cost as compared to other states.
- viii. Since around 70% area of the state is notified as forest, almost any development activity needs forest land diversion. This requires civil land equivalent to twice the amount of forest land diverted and payment of NPV of the forest land. This is like double jeopardy for mountain people. On one hand they protect natural ecosystem which provides ecosystem services to the whole nation and on the other hand they get penalized for their own development. Requirement of NPV causes **cost disability** for state and requirement of double civil land causes **Use Disability** as it deprives the state from its precious scarce civil land which could be used for infrastructure development or for upliftment of people's livelihood.
- ix. **Three dimensionality of** the area whereby circuitous roads have to be built leads to extra capital cost as well as maintenance costs.
- x. Apart from the increased distance, the basic costs of construction in hills and high hills are much higher than the plain region. This is illustrated in table 5.1.

Table 5.1: Cost Index of Hill and Plain areas of Uttarakhand

S.No	Hill Area	Cost Index	S.No	Plain Area	Cost Index
1	Mukteshwar (Nainital)	126	7	Haldwani (Nainital)	109
2	Bageshwar	130	8	Kashipur (U.S. Nagar)	113
3	Gunji (Pithoragarh)	421	9	Khatima(U.S.Nagar)	109
4	Chakrata (Dehradun)	110	10	Dehradun	99
5	Joshimath (Chamoli)	151	11	Hardwar	101
6	Matli (Uttarakashi)	143	12	Rishikesh (Dehradun)	101

Source: CPWD (2016)

Cost of Providing Services to Floating Population

- 5.31 The population of Uttarakhand is little over one crore, but it welcomes around 5 to 6 crore tourists/ pilgrims every year. This necessitates the state government to not only create additional infrastructure in terms of stay arrangements, link roads, bus fleets, bus terminals, drinking water facilities,

roadside amenities but also to bear huge cost of frequent maintenance of these infrastructure and facilities. In the backdrop of the religious nature of tourism and the low paying capacity of the pilgrims, the returns are not commensurate with the cost of services being provided by the state government.

Developmental Disability Index for Hill States in India

- 5.32 Development Disability Index (DDI) was first prepared by National Institute of Public Finance and Policy (NIPFP), New Delhi in 2013. The DDI prepared by NIPFP was later revised by Planning Commission which has two broad components. It reflects the comparative socio-economic profile of all the states of the country.
- 5.33 The first component is the endowment effect, which is based on the Geographical Area Disadvantage Index (GADI). This index has been developed based on two sub components, viz (i) Forest Cover Index (FCI) i.e. the proportion of Forest Cover Area (FCA) to Geographical Area (GA), and (ii) Barren & Unculturable Land Index (BULI) i.e. the proportion of Barren & Unculturable Land to Geographical Area. The composite index of this component is based on the combined index of FCI and BULI in the ratio 60:40. For the purpose of FCI as well as BULI, the Land Use Statistics (LUS) data has been used.
- 5.34 The second component is the Infrastructure Deficit Index (IDI), which takes into account deficits in major infrastructural sectors viz. power, road, telecommunication, aviation, ports and railways.
- 5.35 The Development Disability Index has been calculated as an average of Component-1, i.e. Geographical Area Disadvantage Index and Component-2 i.e. Infrastructure Deficit Index and the states have been ranked in terms of DDI. As an alternate mechanism, this DDI has been further superimposed with the connectivity disadvantage factor to arrive at another DDI (called DDI-2) and the states have been ranked in terms of DDI-2.
- 5.36 Table 5.2 provides the rankings of the states based on Component-1 (Geographical Area Disadvantage Index), Component-2 (Infrastructure Deficit Index including Hilly Terrain and Flood Prone Area component), Developmental Disability Index-1 [combination of Components-1&2] and Developmental Disability Index 02 (DDI-1 with factor such as connectivity disadvantages).

Table 5.2: Calculations of Development Disability Index

S.No.	States	Forest cover Index (LUS)	Barren and unculturable land (LUS)	Geographical area disadvantage Index	Infrastructure Deficit Index (ID)	proportion of Hilly terrain HT	Proportion of Flood Prone area (FPA)	Combination of Hill terrain & flood prone area	[HT & FPA]* [ID-Index]	Development Disability Index (1)	Development Disability Index-Rank (1)	Connectivity Disadvantage	Combined index of Infradeficit and connectivity disadvantage	Development Disability Index (2)	Development Disability Index-Rank (2)
						0.8	0.2		0.8			0.2			
1	Arunachal Pradesh	4.18	0.12	2.55	5.11	1.00	0.00	0.80	4.09	3.32	1	1.0	3.47	3.01	1
2	Manipur	3.51	1.06	2.53	4.77	1.00	0.00	0.80	3.82	3.18	2	1.0	3.26	2.89	2
3	Mizoram	3.46	0.07	2.10	5.01	1.00	0.00	0.80	4.01	3.06	3	1.0	3.41	2.76	3
4	Uttarakhand	2.82	0.71	1.97	4.83	1.00	0.00	0.80	3.86	2.92	4	0.0	3.09	2.53	6
5	Sikkim	2.17	1.06	1.73	5.01	1.00	0.00	0.80	4.01	2.87	5	1.0	3.41	2.57	5
6	Tripura	2.75	1.06	2.08	4.51	1.00	0.01	0.80	3.62	2.85	6	1.0	3.09	2.58	4
7	J&K	1.25	2.05	1.57	5.07	1.00	0.00	0.80	4.06	2.81	7	0.5	3.35	2.46	8
8	Meghalaya	1.95	1.06	1.59	5.00	1.00	0.00	0.80	4.00	2.80	8	1.0	3.40	2.50	7
9	Nagaland	2.44	0.03	1.47	5.06	1.00	0.00	0.80	4.05	2.76	9	1.0	3.44	2.46	9
10	HP	1.11	2.57	1.69	4.73	1.00	0.01	0.80	3.79	2.74	10	0.0	3.03	2.36	10
11	Assam	1.08	3.20	1.93	4.80	0.24	0.09	0.21	1.03	1.48	11	1.0	1.02	1.48	11
12	Kerala	1.28	0.10	0.81	3.27	0.76	0.03	0.61	2.01	1.41	12	0.0	1.61	1.21	12
13	Karnataka	0.74	0.74	0.74	4.49	0.25	0.00	0.20	0.90	0.82	13	0.0	0.72	0.73	14
14	Maharashtra	0.78	1.00	0.87	4.17	0.23	0.01	0.18	0.76	0.81	14	0.0	0.61	0.74	13
15	Odisha	1.71	0.96	1.41	4.75	0.00	0.04	0.01	0.04	0.73	15	0.0	0.03	0.72	15
16	Chhattisgarh	2.11	0.40	1.42	4.85	0.00	0.00	0.00	0.00	0.71	16	0.0	0.00	0.71	16
17	Tamil Nadu	0.75	0.67	0.72	4.02	0.18	0.01	0.14	0.57	0.65	17	0.0	0.46	0.59	21
18	Jharkhand	1.29	1.27	1.28	4.63	0.00	0.00	0.00	0.00	0.64	18	0.0	0.00	0.64	17
19	Gujarat	0.45	2.41	1.23	3.93	0.00	0.04	0.01	0.03	0.63	19	0.0	0.03	0.63	18
20	Goa	1.59	0.74	1.25	0.00	0.00	0.00	0.00	0.00	0.63	20	0.0	0.00	0.63	19
21	Andhra Pradesh	1.04	1.32	1.15	4.51	0.00	0.04	0.01	0.04	0.59	21	0.0	0.03	0.59	20
22	MP	1.30	0.77	1.09	4.88	0.00	0.01	0.00	0.01	0.55	22	0.0	0.01	0.55	22
23	Rajasthan	0.37	1.24	0.72	4.86	0.00	0.10	0.02	0.09	0.41	23	0.0	0.08	0.40	23
24	Bihar	0.30	0.82	0.51	4.67	0.00	0.13	0.03	0.12	0.32	24	0.0	0.09	0.30	24
25	West Bengal	0.62	0.04	0.39	4.36	0.04	0.08	0.04	0.19	0.29	25	0.0	0.15	0.27	25
26	Uttar Pradesh	0.32	0.37	0.34	4.68	0.00	0.22	0.04	0.20	0.27	26	0.0	0.16	0.25	26
27	Punjab	0.27	0.09	0.20	4.18	0.00	0.11	0.02	0.09	0.14	27	0.0	0.07	0.13	27
28	Haryana	0.04	0.42	0.19	4.44	0.00	0.07	0.01	0.06	0.13	28	0.0	0.05	0.12	28

Source: (i) Land use statistics, Ministry of Agriculture, GoI, (ii) Planning Commission, GoI

5.37 Table 5.2 shows that the hill states are constrained by inherent disabilities in socio-economic development as compared to the states of the country. Thus,

based on revised Development Disability Index (DDI) prepared by NIPFP and erstwhile Planning Commission and various other factors, it was recommended that compensation to 11 Himalayan States on account of their contribution of environmental Services (Public Goods) to the rest of the nation and in recognition of their special disabilities on account of these and related factors, **should be 2% of the Gross Budgetary Support (GBS) to the plan each year. (Equivalent to Rs. 10000 crore in 2013-14).**

Equalization approach to Fiscal Transfers:

- 5.38 The equalization approach to fiscal transfers consists of two critical components, namely, (i) the revenue side and (ii) the expenditure side. The revenue side provides a framework for estimating tax efficiency and tax effort of the state governments. The expenditure side provides a framework for the normative assessment of expenditure needs. Together, these two dimensions would provide a methodological framework for designing a system of fiscal transfers.
- 5.39 A comprehensive normative approach to determining fiscal transfers in India would be relevant in the light of the provisions in the Constitution as well as Clause 5 of the Terms of Reference (ToR) of the 15th FC. This Clause requires that fiscal transfers as well as the fiscal consolidation roadmap be guided by the principles of equity, efficiency and transparency. It also calls for examining whether revenue deficit grants be provided at all. Under article 275 (1), it would be ideal to assess the revenue needs of a state under the equalization principle.
- 5.40 Similar approaches are being followed for determining transfers in some of the well-known federal systems in the world such as Canada and Australia. In Canada, the principle of equalization is incorporated in the Constitution and is defined as: *"Parliament and the government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation."* [Subsection 36(2) of the Constitution Act, 1982].
- 5.41 In Australia, equalization is defined by the Commonwealth Grants Commission (CGC) as: *"State governments should receive funding from the pool of goods and services tax [can apply to any relevant sharable pool] such that, after allowing for material factors affecting revenues and expenditures, each would have the fiscal capacity to provide services and the associated infrastructure at the same standard, if each made the same effort to raise*

revenue from its own sources and operated at the same level of efficiency” [2015 Review, Commonwealth Grants Commission, Australia].

- 5.42 The Australian and Canadian approaches are similar in so far as fiscal capacity equalization is concerned. This dimension of equalization relates to the revenue side. It ensures that transfers to states make up for the deficiencies in the fiscal capacities but do not make up for deficiencies in revenue effort relative to a given benchmark. The additional consideration in Australia’s approach relates to the assessment of expenditures needs. In this assessment each state government is considered as operating at the same level of efficiency. Furthermore, in order to consider ‘material factors’ affecting expenditures, that is, factors outside the control of state governments, relevant user and cost disabilities are incorporated. Thus, valid cost differentials or need differentials are taken into account.
- 5.43 In implementing this approach, the Australia’s Commonwealth Grants Commission (CGC) uses four supporting principles namely, (1) focus on what states do collectively, (2) policy neutrality, (3) practicality and (4) contemporaneity. In the principle relating to ‘what states do’, the idea is to focus on averages to capture the collective behaviour of states while allowing departures for individual states from the collective averages on valid grounds of user and cost disabilities. The principle of ‘policy neutrality’ ensures that transfers are made as unconditional transfers. Different budgetary heads may be used to make an assessment of needs, but once the overall transfers are determined, the state can exercise any kind of structure of priorities among different heads. The principle of ‘practicality’ calls for using sound and reliable data and methods that are ‘as simple as possible’. The principle of ‘contemporaneity’ requires that there be minimum lag between the years for which reliable data are available and the years for which an assessment is made.

Equalization Approach in India

- 5.44 In developing an equalization approach for India, it is useful to recognize a number of critical considerations. First, the principle of contemporaneity requires that information used for the exercise should be as close to the years of dispensation as possible. The use of latest available population would help in this process.
- 5.45 Second, the two instruments of fiscal transfers namely, tax devolution and grants, should be appropriately combined to achieve maximum equalization. In the case of tax devolution only shares are determined using broad based

criteria. This gives a built-in buoyancy to the transfers depending upon the performance of the central taxes but these transfers can only be broadly targeted. Grants, on the other hand can be finely targeted but require reliable predictions since grants are fixed in nominal terms in advance for the entire recommendation period. Both components have certain relative advantages. These should be optimally combined to maximize the impact of fiscal transfers on equalization.

- 5.46 Third, inter se differences among the Indian states are extremely large both in terms of fiscal capacity which is linked to per capita income levels and differences in unit costs because of difference in terrain, differences in demographic structure of state populations such as share of young or old populations, shares of disadvantaged populations (scheduled tribes, scheduled castes, backward castes, population living in remote areas etc.). All of these are relevant considerations for equalization.
- 5.47 Fourth, a number of centrally sponsored schemes relating to education, health, and infrastructure serve as instruments of fiscal transfers. These also have equalizing content. The two-sided equalization scheme such as the one used in Australia can treat these as endogenous and utilize the existing schemes for optimally achieving equalization.
- 5.48 Fifth, equalization should be considered as a dynamic exercise in a developmental context. It is itself an instrument for reducing fiscal capacity differences overtime. Post-planning commission, Finance Commission is the only channel of transfers from the centre to the states. It has to have an objective of reducing developmental differences across states. As developmental differences are reduced, the extent of redistributive transfers needed to achieve equalization would also be reduced making the exercise far more acceptable across states.
- 5.49 Sixth, a distinct requirement for the Finance Commission in India is to make its recommendation for a prospective period. The data that it can use is therefore compulsorily lagged. Robust forecasting principles have therefore to be utilized in building the equalization approach while forecasting central resources and state's normatively determined capacities and requirements.

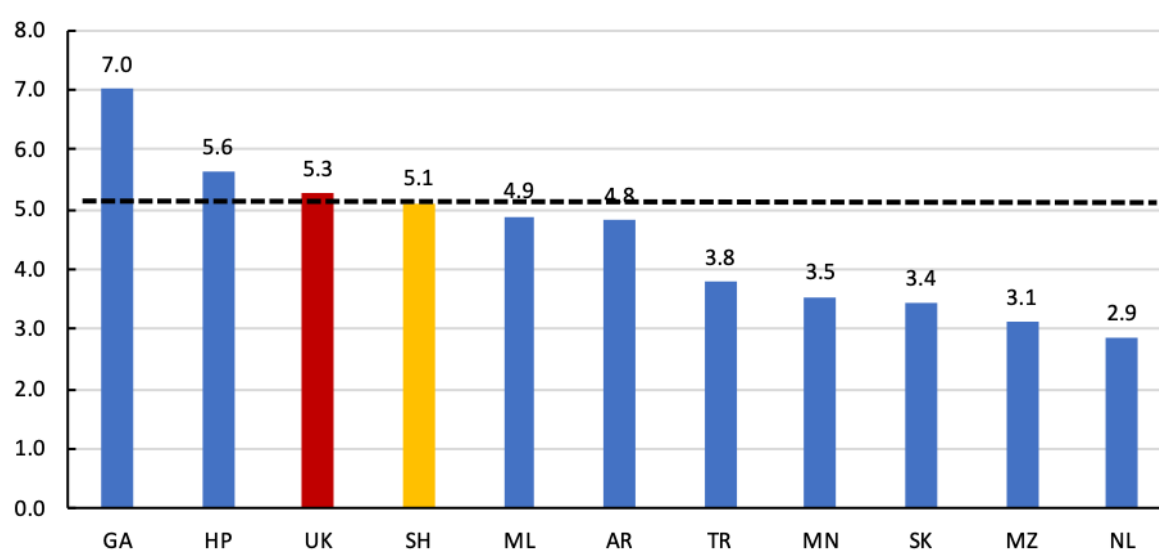
The Revenue Side

- 5.50 Considerations of tax effort, fiscal capacity and tax efficiency are incorporated on the revenue side of the equalization exercise. Fiscal capacity

equalization is a core part of the overall equalization exercise. A normative approach can be applied both to tax revenues and non-tax revenues.

- 5.51 Normatively determined tax revenues are given by applying an average tax effort to the actual taxable capacity or fiscal capacity. If adequate information is available on tax bases and tax revenues, this exercise can be done tax by tax. Otherwise, it can be done at an aggregate level. There is a need to recognise that because of their special characteristics, hilly states tend to have a lower average tax-GSDP ratio. These states should be benchmarked against their group average as shown in chart 5.1.

Chart 5.1: Tax GSDP ratio of small and hilly states¹⁶ (average of 2015-16 to 2017-18)



Source (Basic data): RBI, MOSPI

Note: SH = Population weighted average of Small and Hilly States

- 5.52 Since in the determination of the normative per-capita revenue, average effort is being used, equalization does not make up for the deficiency in tax effort but provides for the deficiency in fiscal capacity. It is consistent with both equity and efficiency.
- 5.53 Three types of variations can be considered relevant for revenue side equalization. First, GSDP can be augmented/ substituted by other determinants of the state-level tax base such as per-capita consumption, per-capita remittances, non-agricultural GSDP etc. A second variation can be obtained by distinguishing between groups of states if there is reason to believe that the average tax effort of two groups of states can be

¹⁶ GA=Goa, HP=Himachal Pradesh, UK=Uttarakhand, SH=Small and Hilly States, ML=Meghalaya, AR=Arunachal Pradesh, TR=Tripura, MN=Manipur, SK=Sikkim, MZ=Mizoram, NL=Nagaland

differentiated on valid grounds and one group of state may be allowed a lower average tax effort as compared to the other group.

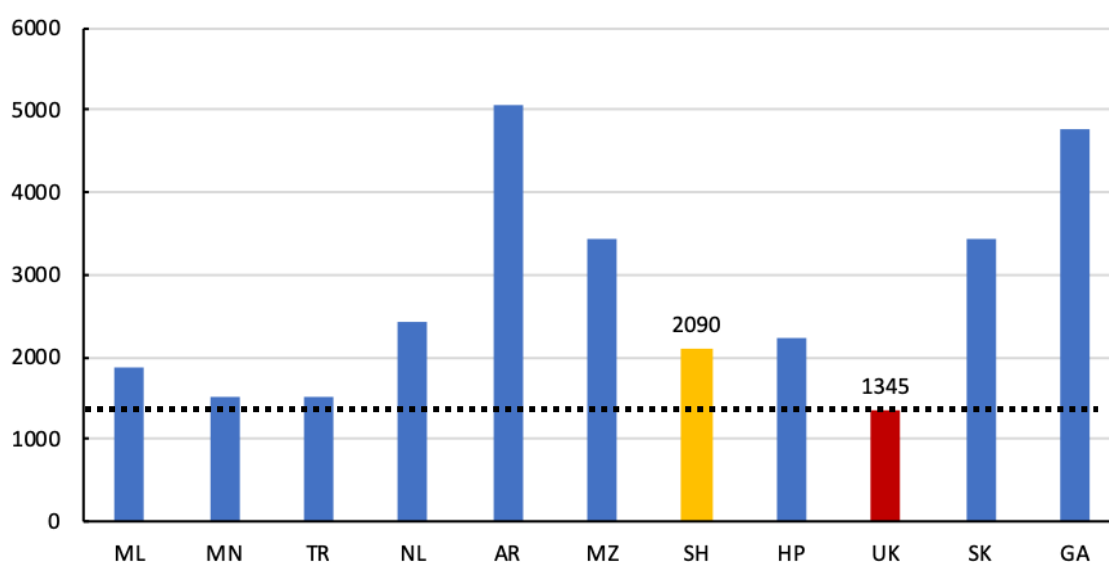
- 5.54 In the context of GST, it might be relevant to make a distinction between GST and the non-GST taxes for the state governments. For GST, state-wise consumption might be a better tax base than GSDP. Lack of any history of raising GST revenues would pose a major problem in developing a suitable approach. It would also be relevant to divide the period 2020-2025 between the compensation period for revenue losses under GST, that is, up to June 2022 and the period beyond. Major non-GST taxes at the state level are sales tax/VAT on petroleum products, stamp and registration duties, motor vehicle tax, state excise duties, and electricity duty. In the assessment of state tax revenues, at least a distinction should be made between GST and non-GST taxes.

The Expenditure Side

- 5.55 In determining per-capita expenditure for a given expenditure head, allowance is to be made for valid user and cost disabilities. User disabilities refer to demand-side disabilities. For example, in an Indian state where the share of population of the children and/ or the share of population above a certain threshold is relatively higher than the average, there may be additional requirements of per-capita health costs. Similarly, if the share of population of a certain disadvantaged group, for example, share of scheduled caste or scheduled tribe or other backward classes is higher, a higher cost of per-capita education or health may be provided. Cost-side disabilities, on the other hand, refer to higher input costs for providing the same level of service as compared to the average per-capita cost because of the nature of the terrain or density of population. These are particularly relevant for a hilly state like Uttarakhand. Per-capita costs may be higher for hilly areas or areas which suffer from excessive rainfall. Similarly, unit costs may be high in areas which are sparsely populated. Both user and cost disabilities need to be considered service by service.
- 5.56 It may be relevant to consider the state into broad groups characterised by common characteristics such as hilly and small states as compared to general states (including Assam) and consider different group averages for respective benchmarking. Some of the user disabilities may be reflected in the share of population below specified age groups and the share of population above specified age groups as share of tribal or other

disadvantaged segments of population. Some of the cost disabilities may be reflected in density of population, remoteness of areas to be served, etc. As discussed in Chapter 2 (paras 2.18 and 2.19), cost disabilities which are differentiated according to states, may be captured by redefining the area criterion to better reflect differentiated cost disabilities of different states. Thus, area under glaciers, share of hilly areas, area under forests, area reflecting international borders, share of coastal areas, are all area related cost disabilities which affect different states differently, but may all be incorporated in the area criterion.

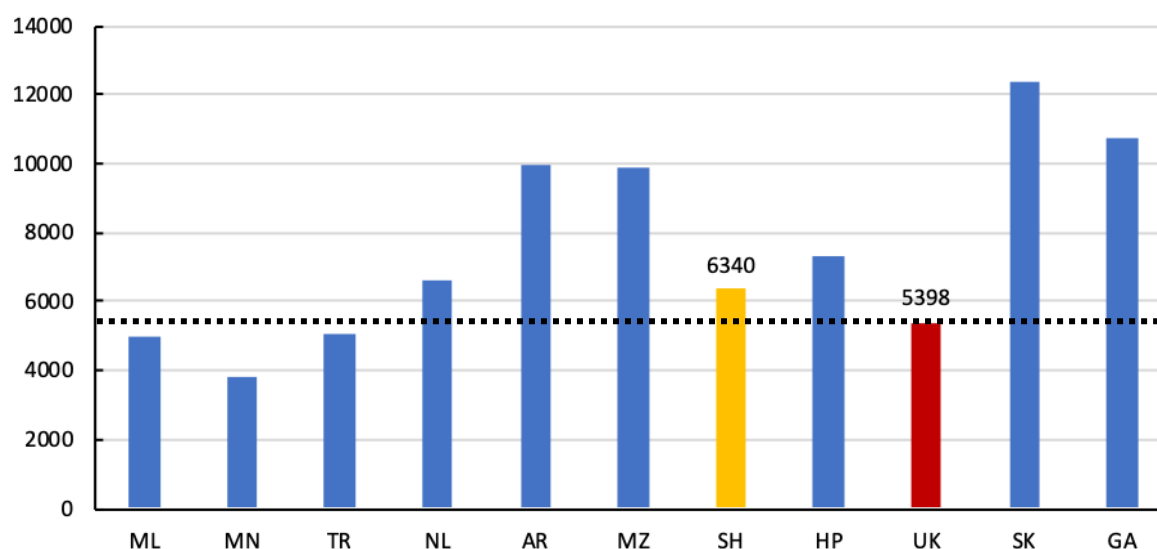
Chart 5.2: Per capita health expenditure of small and hilly states during FY17 to FY18 (Uttarakhand's per capita health expenditure is the lowest amongst S&H states and is lower than the group average)



Source (Basic data): RBI, MOSPI

Note: States are arranged in increasing order of their per-capita GSDP.

Chart 5.3: Per capita education expenditure of small and hilly states during FY17 to FY18 (Uttarakhand is the fourth lowest in terms of per capita education expenditure, well below the group average)



Source (Basic data): RBI, MOSPI

Note: States are arranged in increasing order of their per-capita GSDP.

Case for Special dispensation

5.57 The National Development Council (NDC) had accorded 11 states of the country, the status of "Special Category States". They are special in the sense that they have special socio-economic, geographical problems, high cost of production with less availability of useful resources and hence low economic base for livelihood activities. This status was based on parameters like:

- Low revenue base and tax potential.
- Hilly and difficult remote terrain.
- Low population density.
- Non-viable nature of state's finances.
- Strategic location along the borders of the country.
- Economic and infrastructural backwardness.

5.58 Due to its mountains terrain and far flung remote habitations, the cost of providing citizen centric services is very high. Similarly, the cost of construction and maintenance of infrastructure is also very high.

5.59 It is evident from the above discussion that Uttarakhand has very limited economic potential. Agriculture is constrained by small land holdings, low

production and productivity, reliance on rain fed agriculture, low level of mechanization, low usage of agriculture inputs and low economic research.

- 5.60 Manufacturing sector is also not able to develop after the discontinuation of the industrial package. Though, the state has given its own industrial package, it has not received much response from the industry. The services sector continues to lag due to low level of skill development, technical knowhow, paying capacity and structural issues.
- 5.61 The other major drivers of the economy like the hydro power sector are beset with environmental and regulatory issues. Likewise, as explained earlier the tourism sector is unable to develop requisite infrastructure to attract niche tourists.
- 5.62 The main revenue of Uttarakhand comes from GST, Excise, Stamps & Registration, Mining and Vehicle tax. As explained later in chapters 6 and 7, due to various factors the expected growth rate in these sectors would be muted in the coming years. GST which contributes to around 65% of own tax revenue of the state is now controlled by the GST council and the state has seen a drop of 39% in GST collection as explained in chapter 6.
- 5.63 Similarly, as was evident from chart 3.2, the development of service sector in the state is very low. Most of the manufacturing sectors production goes out of the state and consequently GST being a destination/consumption-based tax also accrues to other state. Thus, the consumption base in the state is very low and consequently the potential tax is very low leading to low own revenue.
- 5.64 In the application of the equalization approach, it would be relevant to consider the states in India in terms of two groups: small and hilly states and general states (including Assam). The small and hilly state due to their geographical terrain suffers from disabilities which are common to them, which are not present in the other category of states. They have a narrow resource base, low fiscal & taxation capacity and thus very limited source of revenue. Hence the 15th FC should take into consideration these factors both for revenue and expenditure equalization and take appropriate measures to benchmark individual states against their respective group averages.
- 5.65 Thus, due to its low resource base, low economic potential, remote mountainous terrain, high cost of providing services, international border, low level development & consumption, and other cost disabilities arising from facts that are exogenous to state control, **various finance commissions and Government of India have always given a special consideration to**

hilly states like Uttarakhand. The 15th FC has also considered Uttarakhand as a part of the north-eastern and hilly states in its first report and we emphasize that the commission may continue this consideration in its final report also. The 15th FC may consider a suitable modification to the area criterion in the devolution formula for internalizing these disabilities so that small and hilly states could be adequately compensated on this account. In the chapter on Proposed Devolution, a methodology has been illustratively given by which the area criterion can be modified to include the share of hilly area in total area. The illustration has provided for a relatively higher weight to hilly area vis-à-vis plain area. Similarly, the forest and ecology criterion includes area under snow and glaciers along with the area under forests.

Chapter 6

Fiscal profile: structural constraints

Total central transfers to Uttarakhand account for more than 50% of its revenue receipts. This implies that risks associated with growth in central tax revenues in the wake of the ongoing economic slowdown accentuated by the impact of COVID-19 pandemic is critical.

- 6.1 The Indian economy has been slowing down since 2016-17. As per the provisional estimates of the CSO, real GDP growth for 2019-20 is estimated at 4.2% falling year after year, from a peak of 8.3% in 2016-17. Moreover, the nominal GDP growth is also estimated to fall to a 48-year low of 7.2% in 2019-20. This situation of ongoing economic slowdown is expected to be accentuated by the onset of the COVID-19 pandemic across the world and in India. The Indian economy is expected to face both supply and demand side disruptions. On the demand side, services sectors, particularly relating to trade, transport, travel and tourism, entertainment as well as financial services are likely to be adversely impacted. On the supply side, disruptions will come through the impact on supply chain emanating from affected countries including China, Germany, UK, Australia and Japan. In this backdrop, the real and nominal GDP growth may fall even below the CSO estimates.
- 6.2 In its first report, the 15th FC has made assumptions for nominal growth at 10% for 2019-20 and 11% for 2020-21. The commission has assumed a buoyancy of 0.84 and 1.14 for centre's gross tax revenues for these two years. Both these assumptions have already proved to be significant overestimates. This implies a massive overestimation of the divisible pool of taxes and therefore the assessed shares in central taxes of individual states. This would lead to an underestimation of revenue deficits for individual states by the 15th FC. The actual gross tax revenues of the centre has fallen short of both the revised estimates for 2019-20 as envisaged in the union budget as well as the FC projections. Since 2019-20 serves as the base year for 2020-21 projections, centre's gross tax revenues for 2020-21 may also be an overestimate. It may be noted that many states including Uttarakhand have already presented their state budgets based on these estimates. In the event of the actuals falling short of these projections, these states may face a considerable resource constraint. This would exacerbate the problems for states which are highly dependent on central transfers to meet their revenue expenditure commitments.

6.3 In this context, it is important to highlight the high dependence of Uttarakhand on central transfers as indicated by the ratio of total transfers to state's revenue receipts. This ratio averaged 56.5% during the 12th FC period and remained between 51% to 52% during the 13th and the first three years under the 14th FC (2015-16 to 2017-18) periods.

6.4 Another critical factor which should be taken into account while outlining the fiscal profile of the state, is that major land mark changes in the system of fund flow from the Central Government to the state governments had taken place in FY 2015-16, in line with the implementation of the recommendations of the 14th FC. This has had an adverse impact on the finances of Uttarakhand as outlined in Chapter 4.

Fiscal Parameters

6.5 Uttarakhand's resources are highly dependent on transfers from the finance commission particularly the revenue deficit grants received by the state during the award periods of the previous Finance Commissions. The main fiscal parameters for Uttarakhand since the year 2001 are given in table 6.1:

Table 6.1: Fiscal Parameters for Uttarakhand

Rs. in crore

FC Period	Year	RD/ incentive Grant by FCs	Revenue Deficit	RD/ GSDP	Fiscal Deficit	FD/ GSDP	RD/FD % (4/6)
1	2	3	4	5	6	7	8
11 th FC	2001-02	17	329.98	2.09	612.00	3.87	53.92
	2002-03		457.29	2.48	888.78	4.81	51.45
	2003-04		759.50	3.72	1405.38	6.88	54.10
	2004-05		950.12	3.83	2171.43	8.76	43.76
12 th FC	2005-06	1113	73.95	0.25	1878.22	6.27	3.94
	2006-07	1064	-896.37	-2.44	885.77	2.41	-
	2007-08	1115	-636.53	-1.39	1742.40	3.80	-
	2008-09	992	-239.53	-0.43	1844.96	3.29	-
	2009-10	830	1171.35	1.66	2783.32	3.94	42.08
13 th FC	2010-11	400	12.92	0.02	1842.57	2.19	0.70
	2011-12	400	-716.09	-0.62	1357.49	1.17	-52.75
	2012-13	300	-1786.99	-1.34	1599.24	1.20	-111.74
	2013-14		-1104.12	-0.74	2650.27	1.78	-41.66
	2014-15		917.10	0.57	5826.17	3.61	15.74
14 th FC	2015-16		1852.01	1.05	6125.34	3.48	30.23
	2016-17		382.54	0.20	5466.95	2.79	6.99
	2017-18		2,007.9	0.90	7,716.3	3.46	26.02
	2018-19		979.7	0.40	7,321.4	2.98	13.38
	2019-20 (RE)		-21.5	-0.01	6,672.5	2.49	-0.32
15 th FC	2020-21 (BE)	4255	-49.6	-0.02	7,549.8	2.57	-0.657

Source: (i) Various FC report, (ii) Budget Documents, GoUK.

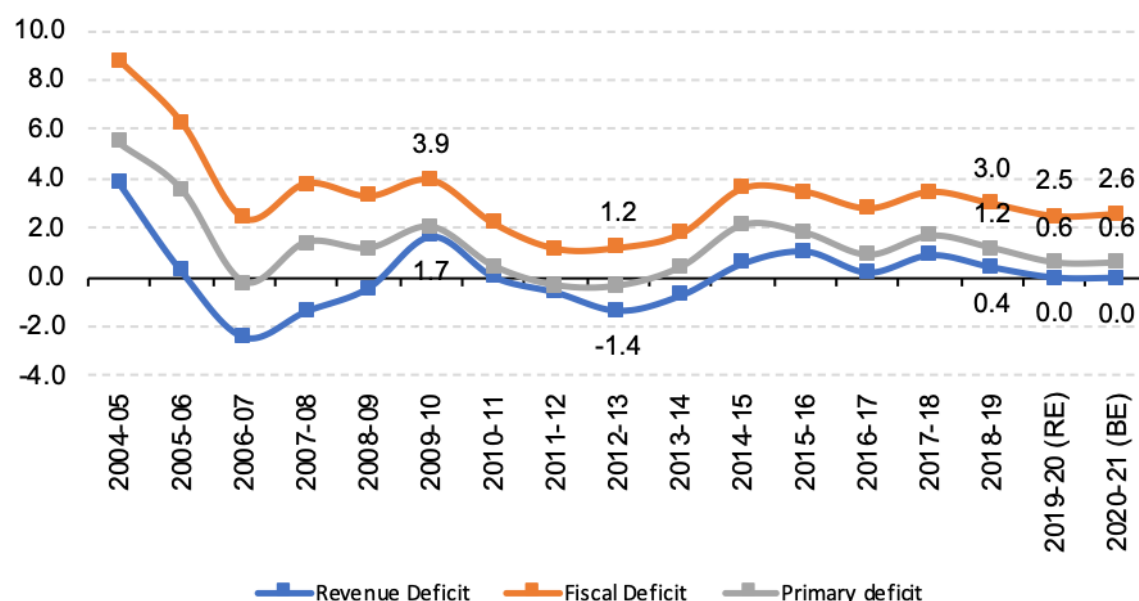
Note: (-) indicates surplus.

- 6.6 The above table depicts year wise deficits of the state government. It clearly emerges from the table that revenue deficit has been dependent and heavily influenced by central transfers especially revenue deficit grants. From FY 2001-02 to FY 2004-05, the revenue and fiscal deficit increased rapidly but from FY 2005-06, there was a decrease in the deficit figures. This was due to the implementation of the 12th FC which had recommended revenue deficit grant for Uttarakhand. Another reason was a major reform in state taxation by way of introduction of VAT, which was introduced in October 2005, and which resulted in increase of own tax revenues of the state. The state remained in revenue surplus for the next three years and in FY 2009-10, the state again slipped into revenue deficit of about Rs. 1171 crore, which was mainly due to the implementation of 6th pay commission award announced by the state government in 2009. From FY 2011-12 the state again became revenue surplus on account of the pension apportionment from UP and also due to the fact that the state received an incentive grant of Rs. 1000 crore on the recommendation of the 13th FC from FY 2010-11 to FY 2013-14. The state again slipped into revenue deficit of Rs. 917.10 crore in FY 2014-15. **After the start of 14th FC period i.e. from FY 2015-16 the state has been running huge revenue deficit which has not been taken into account by way of providing revenue deficit grants to Uttarakhand by 14th FC.** The fiscal position of the state deteriorated considerably in 2017-18, upon the implementation of GST. Thus the state has fallen into grave fiscal stress and huge amount of borrowings have been diverted to meet day-to-day expenditure instead of development activities. This is also evident from table 6.1, in the rising trend of RD/FD ratio from FY 2015-16 onwards. In FY21 the state has budgeted for a revenue account balance/marginal surplus conditional upon the receipt of revenue deficit grant of over Rs. 5000cr from the Centre as per the recommendation made by the 15th FC in its first report.
- 6.7 Due to the ongoing economic slowdown and uncertainties pertaining to COVID-19 as discussed earlier in this chapter, it is likely that Uttarakhand's own revenue sources (tax and non-tax revenues) may remain constrained. In such a situation, provision of revenue deficit grant is desirable since the magnitude of such grants is fixed in nominal terms unlike devolution which is subject to actual collections of central taxes which is likely to be impacted by current uncertainties. It is proposed that the 15th FC may continue to provide revenue deficit grant for Uttarakhand over its recommendation period covering the years 2021-22 to 2025-26.

FRBM and Fiscal Balance

- 6.8 The Uttarakhand Fiscal Responsibility and Budget Management (FRBM) Act 2005, has been amended in April, 2011, and again in 2016, in line with the recommendations of the 14th FC.
- 6.9 Fiscal deficit is the excess of government's total expenditure over total revenues that requires to be financed by borrowing. In FY 2004-05, fiscal deficit in Uttarakhand as a percentage of GSDP was quite high at 8.8%. Fiscal deficit as a percentage of GSDP continuously fell for the next 2 years and in FY 2006-07, it was contained within 3% of GSDP. There was some slippage from FY 2007-08 to FY 2009-10, but it was again brought within the limit of 3% from FY 2010-11 to FY 2013-14. From FY 2014-15 onwards, the fiscal position of the state has deteriorated due to inadequate award of 14th FC. In both FY2015-16 and FY2017-18 the fiscal deficit breached the limit set under the FRBM by a margin of 0.5% points.
- 6.10 The revenue deficit of Uttarakhand was 3.8% of GSDP in FY 2004-05. Surplus was achieved by FY 2006-07 and was sustained until FY 2008-09. Except for FY 2009-10 and marginally for FY 2010-11, the surplus has been maintained up to FY 2013-14. During the 14th FC period, starting from FY 2014-15 till FY 2018-19 the state incurred revenue deficit in each year averaging 0.6% over the period and the state was denied revenue deficit grant by 14th FC adding to the fiscal pressure.
- 6.11 The ratio of revenue to fiscal deficit shows that nearly 44% of borrowing was used to meet current expenditure in FY 2004-05. For the next three fiscal years (2006-09), revenue surplus allowed more fiscal space for the state to enhance its capital spending. In FY 2009-10, the state again had to rely on borrowing to the extent of 42% to meet its current expenditure. This could be attributed to the general slowdown in the economy and payment of arrear of 6th pay commission. From FY 2011-12 to FY 2013-14 surplus in revenue account had allowed the state to improve its spending on capital assets. But from FY 2014-15 onwards, the quality of fiscal deficit as reflected in the ratio of revenue deficit to fiscal deficit, increased to 30.4% in FY 2015-16 before improving to 13.4% in FY 2018-19.

Chart 6.1: Profile of Fiscal Imbalance (as % of GSDP)



Source: Budget Document, GoUK

- 6.12 Whenever the state received its due share of **revenue deficit grant** the fiscal parameters in Uttarakhand have been managed broadly within the stipulated parameters of the FRBMA. Alongside, a healthy GSDP growth was also witnessed in the initial phase which has now come down to all India average. The state is committed to adhere to the principles laid down in FRBMA and has been improving its tax efforts and reigning in the expenditure, but **the major reason for falling fiscal indicators is denial of revenue deficit grant to Uttarakhand by 14th FC.**

Trends in Tax Revenue

- 6.13 Table 6.2 indicates year wise own tax revenues of the state from FY 2011-12 to FY 2020-21 (BE). It varies in the range of 32.40% to 44.2% of the total revenue receipts. In fact, it has fallen year after year from a peak in 2015-16 to its lowest level in 2020-21 (BE). Own non-tax revenues have contributed only about 5.4% to 13.9% of the total revenue receipts. The relative contribution of grants has been in the range of 25% to 38.8% and the contribution of share in central taxes varies from 18.7% to 26.1%.

Table 6.2: Composition of Revenue Receipts (in %)

Revenue Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
1	2	3	4	5	6	7	8			9
As % of total revenue receipts										
Own tax revenues	41.0	40.7	42.5	41.2	44.2	43.8	37.5	39.0	35.1	32.4
Share in central taxes	20.9	20.8	20.6	18.7	25.1	25.8	26.1	25.7	21.2	20.4
Own nontax revenues	8.3	10.2	7.6	5.5	5.7	5.4	6.5	10.6	13.9	8.3
Grants	29.8	28.3	29.3	34.6	25.0	25.0	29.8	24.7	29.8	38.8
Total revenue receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
As % of GSDP* at current prices										
Own tax revenues	4.9	4.9	4.9	5.2	5.3	5.6	4.6	5.0	4.6	4.7
Share in central taxes	2.5	2.5	2.4	2.3	3.0	3.3	3.2	3.3	2.8	2.9
Own nontax revenues	1.0	1.2	0.9	0.7	0.7	0.7	0.8	1.3	1.8	1.2
Grants	3.5	3.4	3.4	4.3	3.0	3.2	3.6	3.1	4.0	5.6
Total revenue receipts	11.9	12.0	11.6	12.5	12.0	12.8	12.2	12.7	13.2	14.5

Source: Budget Documents, GoUK

- 6.14 As percentage of GSDP, the total revenue receipts have continuously increased from 11.9% in FY 2011-12 to 12.8% in FY 2016-17 and further to 14.5% in 2020-21 (BE), indicating that the state has made sustained efforts to expand the tax base and revenues. However, it may be noted that own tax revenues relative to GSDP have fallen from a peak of 5.6% in 2016-17 to 5.0% in 2018-19 and is projected to fall even below it in 2019-20 and 2020-21. Given that there is a falling trend in this dominant source of revenues, the state's dependency on central transfers is likely to increase.

Implication of GST on the State's Economy

- 6.15 On July 1, 2017, the state of Uttarakhand pooled its tax sovereignty along with other UTs and states and the Centre to implement a common nation-wide Goods and Service Tax (GST). The GST is a destination-based single tax levied on the supply of goods and services from the suppliers ~~manufacturer~~ to the consumer. It replaced a number of central, state and UT level taxes. The objective behind the introduction of GST was to create a single country-wide Indian market, expand the tax base, and foster cooperative federalism.
- 6.16 As the GST is a destination-based tax, the sudden shift from the origin based to destination-based principle adversely impacts producing states like Uttarakhand. Under the pre-GST regime, the CST was collected by the producing state on inter-state transactions involving goods. However, under GST, the IGST levied on interstate transactions is transferred partly to the state where the goods are finally consumed and partly to the centre. With a relatively lower consumption base, revenues of Uttarakhand are adversely impacted under the destination-based GST regime.

- 6.17 In the context of Uttarakhand, the manufacturing sector accounted for 33.4% of the state GSDP in 2018-19 as compared to 15.1% at the national level. The share of service sector in the state is far lower than the national average. With the implementation of GST, the state has lost the autonomy to tax goods. Consequently, the state has lost out on half of the total revenue, which customarily accrued from the goods sector to the state, with a marginal gain from services sector, which has not been enough to offset the overall loss. For instance, revenues under CST, which later got subsumed in GST, constituted roughly 29.5%¹⁷ of the revenues subsumed within GST in 2016-17, as compared to a national average of 8%¹⁸. Further revenues arising on account of the 3% input tax credit retained on interstate stock transfers accounted for approximately 5% of tax revenues subsumed within GST in 2016-17. Cumulatively, the state has lost out on 34.5% of revenue streams, as per 2016-17 data, under the GST regime as tax on interstate sales is credited to the consuming state. Under the pre-GST regime the state offered subsidized land and electricity to attract various manufacturing industries through which the state would earn revenue. Several excise duty exemption packages were also provided for hilly states of which Uttarakhand was a beneficiary. However, these incentives have been withdrawn under the GST regime and more importantly, the state has had to bear a permanent loss of the benefit of larger revenues. It is important to note that such revenue losses under the GST regime is common to hilly states which are manufacturing oriented such as Himachal Pradesh and Jammu & Kashmir.
- 6.18 The low consumption base of Uttarakhand is also borne out by the fact that 62% of the total sales in the state in 2016-17 were interstate sales. The state has gained only marginally from services.
- 6.19 Further, the efforts undertaken by the state since its inception, to improve the industrial sector, infrastructure, power etc., would not reap returns in the form of additional GST revenues due to the destination-based nature of GST.
- 6.20 Since its implementation, state sales tax/VAT tax revenues have grown at a CAGR of 18.05% over the period FY 2006-07 to FY 2016-17. Post-GST implementation, there is a sudden drop in the comparable revenues of the state. If GST compensation were to be excluded, the GST revenues were lower by 31% in

¹⁷ Though approximately 60% of the total amount was paid through utilisation of input tax credit of VAT and the rest was actual cash payment, this entire amount remained within the state as compared to the present regime wherein it is credited to other states through IGST.

¹⁸ This data is sourced from the "Report on Revenue Gap for the state of Uttarakhand" submitted by Mr. Has Mukh Adhia, Finance Secretary, Government of India on 31 October 2018 after holding a meeting with several state and central government officials. The note is attached given as Annexure 6.1 at the end of this chapter.

FY 2017-18 compared to the collection in FY 2016-17 of the taxes subsumed under GST. This is shown in Table 6.3.

Table 6.3: Pre-GST & Post GST tax collection details

Rs. in crore

Month	Pre GST (2016-17)		Post GST (2017-18)			Decrease	Remarks
	VAT	Total	SGST+VAT subsumed	IGST settlement	Total after settlement		
Aug	405	405	392	-41	351	-13%	Uttarakhand being an export surplus state and GST being a consumption/ destination-based tax, the actual revenue accruing to the state under GST is much lesser as compared to VAT period.
Sep	414	414	335	-22	313	-24%	
Oct	464	464	312	-10	302	-35%	
Nov	495	495	326	28	354	-28%	
Dec	430	430	282	38	320	-26%	
Jan	492	492	276	80	356	-28%	
Feb	460	460	279	23	302	-34%	
Mar	756	756	380	8	388	-49%	
Total	3916	3916	2582	104	2686	-31%	

Source: Department of Tax, GoUK

- 6.21 The state governments have been assured by the central government of a 14% nominal growth estimated on a cumulated basis over their 2015-16 actual revenues from the taxes that have been merged in GST. Assuming the nominal GSDP growth of 9.5% for the state of Uttarakhand, a nominal growth of 14% ensures a buoyancy in the range of 1.4 to 1.5. If actual SGST revenues are less than the protected/projected revenues, the concerned state will be compensated to the extent of the difference. This provision will continue until June` 2022. After that, the states receiving GST compensation may face a revenue shock. The difference in protected or expected revenues and the revenue earned varies from state to state depending on structural issues mentioned earlier, and how the new tax regime has impacted each of these states. It is important to take this factor into account while providing for revenue deficit grants and also other devolution of funds post GST compensation period.
- 6.22 The Commercial Tax Department whose primary responsibility was to collect VAT/sales tax in the pre-GST regime, used to contribute around 66% of the state's own tax revenue. Under the current GST regime, it is important to maintain the same contribution to the total collection of states' own tax revenues. The only way is to improve SGST collection by increasing the consumption within the state. However, the population of the state is too small to enable a considerable improvement in consumption in the near future. Activities promoting the service sectors in the state, like health, tourism, adventure tourism, wellness centres, recreational facilities, educational hubs for people from outside and within Uttarakhand can give a

spur to the state's economy. Thus, it is important to support the state, in its endeavour to diversify during this period and to adjust to the new tax regime.

- 6.23 Since its inception the state has endeavoured to increase its revenues and thus gave impetus to industrialization. It developed large stretches of industrial estates with state-of-the-art facilities with good infrastructure and connectivity. The economy of the state also grew robustly due to these efforts. Huge amounts of resources were diverted to bring about industrialization and many concessional packages were given by the state to make the ecosystem conducive to industrialization. But suddenly with the change in structure of taxation, both the state and the entrepreneurs have been hit hard. The state is losing revenue and is likely to continue doing so. It is not feasible to suddenly withdraw incentives being given, though they are a strain on the resources of the state. The entrepreneurs / industrialists and traders are also finding it difficult to be competitive with the additional logistics costs incurred on account of being situated in a land locked state combined with the withdrawal of central tax benefits. This has come about in a sudden manner without any transitional arrangement. **The only way to come out of this situation is to rebuild and centre the economic activity in the state around the service sector.** This turnaround can be brought about only over a period of time with sustained financial support and assistance from the Government of India.
- 6.24 The Government of Uttarakhand has always shown its commitment for improving its tax administration. The 13th FC clearly stated that the achievement of Uttarakhand and Jammu & Kashmir has been commendable in a short period of time. Even under GST, it would be of interest to note that the **GST revenues collected from within Uttarakhand have increased by more than 91% compared to the pre-GST revenues. However, they are accruing to other states and the centre in the form of IGST**, and thus not benefitting the state per se, but contributing positively to the Indian economy and that of other states. The pre and post GST scenario for the two successive years 2016-17 and 2017-18, for both the centre and Uttarakhand, is shown in Table 6.4.

Table 6.4: Comparison of pre-GST and post GST tax collection

Rs. in crore

Month	Pre-GST Revenue (2016-17)				Post GST revenue (2017-18)					Increase/ Decrease	%+/-
	Central Excise	Service Tax	VAT	Total	CGST	SGST+VAT (subsumed)	IGST	CESS	Total		
1	2	3	4	5	6	7	8	9	10	11	12
Aug	116	81	405	602	150	392	1242	15	1799	1197	190
Sep	142	69	414	625	150	335	999	15	1499	874	140
Oct	170	101	464	735	143	312	1241	23	1719	984	134
Nov	147	88	495	730	144	326	763	24	1257	527	72
Dec	127	99	430	656	132	282	778	12	1204	548	84
Jan	141	84	492	717	154	276	825	14	1269	552	77
Feb	137	91	460	688	141	279	731	21	1172	484	70
Mar	202	118	756	1076	162	380	778	21	1179	103	10
Total	1182	731	3916	5829	1176	2582	7357	145	11098	5269	91

Source: Department of Tax, GoUK

- 6.25 Thus, it is apparent that the revenues under GST have almost doubled when compared to comparable revenues under the pre-GST regime. This is an attestation to the fact that credible work is being done by the state machinery with respect to the policy formulation, implementation, tax administration and tax enforcement. For securing this revenue of Rs.11,098 crore (column 10, table 6.4), during the 8 months of GST, the work force in the form of assessment officers, enforcement units, and infrastructure investments, deployed by the state, are disproportionately higher than the deployment by the centre. But the benefits are not accruing to the state. As is evident from above table, **out of a revenue of Rs. 11,098 crore, only Rs. 2582 crore is retained by the state. The Central Government receives (1176+half of 7357) around Rs. 4855 crore, whereas earlier it was getting only Rs. 1913 crore. Similarly, around Rs. 3678 crore (half of 7357) is getting accrued to other consuming states.** Thus, the State of Uttarakhand has been adversely affected by the destination-based principle adopted in GST. The implementation of GST was undertaken for the benefit of India's macro-economy. It is based on the sacrifices some states had to undergo for the common national good and improvement in the global competitiveness of our economy. But states should not be punished for this. **We request the 15th FC to kindly consider the above issue and compensate the state for the revenue lost due to GST in the form of revenue deficit grant for its award period.**

Central Transfers

6.26 Uttarakhand was an erstwhile special category state. The 15th FC has also considered it as a part of north-eastern and hilly states. Such states are usually highly dependent on central transfers. It is also worth mentioning that the dependence of Uttarakhand on central transfers would now increase in future, as there is very less maneuverability for revenue generation through tax policy changes within the state post the introduction of GST. The current economic slowdown has also adversely affected the non-GST tax collections leading to revenue erosion and greater dependence on central transfers.

Table 6.5: Composition of Revenue Receipts & Relative Dependence on Central Transfers

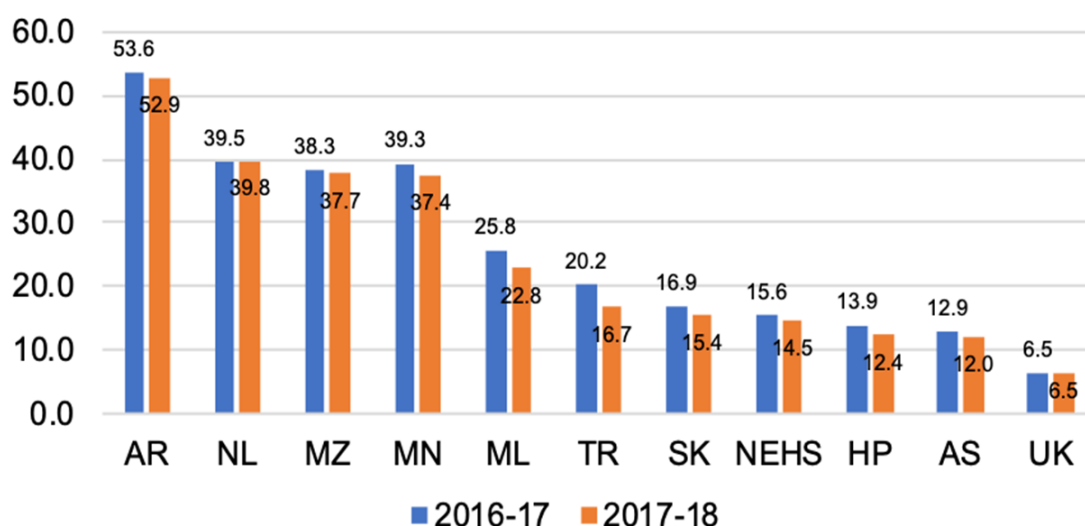
Revenue Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 RE	2020-21 BE
As % of total revenue receipts										
Own Revenue	49.3	50.9	50.1	46.7	49.9	49.2	44.0	49.6	49.0	40.8
Transfers from the centre of which	50.7	49.1	49.9	53.3	50.1	50.8	56.0	50.4	51.0	59.2
Share in Central Taxes	20.9	20.8	20.6	18.7	25.1	25.8	26.1	25.7	21.2	20.4
Grants	29.8	28.3	29.3	34.6	25.0	25.0	29.8	24.7	29.8	38.8
Total revenue receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
As % of GSDP* at current prices										
Own Revenue	5.9	6.1	5.8	5.9	6.0	6.3	5.4	6.3	6.5	5.9
Transfers from the centre of which	6.0	5.9	5.8	6.7	6.0	6.5	6.8	6.4	6.8	8.6
Share in Central Taxes	2.5	2.5	2.4	2.3	3.0	3.3	3.2	3.3	2.8	2.9
Grants	3.5	3.4	3.4	4.3	3.0	3.2	3.6	3.1	4.0	5.6
Total revenue receipts	11.9	12.0	11.6	12.5	12.0	12.8	12.2	12.7	13.2	14.5

Source: Budget Documents, GoUK

6.27 Table 6.5 shows that, the share of own revenue receipts in total receipts used be around 50% till 2016-17. A major portion of this revenue came from VAT. But, in the year 2017-18, due to GST, there has been a sharp decline in the revenue of the state, whereby the share of own revenue has gone down to 44%. Although, a pickup was witnessed in the share of own revenues in 2018-19, it is expected to fall sharply to nearly 40% in 2020-21 (BE). It is important to keep in mind that this drop is in spite of getting the GST compensation, which ensures 14% growth in GST. This means that even the protected revenue is not sufficient to bridge the gap between the current realization and the earlier rate of growth of tax. Another reason which aggravated the problem is that the base year taken for calculating 14% growth was 2015-16, whereas the real growth rate of tax in FY 2016-17 over FY 2015-16 was 17.17%. This has further led to sharp decrease in own revenue of the state. This is a trend which is going to sustain and the share of own revenue in the total receipts is going to see a downward trend as

Uttarakhand is a net manufacturing state. The dependence of Uttarakhand on central transfers is further highlighted in table 6.6. As can be seen from the table the own revenue as a percentage of GSDP has grown from 5.9% in FY 2011-12 to 6.3% in FY 2016-17. This is an indication that the state had good tax policies, effective implementation and efficient tax administration, thereby resulting in rising tax to GSDP ratio. The pickup in the share of own revenues in 2018-19 and 2019-20 (RE) is on account of an increase in non-tax revenues relative to GSDP while own taxes as a proportion of GSDP have remained at similar levels/fallen. One of the main reasons is that post-GST, the state does not have the same independence and control over policies as was during the VAT regime, and any shortfall in the revenue cannot be made up through policy changes by the state alone.

Chart 6.4: Central transfers to GSDP ratio



Source: RBI, *State Finances, A Study of Budgets*

- 6.28 More importantly, we can observe from the chart 6.4 that the central transfers for Uttarakhand stands at 6.5% of GSDP for 2016-17 and 2017-18 which was, way below the average transfer to North-Eastern and Hilly States (NEHS) at 15.6% and 14.5% of GSDP for these two years. Thus, though Uttarakhand is a special category state, it has not been treated at par with the other NEHS states. But more than NEHS it is distressing to note that the average transfer for all states of the country stood at 6.5% and 6% respectively in 2016-17 and 2017-18, which is higher than the transfers for Uttarakhand. This clearly indicates that something is amiss in the logic adopted for central transfers in the case of Uttarakhand, which is a NEHS.

Trends in Non-tax Revenues

6.29 Table 6.6 highlights the relative importance of grants in the composition of non-tax revenues. As we can see that the major component of non-tax revenue is the grants. It is also reiterated that the scope for increasing the own non-tax revenue is very less in the state, given the limited resource potential. It is also not very cost effective to provide essential services given the geographical terrain and the scattered habitations. But these services have to be provided and a huge portion of the creation and maintenance cost cannot be recovered from the citizens and has to be borne by the state. Hence, the scope for increasing the non-tax revenue collection is very limited in the mountainous regions. In this context, the grant plays an important role.

Table 6.6: Non-Tax Revenue relative to GSDP

% to GSDP			
Year	State's Own Non-Tax Revenue	Grants	Non-Tax Revenue
2011-12	0.99	3.53	4.52
2012-13	1.22	3.39	4.60
2013-14	0.88	3.40	4.29
2014-15	0.69	4.34	5.03
2015-16	0.69	2.99	3.68
2016-17	0.69	3.20	3.88
2017-18	0.79	3.63	4.42
2018-19	1.35	3.13	4.48
2019-20 RE	1.84	3.95	5.80
2020-21 BE	1.21	5.62	6.82

Source: (Basic Data) Budget Documents, GoUK

Table 6.7: Composition of Own Non-Tax Revenue

Rs. in crore										
Revenue Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 RE	2020-21 BE
Total Own non-tax revenue of which	1136.02	1602.88	1316.53	1110.40	1219.01	1345.80	1769.18	3309.80	4942.42	3539.39
Interest, Dividend receipts	50.67	114.95	51.42	108.28	94.31	86.98	108.08	74.39	115.00	116.00
General Services	590.18	846.27	375.41	188.00	118.60	178.39	257.38	1903.38	2750.50	1090.76
Social Services	75.45	93.19	107.77	120.94	173.86	253.61	273.41	240.24	423.53	350.64
Economic Services	419.71	548.47	781.93	693.19	832.24	826.82	1130.31	1091.79	1653.39	1981.99
Share in Total %										
Interest receipts	4.46	7.17	3.91	9.75	7.74	6.46	6.11	2.25	2.33	3.28
General Services	51.95	52.80	28.52	16.93	9.73	13.26	14.55	57.51	55.65	30.82
Social Services	6.64	5.81	8.19	10.89	14.26	18.84	15.45	7.26	8.57	9.91
Economic Services	36.95	34.22	59.39	62.43	68.27	61.44	63.89	32.99	33.45	56.00
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Budget Document, GoUK

- 6.30 Table 6.7 gives the composition of own non-tax revenues. In terms of relative importance, the main contributors of Uttarakhand's own non-tax revenues have been general services and economic services which together had a share of 90.5% in total own non-tax revenues in 2018-19 for which actuals are available. From a recent low of 9.7%, the share of general services increased to 57.5% in 2017-18 and is expected to remain close to 55.7% in 2019-20 (RE). This sudden spurt in revenues from general services is on account of the delayed release of accumulated pension dues by the state of Uttar Pradesh in line with the provisions of the Uttar Pradesh re-organization Act, 2000. This source of revenue has been erratic in the past. Further, due to its ad-hoc nature, the balance due on this account cannot be considered as an assured source of non-tax revenue for the state.
- 6.31 Efforts have been made by the state, particularly the revenue earning economic departments to improve the non-tax GSDP ratio, which have been detailed in topic note 39.

Trends in Expenditure

- 6.32 Table 6.8 gives the revenue and capital expenditure levels in the state of Uttarakhand and their share in total expenditure.

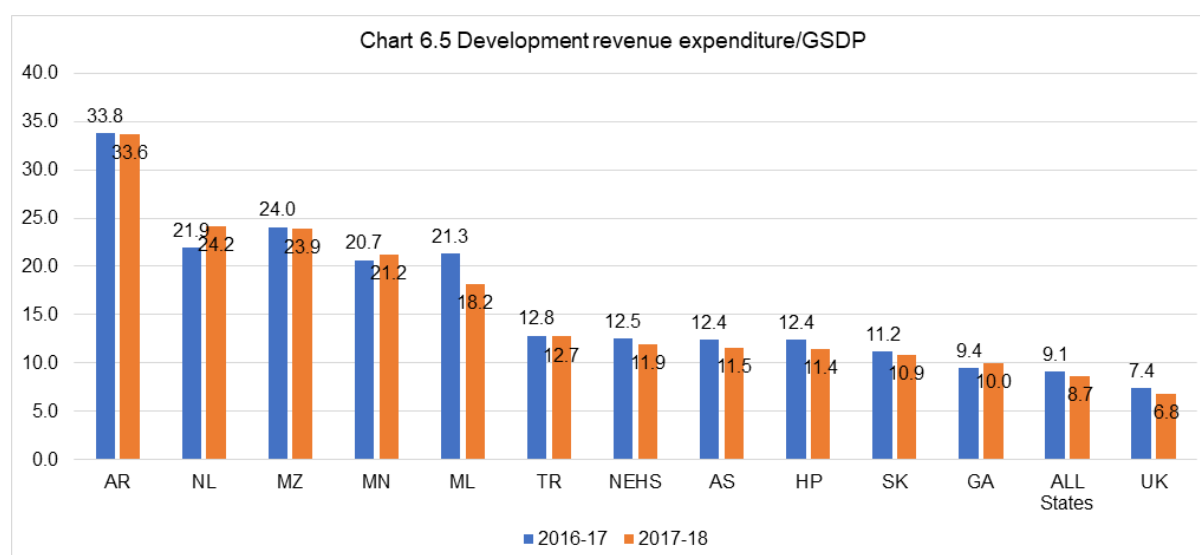
Table 6.8: Revenue & Capital Expenditure in Uttarakhand

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Revenue expenditure (INR Cr)	12,975	13,960	16,216	21,164	23,086	25,271	29,113	32,196	35,481	42,390
Capital expenditure (INR Cr)	2,564	3,815	3,990	5,090	4,301	5,120	5,992	6,369	6,723	7,634
Total expenditure (INR Cr)	15,539	17,775	20,206	26,254	27,387	30,391	35,104	38,565	42,205	50,024
As % of total expenditure										
Revenue expenditure	83.50	78.54	80.25	80.61	84.30	83.15	82.93	83.49	84.07	84.74
Capital expenditure	16.50	21.46	19.75	19.39	15.70	16.85	17.07	16.51	15.93	15.26
Total expenditure	100	100	100	100	100	100	100	100	100	100
As % of GSDP										
Revenue expenditure	11.25	10.61	10.88	13.11	13.03	12.95	13.06	13.09	13.24	14.44
Capital expenditure	2.22	2.90	2.68	3.15	2.43	2.62	2.69	2.59	2.51	2.60
Total expenditure	13.47	13.51	13.55	16.26	15.46	15.58	15.75	15.68	15.75	17.04

Source: Department of Finance, Government of Uttarakhand

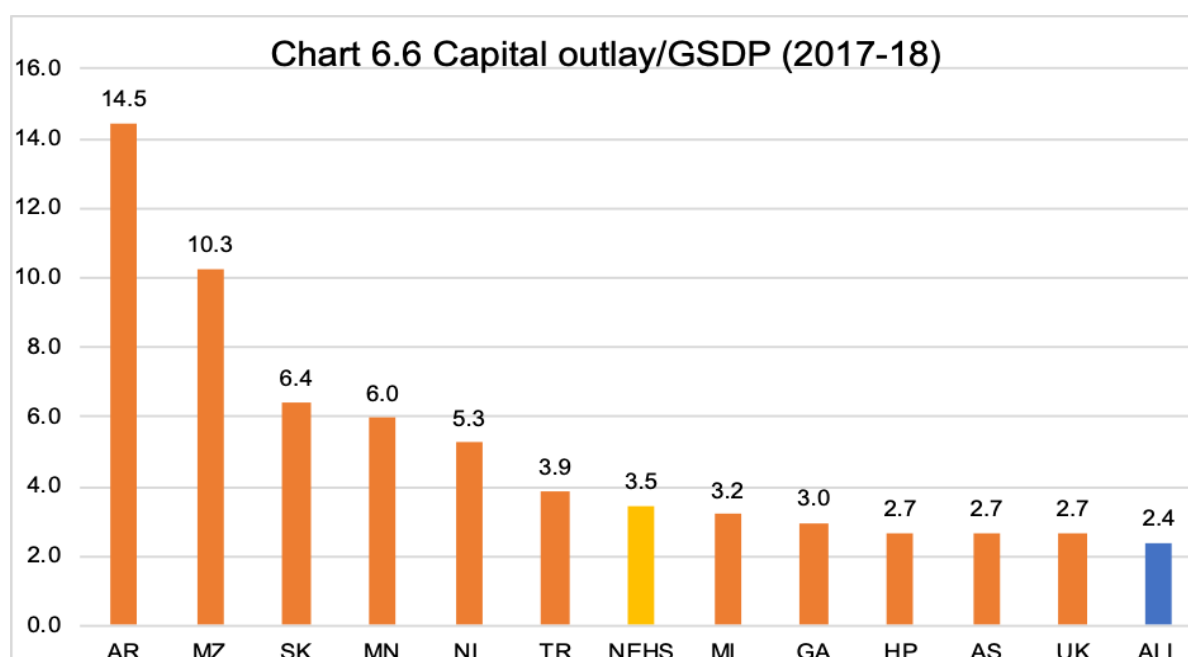
- 6.33 The share of revenue expenditure has accounted for nearly 84% of the total expenditure (excluding loan repayments) consistently. When we see the Revenue expenditure as a percentage of GSDP, it has increased from 11.25% in FY 2011-12 to 14.44% in FY 2020-21 (BE). Thus, a considerable amount of our revenues is going towards meeting the increasing revenue expenditure. This has anyway constrained our capacity to improve the capital

expenditure. But, within revenue expenditure, it has also impacted our capacity to provide the required developmental revenue expenditure.



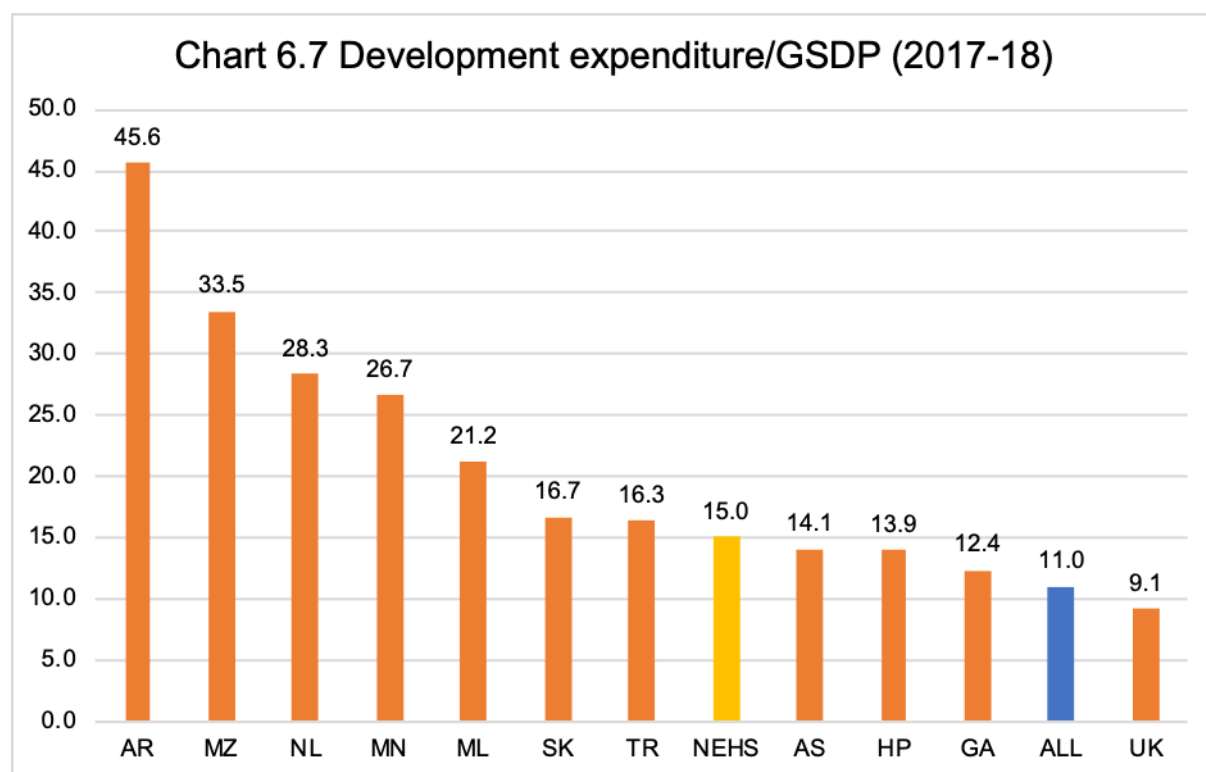
Source: RBI, *State Finances: A Study of Budget*

As chart 6.5 shows the development revenue expenditure as percentage of GSDP for Uttarakhand was 7.4% in 2016-17 and has fallen to 6.8% in 2017-18. This is significantly lower than the average for the NEHS at 12.5% and 11.9% for these two years respectively as well as the all state average of 9.1% (2016-17) and 8.7% (2017-18). This also indicates, that as revenue deficit grants were not given to Uttarakhand, it was constrained for funds and developmental activities suffered considerably.



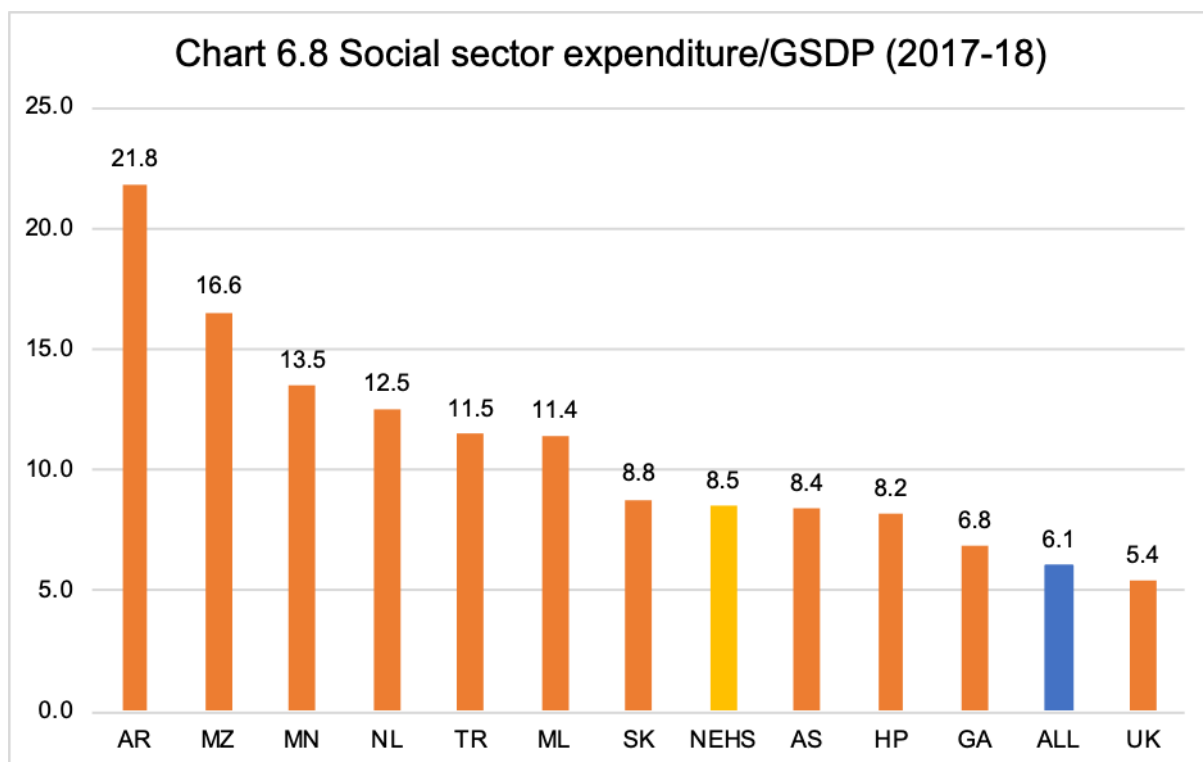
Source: RBI, *State Finances: A Study of Budget*

6.34 As can be seen from the chart 6.6, for the FY 2016-17 (RE), the capital outlay to GSDP ratio at 2.7%, is the lowest for Uttarakhand amongst the NEHS, which have an average of 3.5% and is only slightly higher than the average of all states of the country. **Thus, it is evident that the development expenditure and capital expenditure have suffered in the state due to paucity of resources which in turn is due to non-grant of revenue deficit to the state by the 14th FC.**



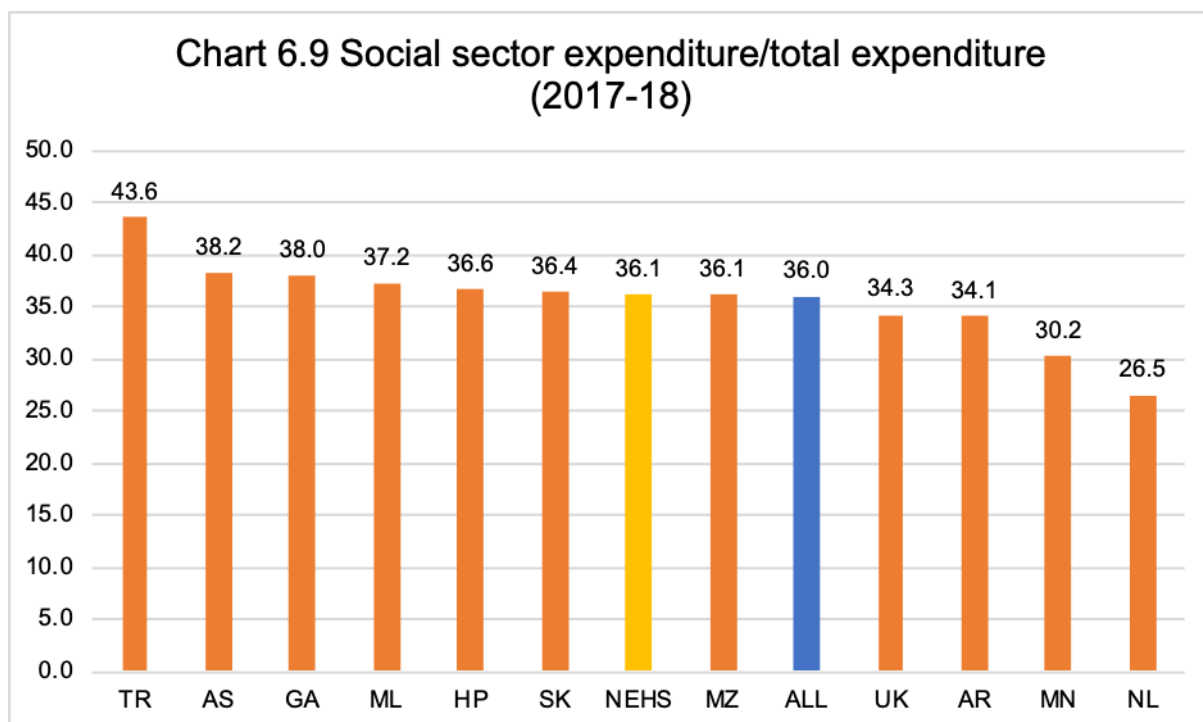
Source: RBI, *State Finances: A Study of Budget*

6.35 Similarly, as chart 6.7 shows Uttarakhand has the lowest ratio of development expenditure of GSDP at 9.1%, whereas, the average for NEHS is 15.0%. It is noteworthy that, the all India average for development expenditure is 11% of GSDP.



Source: RBI, *State Finances: A Study of Budget*

6.36 In social sector expenditure (comprising of revenue and capital expenditure) as shown in chart 6.8, the ratio for Uttarakhand is 5.4%, whereas the average of NEHS is 8.5%. Also, the figure for Uttarakhand is less than even the average of all states in India which stands at 6.1%. This again implies that even though Uttarakhand was a part of the erstwhile special category states, the necessary funds were not transferred to the state to meet the challenges faced by the state.



Source: RBI, *State Finance: A Study of Budget*

6.37 It is evident from chart 6.9 that social sector expenditure formed 34.3% of the total disbursement, which is lower than the all states average. But in spite of spending a high percentage of its available funds on social sector it constitutes only 5.4% of GSDP. This implies that due to low fiscal capacity of the state, though the state spends a higher amount of its budgeted expenditure on social sector, in net terms it is lower than NEHS and all India average.

Table 6.9: Composition of Expenditure

(% to total expenditure)

Expenditure Head	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Revenue expenditure of which:	83.50	78.54	80.25	80.61	84.30	83.15	82.93	83.49	84.07	84.74
General Services of which:	28.80	30.22	30.59	28.20	30.71	32.69	35.35	35.07	35.60	33.65
i. Interest Payments	11.39	11.75	10.18	9.16	10.85	12.25	11.36	11.60	12.17	11.78
ii. Pension and Other Retirement Benefits	7.30	7.68	10.54	9.34	9.60	10.43	14.34	13.99	13.61	12.60
iii. Gen. Serv. other than Interest & Pension	10.11	10.79	9.87	9.69	10.26	10.01	9.65	9.48	9.83	9.26
Social Services	38.74	34.29	36.12	35.13	36.25	34.64	31.13	31.66	29.73	33.20
Economic Services	13.52	11.23	10.23	14.69	14.54	12.84	12.27	12.97	13.05	13.28
Grant-in-Aid to Local Bodies	2.44	2.80	3.31	2.59	2.80	2.98	4.18	3.78	5.69	4.61
Capital Expenditure of which:	16.50	21.46	19.75	19.39	15.70	16.85	17.07	16.51	15.93	15.26
i. Capital Outlay	14.91	19.93	18.37	18.81	15.40	16.30	16.85	16.04	15.39	14.76

ii. Loans & Advances (gross)	1.59	1.53	1.38	0.58	0.30	0.54	0.22	0.48	0.54	0.50
Total expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Budget Document, GoUK

- 6.38 Table 6.9 clearly indicates that while the share of expenditure on social service has decreased over time from 38.7% in 2011-12 to 31.7% in 2018-19 and further down to 29.7% in 2019-20 (RE). A fall in the share of social expenditure suggests that expenditure on critical merit services like education and health has also fallen. In fact, expenditure on education which accounted for close to 26% of total revenue expenditure had fallen to as low as 20.9% in 2019-20 (RE). The share of economic services in total revenue expenditure has stagnated at around 14%. The general services expenses are increasing because of the increase in pension and interest payments which are committed expenditure. As the revenue deficit grant was not given to the state, the state had to borrow from the market and this in turn increased the interest payment and also led to decreasing investment by the state in social and economic services.
- 6.39 In terms of capital expenditure, the share of capital outlay has fluctuated in a range of 14.76% in 2020-21 BE and 19.9% in 2012-13. In fact, the share of capital outlay in total expenditure fell from its peak in 2012-13 to 15.4% in 2015-16. Since then, it averaged 16.1% till 2019-20 (RE). In 2020-21 (BE), the share of capital outlay in total expenditure is expected to fall to 14.8%. The low investment in capital assets does not bode well for the economy of the state and will lead to muted growth in GSDP and revenues in the future, thereby further deteriorating the fiscal capacity of the state and adversely affecting its economic growth.

Trends in Debt and Deficit

- 6.40 Table 6.10 gives the outstanding liabilities of Uttarakhand as percentage of GSDP.

Table 6.10: Outstanding liabilities of Uttarakhand relative to GSDP

Rs. in crore

Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Total Outstanding liabilities	21598.44	23609.42	25539.88	28766.5	33480.28	39068.64	44582.68	53071.1	58039.27
Fiscal Deficit	1842.57	1357.45	1599.24	2,650.26	5,826.17	6,125.93	5,466.98	7716.67	7321.44
Debt/GSDP	25.72	20.32	19.21	19.19	20.74	22.18	22.79	23.81	23.60
Fiscal Deficit/GSDP	2.19%	1.18%	1.22%	1.78%	3.61%	3.46%	2.80%	3.46%	2.98%

Source: State Budget Documents, GoUK

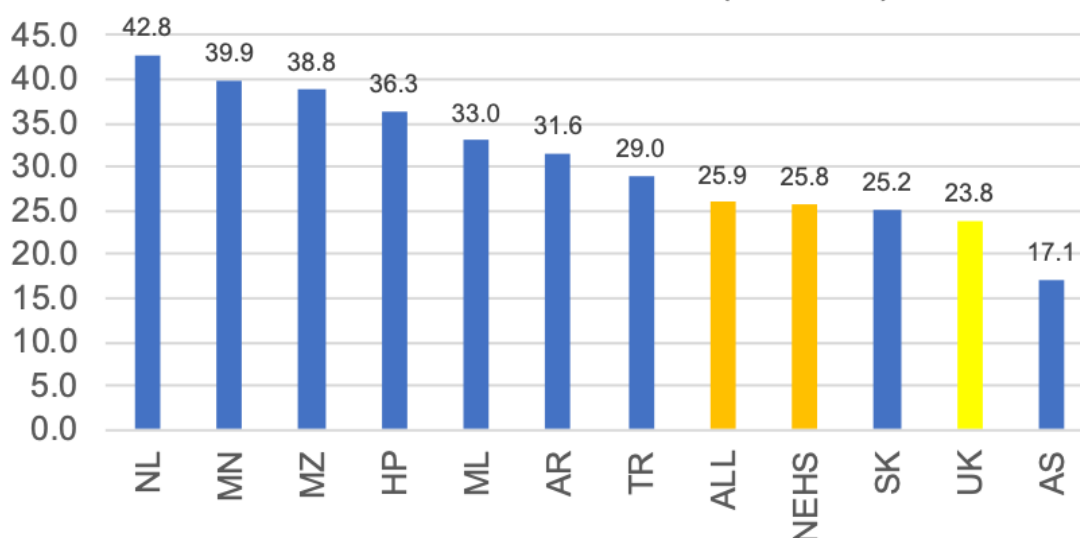
- 6.41 There has been a steady decline in the debt GSDP ratio up-to FY 2013-14. Thereafter, as the state did not receive its due revenue deficit grant from the 14th FC, there is a reversal in trend and steep increase in the debt GSDP ratio as more borrowings had to be taken by the state to meet its committed expenditure and development needs of the citizen.
- 6.42 The fiscal consolidation path recommended by the 13th FC recommends that the states should reduce their augmented share of debt to GSDP to less than 25%. The state of Uttarakhand has shown considerable fiscal discipline and the debt to GSDP ratio has been continually falling. It has been brought to a level of 23.6% by FY 2018-19.
- 6.43 When compared to other NEHS, Uttarakhand has maintained its debt to GSDP ratio within the prescribed limits. Even if we compare with all India average, we can see that the debt to GSDP ratio of Uttarakhand is lower.
- 6.44 This was maintained in spite of not receiving the revenue deficit grants by 14th FC by compromising on the other essential developmental and social sector expenditures. But in the long run if the due revenue deficit grant is not given, then to meet its statutory and Constitutional obligations and given the low fiscal capacity, the state will have to borrow more which will increase the debt to GSDP ratio of the state in the future.

Table 6.11: Debt GSDP ratio of NEHS

NEHS	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
NL	55.43	52.69	50.28	43.18	45.70	44.02	42.83
MN	50.35	49.63	43.81	40.77	41.71	41.47	39.91
MZ	67.72	66.06	60.38	51.87	46.74	38.86	38.79
HP	38.82	35.54	35.75	36.79	36.06	37.60	36.29
ML	26.95	24.06	28.71	29.75	29.96	33.69	32.99
AR	35.69	34.05	32.29	34.33	30.89	28.89	31.61
TR	34.15	35.39	34.14	31.58	28.81	29.92	29.01
ALL	22.95	22.36	22.06	22.91	24.59	25.90	25.95
NEHS	27.73	26.46	25.88	26.11	26.15	25.89	25.81
SK	24.96	24.23	24.11	22.72	24.06	22.66	25.16
UK	21.54	20.41	20.33	21.08	22.74	22.81	23.82
AS	19.51	18.90	17.42	18.12	18.41	17.30	17.09

Source: RBI, *State Finance: A Study of Budget*

Chart 6.10 Debt GSDP ratio (2017-18)



Source: RBI, *State Finance: A Study of Budget*

6.45 The fiscal summary of the state in absolute terms and in per capita is given in table 6.12.

Table 6.12: Fiscal Summary of Uttarakhand

Rs. in crore

Heads	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
Receipts										
Total Revenue Receipts	13691	15747	17321	20247	21234	24889	27104	31217	35503	42439
Total Tax Revenue	8482	9687	10929	12131	14711	17309	17250	20200	19970	22418
-State's own Tax Revenue	5616	6414	7355	8338	9382	10897	10165	12188	12449	13761
-Share in Central Taxes	2866	3273	3573	3792	5329	6412	7085	8012	7521	8657
Non-Tax Revenue	1136	1603	1317	1110	1219	1346	1769	3310	4942	3539
Grants from the Centre	4073	4457	5075	7005	5304	6234	8085	7707	10591	16482
Total Capital Receipts	3734	3411	4274	4934	7026	10627	7810	15475	6519	9985
Borrowings and other Liabilities	3244	2983	4038	4754	6998	10592	7526	15448	6490	9950
Recovery of Loans	91	428	55	46	27	35	284	27	29	35
Total Receipts	17426	19158	21595	25181	28259	35516	34914	46691	42022	52424
Expenditure										
Revenue Expenditure	12975	13960	16216	21164	23086	25271	29113	32196	35481	42390
- of which, Interest Payments	1769	2089	2056	2406	2971	3723	3987	4475	5137	5892
Capital Expenditure	2564	3815	3990	5090	4301	5120	5992	6369	6723	7634
- of which, Loan Payments	247	273	278	151	83	165	77	183	230	251
Total Expenditure	15539	17775	20206	26254	27387	30391	35104	38565	42205	50024
Fiscal Indicators										
Revenue Deficit (RD)	-716	-1787	-1104	917	1853	382	2008	980	-22	-50
Fiscal Deficit (FD)	1358	1599	2650	5826	6126	5467	7717	7321	6673	7550
Primary Deficit (PD)	-412	-489	594	3421	3155	1744	3729	2847	1535	1658
GSDP	115328	131613	149074	161439	177163	195125	222836	245895	268025	293487
Fiscal Indicators as percent to GSDP										
RD/GSDP	-0.62	-1.36	-0.74	0.57	1.05	0.20	0.90	0.40	-0.01	-0.02
FD/GSDP	1.18	1.22	1.78	3.61	3.46	2.80	3.46	2.98	2.49	2.57
PD/GSDP	-0.36	-0.37	0.40	2.12	1.78	0.89	1.67	1.16	0.57	0.56

Source: Budget Document, GoUK

6.46 Impact of 7th Pay Commission: The pay parity principle with the Central Pay scales was accepted after the 4th Pay Commission in the parent state of Uttar Pradesh. Thereafter 5th, 6th and 7th State Pay Commission have followed the same principle and the state government employees are getting

the same pay scales which are currently equivalent to central posts on a post to post parity basis.

6.47 The state has given the benefits of 7th Pay Commission to its employees and pensioners w.e.f. 01st January 2016. However, the arrears from 01st January 2016 to 31st December 2016 have been decided to be given in two instalments during FY 2017-18 and FY 2018-19. The Pay and Pension arrears for the above said period is approximately Rs. 1100 crore and Rs. 350 crore respectively. It is estimated that 40% of the arrear amount of pay and pension has been given so far.

6.48 The trend in year wise expenditure on salary of the state government employees from FY 2019-20 to FY 2024-25 is given below:

Table 6.13 Expected salary expenditure

Rs. in crore

Item	Year	+Forecast					
	2018-19 BE	2019-20 (RE)	2020-21 (BE)	2021-22	2022-23	2023-24	2024-25
Salary	12,900	12,937	14,230	15,653	17,219	18,940	20,834

Source: Budget Document, Estimates of Department of Finance, GoUK

6.49 The decision regarding revision of various allowances other than the DA is under consideration of state government. The likely impact of the allowances will be about Rs. 350 crore annually. The revision of pension of pensioners (this is apart from pension revision in the 7th CPC) who had retired prior to 01st January 2016, is also under consideration as per Government of India rules. This would further entail an increased expenditure of Rs. 150 crore per year.

6.50 Thus, we can see that Uttarakhand has been adversely impacted on all economic fronts. The unrealistic projections of 14th FC being way off the ground realities ensured no revenue deficit grant for the state. This has led to reduced expenditure on development activities, social sector and capital formation. The legal and social commitments of the state continuously increased the committed expenditure and given the low fiscal capacity of the state led to higher borrowings and the consequent high revenue deficit and fiscal deficit. The structural changes brought about by GST changed the paradigm of economic and revenue growth. An entire reorientation of the economy is required to adapt to the new environment.

- 6.51 Uttarakhand has the capacity and willingness to reorient and rebound to its earlier growth trajectory. But it needs to be given the necessary wherewithal in the interim period to overcome the imposition of the structural changes and readjust its objectives to the changed scenario. The challenge in front of Uttarakhand is to move from being a production based to a consumption oriented economy and for this it requires a lot of support in the transitional period from Government of India. It cannot be overemphasized that GST has affected different states in a different way. All states cannot be treated alike, as the reasons for shortfall in GST are different in different areas. In Uttarakhand, the shortfall is not because of tax administration or enforcement, but because of low consumption base. The economy of the state has to be reoriented by helping the state to transition from a manufacturing state to a service providing state. The state is also expected to suffer a severe revenue shock in FY 2022-23 on account of the withdrawal of payment of GST compensation. This is likely to add greater pressure on its revenue deficit and further on the quality of fiscal deficit. **As the fiscal capacity and revenue base of the state is very limited, a substantial support from 15th FC in terms of revenue deficit grant will be required during its extended award period covering the years 2021-22 to 2025-26.**

Annexure

Annexure 6.1 Note submitted by Finance Secretary, Government of India titled “Report on Revenue Gap for the state of Uttarakhand”

F. No.756/Rev-Gap-UK/GSTC/2018

Report on Revenue Gap for the State of Uttarakhand

I held a meeting with the officers of the Central and State Tax Administrations of Uttarakhand on 25th October, 2018 in Dehradun to discuss the reasons for the GST Revenue Gap of the State of Uttarakhand. A list of officers who were present during the meeting is attached as **Annexure 1**. The State and the Central Tax Administrations made presentations on the revenue position of the State and the reasons for the shortfall.

2. Uttarakhand is among the top 5 States in terms of the percentage of revenue shortfall against the all-India revenue shortfall figure. For the 8 months of GST collection during the financial year 2017-18 (August, 2017 to March, 2018), the average revenue shortfall of Uttarakhand is 39% as against the national average shortfall of 16%. In the first six months of the financial year 2018-19 (April to September, 2018), the revenue shortfall of Uttarakhand is 38%, as against the national average revenue shortfall of around 15%.

3. Revenue of Uttarakhand to be protected for the base year 2015-16 is Rs. 4961.22 crore. The break-up of the revenue to be protected is at **Table 1** below (revenue from subsumed tax):

Table 1			Table 2		
Revenue from subsumed tax 2015-16			Revenue from Non-Subsumed Tax 2015-16		
Sl. No.	Particulars	Rs in crore	Sl. No.	Particulars	Rs in crore
1	VAT (Including Works Contract)	3858.43	1	VAT on Petroleum Product and Natural Gas	1208.50
2	Central Sales Tax (CST)	766.16	2	Spirit (alcohol)	145.17
3	Advertisement Tax	0.00		Total	1353.67
4	Lottery, Betting & Gambling				
	Luxury Tax (Hotel Receipts Tax)	53.37			
5	Entry Tax	3.21			
6	Cesses and Surcharges	0.19			
	Duties of Excise on Medicinal & Toilet Preparations	0.00			
7	Revenue Foregone	279.86			
	Total	4961.22			

(Source: Department of Revenue and Commercial Tax Deptt. Uttarakhand)

4. The trend of revenue collection from the subsumed taxes for the last five years and the percentage growth of such revenue is summarised in **Table 2** below:

Page 1 of 7

[Signature]

the State on account of stock transfer. According to State figures, this earned them a revenue of Rs.284 crore from 54 manufacturers during the period 2016-17 which constitutes about 5% of the total revenue. Hence the State has lost about 34.5% of its revenue base due to structural factors connected to switchover from VAT to GST regime.

8. **Low Consumption base:** The State has a very low consumption base of goods as well as services. As per figures given by the State administration, in 2016-17, inter-State sales accounted for 62% of the total sales in the State. As a result, the tax flowing to the State through IGST settlement is very low. It was only Rs.110 crore for the period August, 2017 to July, 2018, constituting only 3% of their total SGST revenue. This puts them in a difficult position compared to other top six revenue losing States whose percentage of IGST settlement is much better ranging from 45% to 63%.

9. **Outflow of taxes paid as SGST:** It is seen that some of the big taxpayers of the State are ancillary suppliers to big industries like a motor cycle producing unit located in the State. As a result, while they pay SGST, but at the subsequent stage, this tax also flows out of the State when final product, i.e. motor cycle is supplied to other States and IGST is paid by utilising the input tax credit of the SGST paid by the ancillary suppliers.

10. **Reduction in effective rate of tax on goods:** As per the data given by the State administration, there is loss of revenue of Rs.655 crore during the financial year 2017-18 on account of reduction of rate of tax on goods in GST as compared to the earlier VAT rates. The earlier VAT rate was largely in the range of 14.5% and 5% whereas in the GST regime, it has reduced to 9%, 6% and 2.5%. These include electrical goods, cosmetics, electronic components, chemicals, footwear, biscuits, glassware, etc., which attracted a VAT rate of 14.5% but attract SGST rate of 9%. Medicines, food grains, refined coconut oil, bricks, rice bran, fertilisers and spices attracted 5% VAT but now attract only 2.5% SGST and GST on food grains is nil. As against this, the income of State from the service sector is not commensurate with this loss.

11. **Poor Collection from Service Tax:** Service Tax contribution from major service sectors in the State is reported to be very low. As per the estimates of the State Tax Department, during the period 2017-18, their tax collection from the major Services sector was only about Rs.115 as per **Table 4** below. However, this figure needs to be checked by GSTN.

Page 3 of 7

[Signature]

Table 2

Year	Amount collected (Rs. crore)	Growth Percentage
2012-13	3440.45	
2013-14	3879.08	12.75
2014-15	4334.86	11.75
2015-16	4961.22	14.45
2016-17	5704.99	15.00
Average growth rate		13.49

(Source: Commercial Tax Deptt., Uttarakhand and Dept. of Revenue)

5. As can be seen from **Table 2** above, the average growth rate of revenue of the last four years for Uttarakhand is 13.49%, which is close to the assured growth rate of 14% for first five years of implementation of GST. The State enjoyed a marginally higher than the 14% assured growth rate in 2016-17 (15%).

6. The ratio of subsumed to non-subsumed taxes for 2015-16 for Uttarakhand is 3.66 (**Table 3** below) which is approximately more than double (2.27 times) the national figure of 1.61. This implies that Uttarakhand has more dependence on the subsumed revenue.

Table 3			
State/National	Subsumed (Rs in crore)	Non-Subsumed (Rs in crore)	Ratio
	A	B	C = A/B
Uttarakhand	4961.22	1353.67	3.66
All States/UTs with Legislatures	396882	246264	1.61

(Source: Department of Revenue and information collected from States/UTs)

Reasons for shortfall in revenue

7. **Loss due to CST and doing away with ITC Retention on Stock transfer:** Due to the benefit of area-based exemption scheme introduced by the Central Government in 2003 for setting up of new industries or for substantial expansion of existing industries, a very large number of big manufacturers (around 58,000) have set up industries in Uttarakhand and manufacturing constituted about 50% of State GDP in 2017-18. Sales by manufacturers to other States gave substantial amount of CST to the State. During 2016-17, total CST paid was Rs.1686 crore out of total revenue of Rs.5705 crore, which constituted 29.5% of the total revenue, as against the national average of 8%. Though out of this, Rs.1014 crore was paid through utilisation of input tax credit of VAT and Rs.672 crore was actual cash payment, this entire amount remained within the State whereas now it is flowing out as IGST to other States. In addition, during the VAT period, 3% of input tax credit was retained for goods sent out of

Page 2 of 7

[Signature]

Table 4

Revenue from Services Sector (August, 2017 - July, 2018)

S.No.	Sector	Amount (Rs. crore)
1.	Banking	17
2.	Telecom	15
3.	Insurance	75
4.	Railways	1.5
5.	Airlines	6
6.	Transport	0.5
	Total	115

(Source: Commercial Tax Deptt., Uttarakhand)

12. **Unsatisfactory Return Filing:** Return filing percentage in the State is lower than the national average. For GSTR-3B, against the national average filing of 82% for July, 2017 to September, 2018, it is 77% for the Central Government and 80% for the State Government. For the same period, performance of the Central Government for GSTR-1 filing is much lower at 53% as against the national average of 64% while performance of the State Government is better at 62%. However, this should also be improved. The authorities have explained that a large number of non-filers of GSTR-3B are small taxpayers with annual turnover of below Rs.20 lakh who got migrated to the GST regime or those who took GSTIN for filing tenders. However, there is still scope for improvement.

Steps suggested to address the Revenue Gap

13. The State earlier got its major share of revenue by attracting manufacturing units. In the new tax regime, the paradigm has shifted to destination-based consumption taxation. Therefore, the State would need to reorient its policies to attract more consumption. For this, it should develop tourism sector, convention centres, retail outlets and some eco-friendly services sector like IT. It is noted that the State is already working in a concerted manner to develop services sector with focus on tourism, wellness, rejuvenation, medical tourism, education, adventure sports, etc. and also recently organised an Investment Summit.

14. Tax compliance by hotels and restaurants should be given specific attention including payment of tax on peripheral services given by hotels like laundry, spa, etc. Charitable

Page 4 of 7

[Signature]

institutions/trusts which charge room rent of more than Rs. 1,000 per night also need to be verified for tax compliance.

15. The State officials have pointed out that the State of Uttarakhand is hardly getting any revenue from passenger transport services sector because as per the present place of supply rules, the place of supply of service is the place where the passenger embarks on the conveyance for a continuous journey. Normally, tourists coming to Uttarakhand for religious pilgrimage hire vehicles in Delhi and return to Delhi and thus no tax accrues to the State leading to major revenue loss. The Law Committee may examine this aspect to see whether concerns of Uttarakhand could be addressed.

16. As the amount of tax coming through IGST settlement is very low, the State tax administration should examine in greater detail as to for which products settlement is very low and analyse the reasons for the same.

17. The build-up of IGST would be reduced after the annual returns under GST are filed because the figures declared in these returns will help in settling a larger amount of tax. Annual returns of top 500 taxpayers should be examined thoroughly by the two tax administrations.

18. It needs to be checked that the correct amount of tax from important Services sector like banking, insurance, telecom, airlines are correctly accruing to the State. In this regard, DG Audit, CBIC, has already been directed to conduct an audit of the accounting software of major service providers in the field of banking, insurance, airlines, telecom, railways, etc.

19. The return filing behaviour of top 500 taxpayers under the jurisdiction of Central and State Tax administrations should be analysed on a continuous basis and follow up action should be taken to persuade non-filers to file their returns. It is seen that the Central Government administration has been conducting such analysis and the State Government administration should also carry out similar analysis.

20. Return filing percentage in the State is lower than the national average. Registrants whose turnover is below the taxable threshold need to be weeded out quickly and energy should be devoted on improving the return filing compliance. GSTR-1 data is an important tool for verification of correctness of input tax credit taken in GSTR-3B. Similarly, improved compliance for GSTR-3B filing is essential to augment revenue. Constant efforts should be made for improved filing percentage of GSTR-1 and GSTR-3B, particularly return filing for

Page 5 of 7

Handwritten signature

the month. Outreach programmes should be carried out to sensitise taxpayers that late fee for GSTR-1 has been waived if filed by 31st October, 2018.

21. The performance of Central Government officers for e-Way bill checks is very unsatisfactory. They must beef up their performance in this area, in coordination with their State counterparts.

22. It is seen that the number of units availing area-based exemption in the State who migrated to GST is 1568 but only 490 units have registered under the Budgetary Support Scheme (BSS). This gap is too large and a test check of the units which have not registered themselves under the BSS, should be done on some risk based parameters, such as those units which had filed four consecutive quarterly returns before the implementation of GST.

23. Physical verification of premises of at least 10% of new registrants should be done on the basis of risk parameters to curb growth of bogus units, only trading in invoices.

24. It is noted that 47% of the tax in the State is paid in cash as against the national average of about 34%. Cash to ITC ratio of top 100 taxpayers as also taxpayers prone to revenue risk should be monitored continuously.

25. Tax collected per capita should be monitored regularly as a fall in this figure could also point to evasion of tax.

26. The Central Tax administration has devised a broad framework for revenue augmentation through anti-evasion activities. The State Tax administration should also chalk out a similar plan of action and work systematically to curb tax evasion. Collaborative steps by the two administrations will lead to very positive synergy.

27. It is seen that as against the moving revenue target of CGST Commissionerate of Rs.4210 crore for 2018-19 (upto September, 2018), the collection is Rs.3431 crore, showing a 19% shortfall. Reasons for the same need to be analysed. The State administration should also conduct a similar analysis in respect of the indicative revenue target of Rs. 10,778 crore (comprising of all taxes) for the units falling in their jurisdiction communicated earlier by the GST Council Secretariat by its O.M. dated 12.10.2018.

Handwritten signature
(Hasmukh Adhia)
31.10.2018

Page 6 of 7

Annexure-1

List of Officers Who Attended Meeting with Union Finance Secretary in Dehradun on 25.10.2018

STATE GOVERNMENT OFFICERS

S.No	Name of the Officer (S/Shri)	Designation
1	Utpal Kumar Singh	Chief Secretary, Uttarakhand
2	Amit Singh Negi	Secretary, Finance, Govt. of Uttarakhand
3	Smt. Sowjanya	Secretary incharge and Commissioner State Tax, Uttarakhand
4	Piyush Kumar	Additional Commissioner (Special grade pay), State Tax, Uttarakhand
5	Vipin Chandra	Additional Commissioner, State Tax, Uttarakhand
6	Rakesh Verma	Joint Commissioner, State Tax, Uttarakhand
7	Dr. Sunita Pandey	Deputy Commissioner, State Tax, Uttarakhand
8	S.S. Tiruwa	Deputy Commissioner, State Tax, Uttarakhand
9	Ranjeet Singh Negi	Assistant Commissioner, State Tax, Uttarakhand

CENTRAL GOVERNMENT OFFICERS

S.No	Name of the Officer (S/Shri)	Designation
1.	Pradeep Kumar Goel	Commissioner, CGST Commissionerate, Dehradun
2.	Yogesh K. Agarwal	Commissioner(Audit), Dehradun
3.	Manish Goel	Additional Director General, DGGI, Meerut Zone
4.	Amit Gupta	Joint Commissioner
5.	Deepak Shukla	Assistant Commissioner
6.	Tribhuvan Yadav	Assistant Commissioner
7.	Amit Deoli	Superintendent
8.	Vijay Kumar Gupta	Superintendent
9.	Avneesh Kumar Gupta	Inspector
10.	Mohammad Mohatseem	Inspector

Page 7 of 7

Chapter 7

Revenue and expenditure forecasts

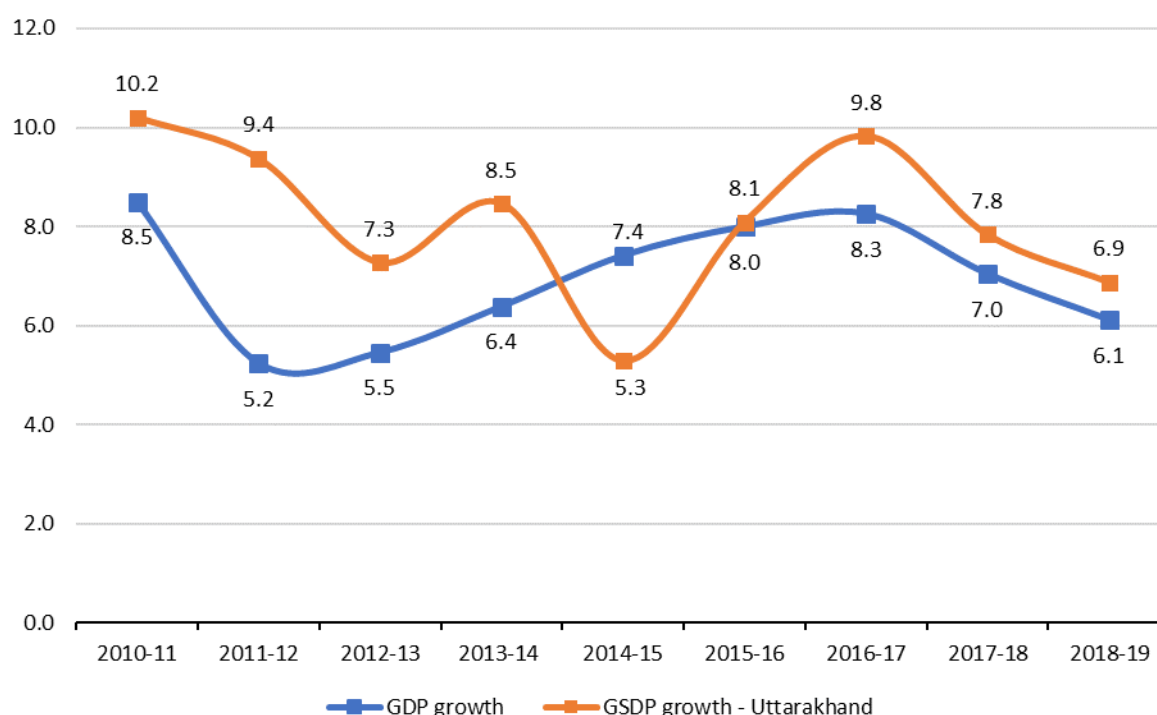
The 15th FC requires the state governments to provide a detailed assessment of their revenues and expenditures for the period from FY 2021-22 to FY 2025-26 for their final report. A realistic assessment is critical for working out the transfers to the states which will include both devolution and grants-in-aid. For making the relevant projections the base year for the expenditure needs and non-tax revenues of the Government of Uttarakhand is 2018-19 (Actuals). Provisional actuals of tax revenues in FY 2019-20, which have turned out to be much lower than FY 2019-20 (RE) due to the unanticipated impact of Covid-19 pandemic, are used to reassess the tax revenues for FY 2020-21. These have further been used as the base for forecasting tax revenues for subsequent years.

- 7.1 Fiscal data for Uttarakhand on an actual basis are available from FY 2001-02 to FY 2018-19. Revised estimates for FY 2019-20 and budget estimates for FY 2020-21 are also available. The main considerations that need to be taken into account are (a) economy-wide slowdown accentuated by the outbreak of Covid-19 which has affected the state's own tax revenues, transfers from the centre to the state governments as well as state expenditure on healthcare (b) fall in revenues of Uttarakhand mainly due to fall in GST collections which has changed the tax collection paradigm from production to consumption (c) the revenue shock that arises as GST compensation period ends in June 2022 (d) subdued collections from sales tax/VAT on petroleum products on account of the demand slowdown (e) the fall in pension apportionment from Uttar Pradesh due to which the non-tax revenues under this category are expected to fall to a meagre amount of Rs. 60 crores in 2021-22 from an estimated Rs. 2,564 crores in 2019-20 (RE), and (f) the additional burden of providing pension and gratuity benefits with retrospective effect for 6,268 work-charge employees who were converted to permanent employees through a Supreme Court order. These considerations affect both the projections and the medium-term prospects.
- 7.2 Although the past time series data are useful for forecasting, it is not possible to predict the future entirely on the basis of historical trends in the presence of discontinuities and policy changes that may have an effect on the economic relationships. An eclectic approach has, therefore, been followed for revenue and expenditure projections.

Revenue Base: Gross State Domestic Product

- 7.3 The base year of GSDP has changed over a period of time. The present GSDP estimates have been worked out taking FY 2011-12 as the base year. The growth of the real GSDP from FY 2012-13 to FY 2018-19 was in the range of 5.29% to 9.83%. **The average annual real GSDP growth over the period FY 2011-12 to FY 2018-19 is 7.66%.** In the initial years after the creation of the state, the growth rate was high as it was on a very low base and the industrial package also helped in the establishment of new industries. The Indian economy as a whole was also buoyant during those years.
- 7.4 However, the Indian economy has been slowing down since 2016-17 as explained in the chapter 6. This situation of ongoing economic slowdown is accentuated by the onset of the COVID-19 pandemic. On the demand side, services sectors, particularly relating to trade, transport, travel and tourism, entertainment as well as financial services are likely to be adversely impacted. On the supply side, disruptions will come through the impact on supply chain emanating from affected countries with strong trade links to India. Reflecting the impact of the pandemic and the ongoing economic slowdown, the real and nominal GDP growth fell to 4.2% and 7.2% respectively in 2019-20.
- 7.5 As Chart 7.1 shows, Uttarakhand's GSDP growth trends in line with India's GDP growth particularly after 2015-16. Lower growth in India's GDP affects GSDP growth in Uttarakhand through various demand-side and supply-side interlinkages. From 2016-17 to 2018-19 as India's GDP growth slipped from 8.3% to 6.1%, Uttarakhand's GSDP growth fell from 9.8% to 6.9%. With the continued overall slowdown in the Indian economy aggravated with the Covid-19 outbreak, the GSDP growth of Uttarakhand is estimated to sharply fall in 2020-21, and recover marginally but remain low in the subsequently years.

Chart 7.1: Real GDP growth and real GSDP growth in Uttarakhand



Source: Statistical Abstract Uttarakhand 2015-16 (2000-01 to 2015-16); MoSPI

55. The 15th FC first report assumed the nominal GSDP growth for the state of Uttarakhand at 9.2% in FY2019-20 and at 10.2% in FY 2020-21. The Covid-19 pandemic has led to a sharp fall in economic activity both at the national level as well as at the state level. The International Monetary Fund (IMF) has estimated India's real GDP to contract by (-)4.5% for the year 2020-21¹⁹ a sharp downward revision by 6.5% points from its earlier growth projection of 1.9% in April 2020. It projects a v-shaped recovery in India's real GDP growth which is forecasted at 6.0% in 2021-22. The OECD²⁰ also projected India's GDP to contract by (-)3.7% in the single hit scenario and by (-)7.3% in the double hit scenario, where single hit scenario assumes an avoidance of a second outbreak which is factored in the double hit scenario. Taking into account the ongoing economic slowdown and the adverse effect of the COVID-19 pandemic, the nominal GSDP growth of Uttarakhand is estimated to sharply fall to 0.8% for 2020-21 as compared to the growth of 9.0% assumed in the state budget of Uttarakhand and a growth of 10.2% assumed by the 15th FC. In line with the expected pick up in India's GDP growth, the nominal GSDP growth in Uttarakhand is assumed to recover to 7.5% in 2021-22 and remain at 8% during the subsequent years.

¹⁹ IMF World Economic Outlook Update released on 24 June 2020

²⁰ OECD Economic Prospects released on 10 June 2020

- 7.6 The expenditure forecasts take into account the state specific features and expenditure requirements of the state. Expenditures are reprioritized by curtailing unproductive/unnecessary expenditure and increasing expenditures on health, education and infrastructure. The impact of the 7th pay commission has been incorporated in statement number 3, but the impact of allowances, which are under consideration of the state government, has not been taken into account.
- 7.7 **In arriving at the forecast of expenditure, actuals of FY 2018-19 are used as the base year. With respect to revenues, the 2019-20 (RE) numbers incorporate to a certain extent the impact of the slowdown in economic activity. However, the provisional numbers indicate a considerable underachievement of the 2019-20 (RE) as well on account of the unanticipated and adverse impact of the Covid-19 outbreak. 2020-21 (BE) thus turns out to be a significant overestimate. Revenues for 2020-21 are thus reassessed taking into account a) the significant under-achievement in revenues in 2019-20 (RE) and b) the large adverse impact of Covid-19 on economic activity and consequently on revenues. Revenue projections for subsequent years have been done taking FY 2020-21 reassessed revenues as the base.**

Revenue Receipts Forecast (FY 2021-22 to FY 2025-26)

- 7.8 In projecting states' own tax revenues, the 15th FC assumed a uniform tax buoyancy of 1.16 for all states including Uttarakhand for the year 2020-21. In Uttarakhand, buoyancy of own tax revenues has fallen drastically from 1.9 in 2018-19, to 0.2 in 2019-20 (RE) even as nominal GSDP growth is expected to have fallen to 9.0% from 10.3% over the same period. Subdued GST and VAT based revenues reflecting the production-orientation of the economy and the economic slowdown have contributed the most to the fall in own tax buoyancy. With growth expected to be subdued during 2021-22 to 2025-26, we project an improvement in the buoyancy of own tax revenues to 0.8 during the forecast period. However, for the year 2020-21, tax revenues have been re-estimated considering the adverse impact of Covid-19 and revised downwards.
- 7.9 The major sources of tax revenues for Uttarakhand are GST/VAT, excise duties, stamps and registration fees, motor vehicle tax and electricity tax. Non-tax revenues of the state originate primarily from economic services of which power, forestry and mining & minerals are the major ones.

Tax Revenues

- 7.10 **Tax on GST income (0006):** Since its introduction, GST has been the major contributor to the state's own tax revenues contributing nearly 40% of state own tax revenues in 2018-19 and 2019-20 (RE). However, it has largely underperformed during the period 2017-18 to 2019-20. In 2019-20 (RE), the only year for which growth can be calculated over comparable periods, the buoyancy of GST revenues has been estimated to remain muted at 0.3. This itself is a significant overestimate based on a provisional actual estimate of Rs. 3,846 Crores as per information available during the first week of April 2020. Assuming further improvement in compliance, the buoyancy has been increased to 0.6 resulting in a growth of 4.5% for 2021-22 and 4.8% for the period 2022-23 to 2025-26. Considering the economic impact of the Covid-19 pandemic, the estimated revenue under this head has been pegged at Rs. 4,000 crores close to the provisional actuals. Protected revenues under GST have been estimated till the first three months of FY 2022-23 using a growth rate of 14% on the revenues under taxes subsumed within GST in the base year 2015-16.
- 7.11 Table 7.1 shows the impact of GST on the state over the coming years. Column 3 of the table 7.1 contains the assured revenue from the Central government until June 2022. Column 4 gives the projected GST revenue. Prior to GST, the growth of VAT depended significantly on production/manufacturing within the state. Post-GST the scenario has changed, as GST is a consumption-based tax. With the slowdown in economic activity and with Uttarakhand being a manufacturing-driven state, the GST tax buoyancy (excluding compensation cess) in 2019-20 (RE) is estimated at 0.268 which itself is an overestimate since it does not consider the sharp downward dip in revenues on account of the Covid-19 outbreak. The current GST buoyancy for the state of Uttarakhand, is also likely to be constrained by the loss of autonomy over the setting of tax rates. Column 5 gives the projected revenues for Non-GST (diesel, petrol etc.) based on historical growth rate. Column 6 gives the total tax collection expected. Column 7 gives the notional value of tax collection, in case GST was not implemented and the state revenues subsumed within it continued to grow at the same rate as before.

Table 7.1 Projected revenue collection with and without GST

Rs. in crores

S.No.	Financial Year	Assured revenue (Under GST)	Projected GST (Without compensation)	Projected Non GST	Total projected tax	Projected growth if GST was not implemented
1	2	3	4	5	6	7
1	2017-18	4836+ (1294 Cr. of Apr, May & June)	1,972	1,654	7784 (3+5)	8,648
2	2018-19	7,350	4,802	1,883	9233 (3+5)	10,356
3	2019-20	8,379	4,918	1,813	10192 (3+5)	12,401
4	2020-21	9,552	4,000	1,400	10952 (3+5)	14,851
5	2021-22	10,890	4,180	1,505	12395 (3+5)	17,784
6	2022-23 (3 months)	3,104	1,095	406	3510 (3+5)	
	2022-23 (9 months)		3,285	1,219	4505 (4+5)	
	Total	3,104	4,381	1,625	8,015	21,296
7	2023-24	-	4,591	1,755	6346 (4+5)	25,502
8	2024-25	-	4,811	1,896	6707 (4+5)	30,539
9	2025-26	-	5,042	2,048	7090 (4+5)	36,570

Source: Department of Tax, GoUK

Note 1: The assured receipts are calculated with the growth rate of 14% on the net collection of the base year 2015-16.

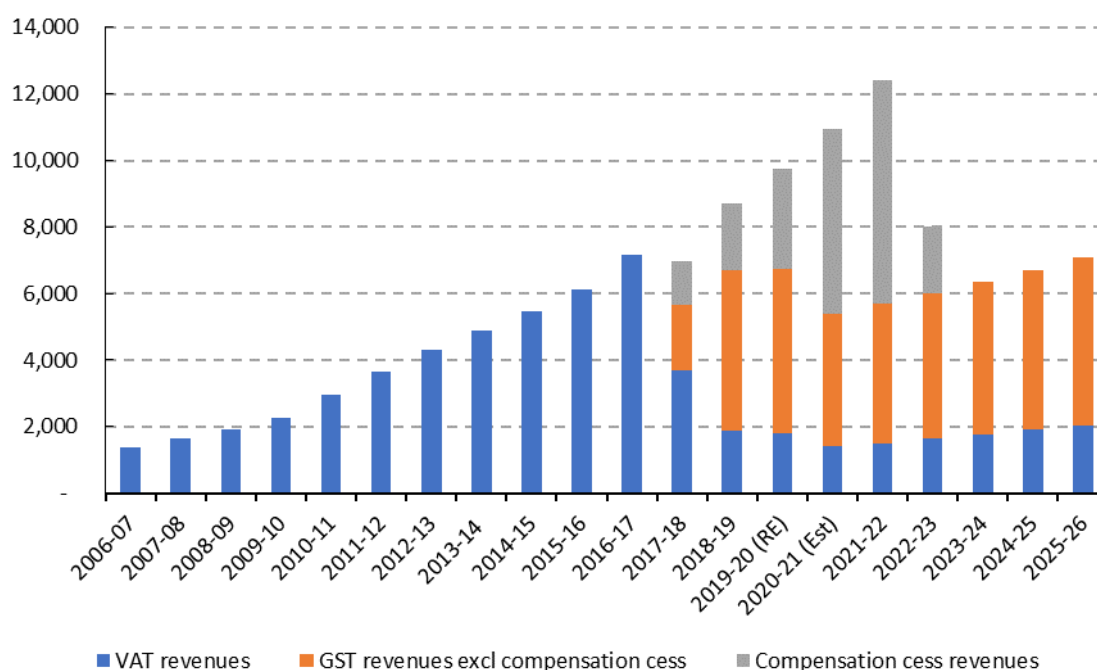
Note 2: As GST is a consumption-based tax, post GST, the growth of tax revenue is related more with increased consumption capacity rather than production. The tax growth rate is taken to be 4.5% in 2021-22 and 4.8% thereafter, by assuming a tax buoyancy of 0.6 on a 7.5% GSDP growth in 2021-22 and 8% GSDP growth rate thereafter. (Even then, 4.8% growth rate seems to be on the higher side since GST buoyancy for 2019-20 (RE) is estimated at a much lower level of 0.3)

Note 3: The growth rate for non-GST goods is estimated at 7.5% in 2021-22 and at 8.0% for 2022-23 onwards utilizing a buoyancy of 1.0. The estimate assumes an improvement in buoyancy taking into account an improvement in economic activity during the forecast period.

7.12 Table 7.1 and Chart 7.2 show that after including the impact of VAT revenues from petroleum products and liquor, Uttarakhand would suffer a revenue shock of the magnitude of Rs. 4,380 crores in FY 2022-23 compared to FY 2021-22 as a result of the loss of GST compensation for the nine-month period July 2022-March 2023. **Further, in FY 2023-24, the aggregate of GST revenues and VAT based revenues are estimated to fall to Rs. 6,346 crores, lower than FY 2021-22 estimates by Rs. 6,049 crores. The revenue projection for FY 2025-26 at Rs. 7090 crores is lower than the actuals in FY 2017-18 by Rs. 694 crores,** which shows that the growth will in fact be negative over a long period of time, adversely impacting the development and social welfare of the people. When compared to the scenario under which GST has not been implemented, (and presuming VAT/sales tax continued to grow at the previous rate of growth)

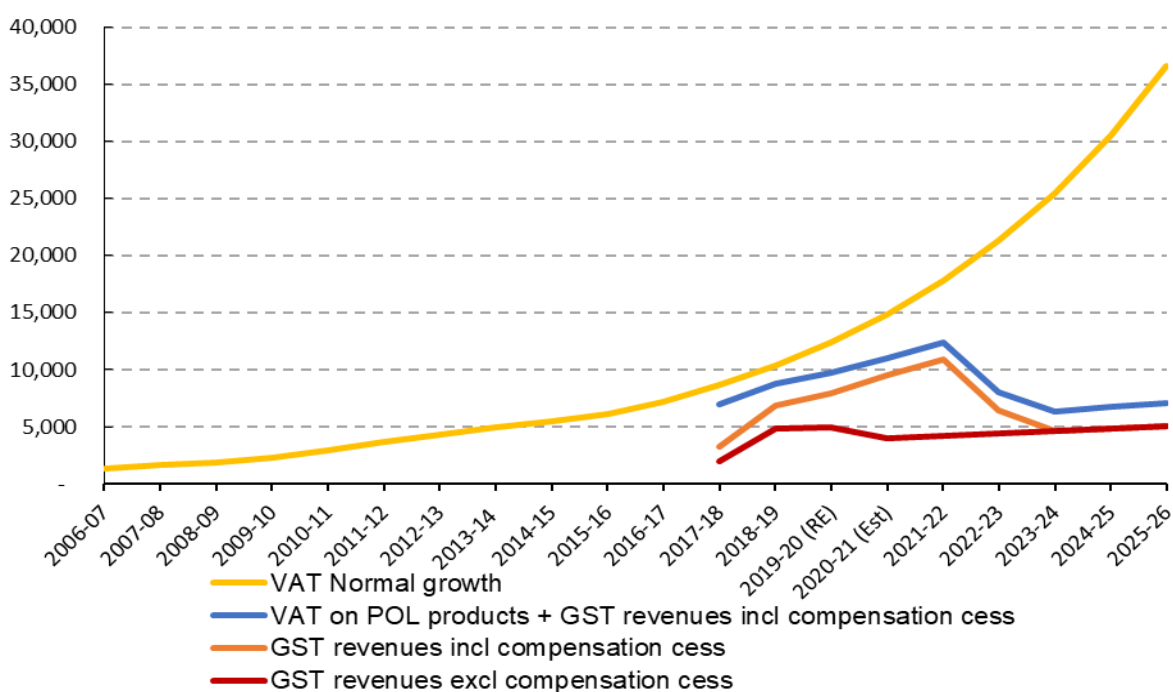
the projection of revenues under VAT regime in 2025-26 are estimated to be 5.2 times the projected revenues under VAT and GST together in the corresponding period. This is shown in Chart 7.3.

Chart 7.2: Year wise actual / projected receipts under VAT/GST (INR crores)



Source: (i) Department of Tax, GoUK (ii) Budget Document, GoUK

Chart 7.3: Year wise different scenario under VAT/GST (INR crores)



Source: (i) Department of Tax, GoUK (ii) Budget Documents, GoUK

This loss of revenue due to implementation of GST has an adverse impact on the resources available to the state and hence on its developmental activities. Another adverse impact is that given the imperative for prioritization of the competing needs and paucity of resources, capital expenditure would have to be curtailed drastically which in effect would lead to lower growth rate or even stagnation in the economy.

- 7.13 **Land Revenue (0029):** The share of land revenue in total collection is negligible as a major portion of it comes from collection charges of arrears. Land revenues fluctuate from year to year. They fell from Rs. 18.31 crores in FY 2010-11 to Rs.10.18 crores in FY 2011-12, rose sharply to Rs.159.51 crores in FY 2016-17 (which include onetime receipts against a land given to SIIDCUL by the state government) before falling again to Rs. 24.09 crores in FY 2017-18. In FY2018-19 land revenues amounted to Rs. 34 crores and are estimated at the same level in 2019-20 (RE), although provisional actuals are much lower. During the forecast period including 2020-21, it has been assumed to remain close to a level of Rs. 25 crores each year.
- 7.14 **Stamp Duty and Registration Fees (0030):** The average buoyancy achieved over the five-year period 2014-15 to 2018-19 is 0.8 and that over the four-year period 2014-15 to 2018-19 is 0.9. In line with JNNURM conditionalities, the stamp duty rate was brought down from 12% to 5% and the additional stamp duty was abolished. Although revenues from the stamp duty and registration fees seem to have stabilised, growth in this sector is not expected to be robust primarily due to the country wide slowdown in real estate markets and also due to promulgation of new regulation like RERA accentuated by the economic impact of the Covid-19 pandemic. Accordingly, a buoyancy of 0.9 has been assumed for the forecast period 2021-22 to 2025-26, the average achieved over the period 2015-16 to 2018-19. However, for 2020-21 we expect the amount of revenues to be Rs. 700 crores, well below the provisional estimates of Rs. 1069 crores for 2019-20, after taking into account the substantial adverse impact of Covid-19 on economic activity. In 2016-17 when the state had experienced a slowdown, buoyancy had turned negative.
- 7.15 **State Excise Duties (0039):** The average buoyancy over the period 2014-15 to 2018-19 was high at 1.7. But the rate of excise duties has been reduced with a view to check smuggling from other states. Moreover the per capita excise tax collection in Uttarakhand is Rs. 2324.56 as compared to Rs. 911.21 in UP and Rs.1953.42 in HP. Thus the state has reached a plateau in tax collection and the growth is likely to be much subdued in the coming

years. Further it can be seen that the buoyancy of state excise duty generally falls as nominal GSDP growth falls. For instance, the buoyancy fell to 1.0 in FY 2016-17 when GSDP growth was at 9.7%. Since nominal GSDP growth is assumed to remain low at 7.5% in 2021-22 and at 8.0% thereafter till 2025-26, a low buoyancy of 1.0 has been assumed for this period. However, for the year 2020-21, revenues to the tune of Rs. 2,000 crores are expected, much lower than the provisional collection of Rs. 2684 crores in 2019-20 as per latest available information, considering the adverse impact of the continued economic slowdown.

- 7.16 **Non-GST (0040):** The buoyancy of VAT on petroleum products fluctuates based on both the change in VAT rates as well as the consumption level in the economy which in turn has a close link with the global price of crude. It has averaged close to 0.8 over the period 2014-15 to 2018-19, varying widely between (-) 0.6 in 2017-18 and 1.6 in 2016-17. For the period 2021-22 and beyond it has been assumed at 1.0. However, for 2020-21 revenues under this head are estimated at Rs. 1,400 crores, approximately Rs. 400 crores lower than the level of Rs. 1806 crores in 2019-20 as per latest available information, due to a significant fall in economic activity on account of the Covid-19 pandemic.
- 7.17 **Taxes on Vehicles (0041):** Although the sector has grown at double digit rates in the past, this was mainly due to major reforms undertaken by the government and major rate revisions undertaken by the Government of India in FY 2016-17. However, a recessionary trend can be seen in 2019-20 (RE) during which buoyancy has been estimated to fall to 0.7. Provisional actuals (2019-20) as per latest available information show a sharp contraction in revenues to Rs. 849.2 crores as compared to Rs. 908.6 crores in 2018-19. Revenues for 2020-21 at Rs. 550 crores are estimated at approximately Rs. 300 crores below the levels of provisional actuals for 2019-20 considering the negative impact of the slowdown in economic activity due to the outbreak of Covid-19. During the forecast period buoyancy is expected to pick up and remain close to 1.0 as growth improves.
- 7.18 **Taxes and Duties on Electricity (0043):** Electricity duty is collected by the Uttarakhand Power Corporation on behalf of the state government and deposited in the government treasury. Electricity duty revenues have fluctuated widely in the recent past, ranging from Rs. 3 crores in FY 2012-13 to Rs. 506 crores in FY 2018-19. The primary reason for such fluctuations is that due to its loss-making financial position, the state owned Power Corporation deposits taxes only when its own fiscal resources allow it to do

so. Since the firm continues to remain financially stressed and is not expected to make substantial payments, the revenues under this head have been assumed at Rs. 100 crores during the entire period 2020-21 till 2025-26, close to the level of Rs. 39.3 crores estimated to be have been provisionally achieved in FY 2019-20 as per latest available information.

- 7.19 **Water Tax:** Under the head 0045, the main contributor is water cess. After the implementation of GST entertainment tax has been subsumed in GST. Water tax for electricity generation is being levied by the Irrigation Department of Uttarakhand on the hydro power projects, having generation capacity of more than 5 MW. **Water tax is determined on volumetric basis** i.e. cubic meter utilization of water meant for electricity generation linked with available head of the hydro power project. However, only the state's electricity generation companies are depositing tax in the state exchequer. The private companies have challenged this tax and the matter is sub-judice in Hon'ble High Court of Uttarakhand. Consequently, the provisional actuals under this head for 2019-20 based on latest available data are estimated to be less than Rs. 10 crores. Based on past experience and given the reluctance of taxpayers to pay tax, a nominal amount of revenue close to Rs. 50 crores is projected for 2020-21 with a marginal increase on an annual basis.

Non-Tax Revenues

- 7.20 Non-tax revenues have fluctuated over the past decade rising from Rs. 631 crores to Rs. 1,317 crores in 2013-14, falling to Rs. 1,110 crores in 2014-15 and then gradually rising again to Rs. 1,769 crores in 2017-18. In 2018-19, 2019-20 (RE) and 2020-21 (BE) pension transfers from Uttar Pradesh agreed as per the Uttar Pradesh Reorganisation Act, 2000 have led to a one-time spike in non-tax revenues. However, these pension transfers which were accumulated dues from the Government of Uttar Pradesh to the Government of Uttarakhand, are expected to dip considerably in 2020-21 and remain negligible thereafter. Considering all these factors, non-tax receipts like general, economic and social services, apart from the ones specifically mentioned below, are assumed to grow at 5.0% during the forecast period, a level slightly lower than the growth rate of tax revenues. Further given their volatile nature, the base year has been assumed to be 2018-19.
- 7.21 **Interest Receipts (0049):** As the PSUs in Uttarakhand are loss making, no interest receipts are expected from them. Only the power utilities pay interest

on the Government of India loans through the state government. An amount of Rs. 50 crores per year has been taken for this source during the forecast period.

- 7.22 **Dividend and Profits:** There are only a few PSUs in Uttarakhand and revenues from this head are meagre. An optimistic estimate of Rs. 40 crore equivalent has been assumed for this sector during the forecast period.
- 7.23 **Pension receipts (0071):** With respect to recoveries towards Pension and Retirement Benefits, the state received a sum of Rs. 500 crores in 2011-12, Rs.1045.98 crores in 2011-12 and Rs. 350.79 crores in 2013-14 from Uttar Pradesh as the share of pension apportionment for a period from 09th November 2000 to 31st March 2001. Further the higher pension receipts in 2018-19 and 2019-20 (RE) amounting to Rs. 1714.7 crores and Rs. 2563.6 crores respectively reflect the large apportionment from Uttar Pradesh for these two years. This amount is expected to fall to 863.6 crores in 2020-21. Thus pension receipts from Uttar Pradesh is not a continuous source of revenue, but a settlement of earlier pension dues. Further, due to its ad-hoc nature, the balance due on this account cannot be considered as an assured source of non-tax revenue for the state. Beyond 2020-21, the state is expected to receive a negligible amount under this head. Hence, a marginal amount of Rs. 60 crore per year has been assumed for the forecast period. The fall in pension receipts will have a substantial adverse impact on state finances especially revenue deficit given that it accounted for 51.9% of total non-tax revenues and 14.7% of revenue receipts in 2019-20 (RE).
- 7.24 **Forest:** In the case of non-tax revenues from forestry and wildlife, revenues from forestry have fluctuated between Rs. 300-400 crore during the period 2013-14 and 2018-19. With restrictions having been placed on felling of trees, a growth of 6% per annum has been assumed over the 2018-19 estimated actuals.
- 7.25 **Power:** Although, Uttarakhand has significant hydro power potential and can get a 12% royalty in the form of free power, any actual development of the power potential is not forthcoming in the near future due to various environmental and regulatory factors. The scope of generating any revenue through sale of surplus power has also dried up with the slowdown in domestic demand for electricity. There was an improvement in revenues in 2017-18 but this was mainly on account of book adjustment due to UDAY and some past pending arrears being paid by the power department. In fact, Uttarakhand has suffered from a power deficit in recent times and had been

a net purchaser of power. The CAGR from FY 2012-13 to FY 2018-19 in this sector is 3.7%. Considering all factors, the revenues from power sector has been estimated at Rs. 100 crores during the forecast period.

- 7.26 **Metallurgical Industries (0853):** The state government has undertaken major reforms in the functioning of this sector like online auction, establishment of special task force (STF) to check illegal mining, establishment of comprehensive data base, use of technology in the assessment of available material for mining among others, which has resulted in a CAGR of 32.0% from FY 2012-13 to FY 2018-19. But due to environmental regulations, mining activity has been severely restricted in Uttarakhand and this has had adverse revenue implications for this sector. Further, the slowdown in overall economic activity is expected to constrain revenue growth in this category to 5.0% per annum over the forecast period, equivalent to the overall average growth in non-tax revenues.

Revenue Expenditure Forecasts: Assumptions

- 7.27 The CAGR of revenue expenditure for different periods are given in table 7.2.

Table 7.2: CAGR of Revenue Expenditure

S.	Financial Years	CAGR (%)	CAGR (Excluding interest and pension expenditure)
1.	2011-12 to 2018-19	13.86	12.04
2.	2012-13 to 2018-19	14.94	13.39
3.	2013-14 to 2018-19	14.70	13.16
	Average	14.50	12.86

Source: Department of Tax, GoUK

- 7.28 Revenue expenditure is divided into general, social and economic services. It is evident from the above that the average growth rate of revenue expenditure over the previous years has been around 14.50%. If we exclude interest payments and pension expenditure then the growth in primary revenue expenditure, over the years is around 12.86%. **Hence a growth rate of 12.80% in primary revenue expenditure has been assumed for the forecast period.** The sectors where growth has been assumed to be

different from above are being explained below. Expenditure forecasts have been made by taking into account the spending requirements of the state on social and economic infrastructure and the committed liabilities of the State. The above growth rate is justified and balanced and **is substantiated by the long-term revenue expenditure growth rate of 14.50% from FY 2002-03 to FY 2018-19.**

- 7.29 The state has already given the benefit of the 7th Pay Commission to its employees and pensioners, hence the impact of arrears has been incorporated in the forecast. The payments of arrears are being given in two instalments during FY 2017-18 & FY 2018-19. However, the decision on the various allowances like HRA, TA etc. is yet to be finalized. The state government had constituted a committee to give recommendations regarding various allowances. The committee has submitted its report which is under consideration of the government. This is likely to increase the expenditure under allowance category by Rs. 350 crores per year. Another issue is regarding the revision of pensions (apart from 7th CPC) on the lines of government of India which is also under consideration by the state government. Their salaries and pension will be an additional burden on the state's budget. Though the impact of both salaries and pensions have not been incorporated in the forecast, it is likely to lead to increased expenditure to the tune of around Rs. 500 crores per year.
- 7.30 **Interest payments:** Despite the fall in interest rates, interest payments continue to consume a major share of revenue expenditure. This is a direct consequence of debt being contracted by the state to meet its expenditure needs. The forecast of interest payment has been made on the basis of interest burden of the existing debt stock as well as taking into account the new loans which are likely to be contracted in future. The new debt liabilities to be contracted by the state are taken at the rate of 5% of GSDP for FY 2020-21 as per the relaxation provided by the central government²¹, and at 3% of GSDP thereafter. Accordingly, the figures of the future interest payment have been estimated. Interest burden under each instrument of existing debt has been forecasted after considering the applicable interest rates.
- 7.31 **Pension Payments:** The growth rate of pension payment is given in table 7.3 below:

²¹ <https://pib.gov.in/PressReleasePage.aspx?PRID=1624661>

Table 7.3: Growth rate of Pension Payments

S.No.	Financial Year	Pension Payment	Growth Rate
1	2010-11	1141.72	
2	2011-12	1135.10	-0.58
3	2012-13	1365.68	20.31
4	2013-14	2130.67	56.01
5	2014-15	2451.91	15.08
6	2015-16	2627.82	7.17
7	2016-17	3170.28	20.64
8	2017-18	5033.47	58.77
9	2018-19	5396.21	7.21

Source: Department of Tax, GoUK

- 7.32 Every year on an average, 5000 people are retiring. These people have to be given gratuity, commutation and leave encashment, apart from the pension and GIS. Majority of the employees after 30 years of service will retire above level-8 of 7th CPC pay matrix. The minimum value of gratuity, commutation and leave encashment benefits that an employee will be entitled to will be Rs. 25 lac. If we include higher pay levels, the average would be higher around Rs. 30 lac. This implies a minimum expenditure burden of Rs. 1500 crores per year (5000 X Rs. 30 lac), without accounting for the pension receivable. On top of this, there will be a minimum 4% increase in DA (though in our opinion, a realistic assumption will be 6% of DA) and also increase in salary leading to an increase in pension. Further, through an order of the Supreme Court, 3,500 work charge or temporary employees of the government have been regularised. The government needs to provide pensions for these employees retrospectively from 2016-17 onwards. Besides these, the pension and gratuity for 2,768 employees on work charge basis who have recently retired need to be provided by the state government with retrospective effect for the last three years. These liabilities will be an additional permanent burden on state finances, from the perspective of provision of salary and pension for the currently serving, and pension and gratuity for the retired.

- 7.33 The CAGR of pension expenditure for FY 2012-13 to FY 2018-19 is 25.7%. The average rise in pension as per table 7.4 is 24.0%. Hence, given the substantial increase in pension due to 7th CPC and likelihood of civil equivalent of “one rank one pension” being implemented, the state government expenditure on the pension bill will increase in coming years and accordingly a conservative growth rate of 12.0% for the forecast period has been assumed.

Table 7.4: CAGR of Pension Expenditure

S.	Financial Years	CAGR (%)
1.	2010-11 to 2018-19	21.43
2.	2011-12 to 2018-19	24.95
3.	2012-13 to 2018-19	25.74
	Average	24.04

Source: Budget Documents, GoUK

- 7.34 Expenditure related to growth sectors such as medical and public health, water supply and sanitation, crop husbandry, village and small industries, roads and bridges, and tourism has been grown at rates higher than the overall average growth rate of 12.8%.
- 7.35 **Medical and Public Health:** The state has a pressing need to increase investment in medical and public health and appoint higher number of doctors. This becomes especially important in the wake of the outbreak of COVID-2019 and considering the fact that there is a greater need for the state to be well prepared in the foreseeable future for any kind of pandemics/ medical exigencies similar to that of COVID-19. Taking these factors into consideration, a growth rate of 14% per year has been assumed for revenue expenditure on medical and public health for the forecast period.
- 7.36 **Water Supply and Sanitation:** In water and sanitation sector, the state government is laying a lot of emphasis on the maintenance of the assets. Accordingly, keeping in view higher investment needs especially in drinking water in urban and rural areas a growth rate of 14% has been assumed for the forecast period.

- 7.37 **Crop Husbandry:** A new externally-aided project (EAP) has been sanctioned in this sector, hence a growth rate of 14% is assumed for the forecast period.
- 7.38 **Village and Small Industries:** A new EAP has been sanctioned in this sector. The state government is putting a lot of emphasis on promotion and development of service sector in the state. MSME is a priority growth driver of the state government, and hence a growth rate of 14% has been assumed for the forecast period.
- 7.39 **Road and Bridges:** The total road network in the state is around 40,000 Km. As against a requirement of more than **Rs. 1,000 crores per year** for the maintenance of this network, the state government is able to give only around Rs. 200 crores a year due to its limited fiscal capacity. Further Uttarakhand has very limited rail network making roads the lifeline of the state. Hence for proper upkeep and maintenance of this vast road network, a growth rate of 14% has been assumed for the forecast period.
- 7.40 **Tourism:** Tourism sector is the main growth driver of the state economy upon which the livelihood of a majority of the population depend. In FY 2017-18 the state government has introduced a new “**Home Stay Policy**”. Accordingly, given the higher expenditure required in publicity, implementation and promotion of various tourism policies, etc. a growth rate of 15% has been assumed for this critical services sector for the entire forecast period.
- 7.41 The recurrent natural calamities in the Himalayan state of Uttarakhand including the current outbreak of Covid-2019 has led to significant stress on state finances on a periodic basis. Taking note of the need for financing a larger expenditure towards disaster mitigation and management, the 15th FC has already allocated a higher amount of Rs. 1,041 crores towards the SDRMF in 2020-21 for Uttarakhand. Going by the earlier record of incidences in Uttarakhand, the government has assumed a higher growth of 12.8% over the forecast period under this category.

Capital Expenditure

- 7.42 **Statement 4** deals with the capital outlay component of the total expenditure. The capital outlay is divided into three broad categories viz. general services, social services and economic services. Uttarakhand is an infrastructure deficient state and need major investments in the area on urban infrastructure, roads including bridges and tunnels, irrigation, water sector,

power sector etc. The weak position of state finances has constrained the space available for undertaking capital expenditure which has fallen relative to GSDP from 3.1% in FY 2014-15 to 2.5% in 2018-19. To provide the population with the required infrastructure the capital outlay needs to be increased to close to 3% of GSDP, which also implies a revenue account balance given the fiscal deficit limit of 3% imposed through the FRBM Act. Consequently, the rate of growth in capital outlay has been fixed at 13% over the forecast period although the state would like to increase investment by a higher growth rate of more than 15%. A revenue deficit grant is imperative for the state to undertake the higher capital expenditure. Many new EAPs have been sanctioned in water supply, major irrigation, power sector which would require higher capital expenditure in the coming years. The CAGR of capital outlay excluding the expenditure under the head Food (0048) over the period FY 2011-12 to FY 2018-19 is 14.1%.

- 7.43 **Water Sector:** Uttarakhand is facing a severe water crisis as water supply to many rural habitations, and urban areas is highly stressed. A new EAP of the World Bank has already been approved by DEA and two new EAPs are under consideration of the state government. Hence given the high investment need and demand in the sector, a capital expenditure growth rate of 17% has been assumed for the forecast period.
- 7.44 **Road Transport Services:** Roads are the critical lifeline of the state and many villages in the state are yet to be connected with roads. The state government is planning a new EAP with ADB support, hence, given the high capital investment needs in this sector, a growth rate of 15% has been assumed for the forecast period.
- 7.45 **Urban, Power, Irrigation Sector:** A new EAP of ADB has been sanctioned in Urban sector and Power sector. Similarly, a new EAP has been sanctioned in the irrigation sector. Hence given the higher investment needs in these sectors a growth rate of 15% has been assumed for the forecast period for the above three sectors.

Capital Account: Receipts and Disbursements

Receipts

- 7.46 **Total debt receipts:** This includes internal debt, loans and advances from the central government and public account. The total debt receipts has been kept at the higher limit of 5% of forecasted GSDP for FY 2020-21 basis the relaxation provided by the central government recently in order to support the

state economy to cope with the negative impact of COVID-19. For the remaining forecast period, that is, from 2021-22 onwards the total debt receipts has been kept at 3.0% of GSDP.

- 7.47 **Internal debt receipts:** This is derived residually after accounting for loans and advances from the Central Government, and public account.
- 7.48 **Loans and advances from the Central Government:** Loan portion of the externally aided projects has been assumed at Rs. 220 crore on an annual basis over the forecast period based on loan requirement of Externally Aided Projects (EAPs).

Disbursements: Repayment of debt

- 7.49 **Internal debt:** Repayments of loans from market borrowing, NABARD, NCDC, small savings, and power bonds have been worked out on the basis of past loans as well as fresh borrowings.
- 7.50 **Central government loans:** Repayment of non-plan block loan has been worked out as per the repayment schedule.
- 7.51 **Loans and Advances by the State Government:** These generally vary widely from year to year. They have been assumed to grow at a constant rate of 10% except for power sector for which loans are taken as per the needs of the power sector enterprises.

Summary and Overview of Forecasts

- 7.52 Table 7.5 provides an overview of the projected state finances till 2025-26. Table 7.6 gives values as a share of the corresponding GSDP. It may be noted that the increase in the fiscal deficit and revenue deficit in FY 2020-21 and beyond is the result of the adverse impact of the Covid-19 pandemic on economic activity and consequently on revenues. The sudden jump in both fiscal and revenue deficit in 2021-22 and the remaining forecast period is the result of non-inclusion of any fiscal transfers in the form of share in central taxes or grants from the centre as per the formula given by the Finance Commission besides the anticipated subdued revenues in these years.
- 7.53 Table 7.5 gives a summary of forecasts in absolute terms (INR Cr) at current prices.

Table 7.5: Forecast: Revenue and Expenditure Aggregate

In Rs. crores

HEADS	Actual	RE	Re-estimated	Forecast				
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
1	2	3	4	5	6	7	8	9
I. Revenue Receipts (1+2)	31,216.62	35,502.58	36,854.49	17,834.08	13,807.69	12,517.89	13,284.24	14,101.15
1. State's Own Revenue	15,498.16	17,391.30	11,715.33	11,124.08	11,798.85	12,517.89	13,284.24	14,101.15
i. Total Tax Revenue	12,188.32	12,448.88	8,825.94	9,349.39	9,943.55	10,577.66	11,254.57	11,977.31
ii. Total Non-Tax Revenues	3,309.84	4,942.42	2,889.39	1,774.68	1,855.31	1,940.23	2,029.67	2,123.84
2. Transfers from the Centre (3+4)	15,718.46	18,111.28	25,139.16	6,710.00	2,008.84	0.00	0.00	0.00
3. Share in Central Taxes	8,011.59	7,520.71	8,657.35	0.00	0.00	0.00	0.00	0.00
4. Grants from Centre	7,707	10,591	16,482	6,710.00	2,008.84	0.00	0.00	0.00
i. Grants under FC	484.86	772.61	5,078.00					
ii. Grants other than FC	7,222.01	9,817.96	11,403.81	0.00	0.00	0.00	0.00	0.00
GST Compensation cess	2,037.0	3,017.3	5,552.0	6,710.0	2,008.8			
II. Total Revenue Expenditure (1+2+3+4)	32,196.31	35,481.08	42,715.77	48,196.50	54,174.29	60,876.66	68,393.25	76,824.94
1. General Services	13,525.14	15,026.50	17,157.26	20,177.33	22,546.37	25,173.55	28,088.00	31,322.26
i. Interest Payments	4,474.82	5,137.19	6,218.32	6,915.65	7,668.77	8,482.14	9,360.57	10,309.28
ii. Pension and Other Retirement Benefits	5,396.21	5,742.69	6,304.87	7,581.29	8,491.04	9,509.97	10,651.16	11,929.30
iii. Gen. Serv. other than Interest & Pension	3,654.11	4,146.62	4,634.07	5,680.39	6,386.56	7,181.45	8,076.27	9,083.68
2. Social Services	12,209.36	12,546.47	16,610.32	18,206.98	20,576.89	23,255.67	26,283.63	29,706.34
3. Economic Services	5,002.49	5,507.62	6,644.41	7,254.99	8,212.54	9,296.72	10,524.32	11,914.34
4. Grant In Aid to Local Bodies	1,459.32	2,400.49	2,303.78	2,557.20	2,838.49	3,150.72	3,497.30	3,882.00
III. Capital Expenditure	6,368.83	6,725.16	7,635.49	9,900.31	11,311.36	12,926.18	14,774.63	16,891.00
i. Capital Outlay	6,185.16	6,493.92	7,382.56	9,597.40	10,948.47	12,491.31	14,253.37	16,266.10
ii. Loans & Advances (gross)	183.67	231.24	252.93	302.92	362.90	434.88	521.25	624.91
IV. Total Capital Receipts	7,414.77	6,367.13	13,298.75	8,801.63	9,498.96	10,252.08	11,065.45	11,943.88
i. Misc. Capital Receipts								
ii. Internal Debt (Net)	5,156.35	3,494.80	12,965.27	8,361.63	9,063.96	9,822.08	10,640.45	11,523.88
iii. Loans from Centre (Net)	61.32	118.89	88.89	155.00	150.00	145.00	140.00	135.00
iv. Recoveries of Loans & Advances	26.92	29.44	34.59	35.00	35.00	35.00	35.00	35.00
v. Outstanding ways and means advance (net)								
vi. Others (Net)	2,170.18	2,724.00	210.00	250.00	250.00	250.00	250.00	250.00
a. Inter-State Settlement (net)								
b. Contingency Fund (net)	190.81	-276.00	-250.00	50.00	50.00	50.00	50.00	50.00
c. Public Account (net)	1,979.37	3,000.00	460.00	200.00	200.00	200.00	200.00	200.00
V. Revenue Deficit (II-I) *	979.69	-21.50	5,861.28	30,362.42	40,366.60	48,358.78	55,109.01	62,723.79
VI. Fiscal Deficit [(II+III) - (I + IV (i + iv))]	7,321.60	6,674.22	13,462.18	40,227.74	51,642.96	61,249.96	69,848.64	79,579.79
VII. GSDP at Current Prices	2,45,894.60	2,68,025.10	2,70,283.21	2,90,554.45	3,13,798.81	3,38,902.71	3,66,014.93	3,95,296.12
VIII. GSDP at Constant Prices (2011-12 Series)	1,93,272.78	2,04,869.14	1,97,698.72	2,05,606.67	2,14,858.97	2,24,527.63	2,34,631.37	2,45,189.78
Memo Item								
State's own tax revenues incl GST compensation cess	14,225.32	15,466.13	14,377.94	16,059.39	11,952.39	10,577.66	11,254.57	11,977.31
State's own revenue incl. GST compensation cess	17,535.16	20,408.55	17,267.33	17,834.08	13,807.69	12,517.89	13,284.24	14,101.15
Nominal GSDP growth	9.0	0.8	7.5	8.0	8.0	8.0	8.0	9.0

Source: Department of Finance, GoUK. Note: -ve value indicates surplus. BE indicates budgeted figure for FY 2018-19

7.54 Table 7.6 gives the corresponding values as percentage of GSDP at current prices.

Table 7.6: Forecast: Revenue and Expenditure Aggregates

(% of GSDP)

HEADS		RE	Reassess ed	Forecast				
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
1	2	3	4	5	6	7	8	9
I. Revenue Receipts (1+2)	12.70	13.25	13.64	6.14	4.40	3.69	3.63	3.57
1. State's Own Revenue	6.30	6.49	4.33	3.83	3.76	3.69	3.63	3.57
i. Total Tax Revenue	4.96	4.64	3.27	3.22	3.17	3.12	3.07	3.03
ii. Total Non-Tax Revenues	1.35	1.84	1.07	0.61	0.59	0.57	0.55	0.54
2. Transfers from the Centre (3+4)	6.39	6.76	9.30	2.31	0.64	0.00	0.00	0.00
3. Share in Central Taxes	3.26	2.81	3.20	0.00	0.00	0.00	0.00	0.00
4. Grants from Centre	3.13	3.95	6.10	2.31	0.64	0.00	0.00	0.00
i. Grants under FC	0.20	0.29	1.88	0.00	0.00	0.00	0.00	0.00
ii. Grants other than FC	2.94	3.66	4.22	0.00	0.00	0.00	0.00	0.00
GST Compensation cess	0.83	1.13	2.05	2.31	0.64	0.00	0.00	0.00
II. Total Revenue Expenditure (1+2+3+4)	13.09	13.24	15.80	16.59	17.26	17.96	18.69	19.43
1. General Services:	5.50	5.61	6.35	6.94	7.18	7.43	7.67	7.92
i. Interest Payments	1.82	1.92	2.30	2.38	2.44	2.50	2.56	2.61
ii. Pension and Other Retirement Benefits	2.19	2.14	2.33	2.61	2.71	2.81	2.91	3.02
iii. Gen. Serv. other than Interest & Pension	1.49	1.55	1.71	1.96	2.04	2.12	2.21	2.30
2. Social Services	4.97	4.68	6.15	6.27	6.56	6.86	7.18	7.51
3. Economic Services	2.03	2.05	2.46	2.50	2.62	2.74	2.88	3.01
4. Grant In Aid to Local Bodies	0.59	0.90	0.85	0.88	0.90	0.93	0.96	0.98
III. Capital Expenditure	2.59	2.51	2.82	3.41	3.60	3.81	4.04	4.27
i. Capital Outlay	2.52	2.42	2.73	3.30	3.49	3.69	3.89	4.11
ii. Loans & Advances (gross)	0.07	0.09	0.09	0.10	0.12	0.13	0.14	0.16
IV. Total Capital Receipts	3.02	2.38	4.92	3.03	3.03	3.03	3.02	3.02
i. Misc. Capital Receipts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ii. Internal Debt (Net)	2.10	1.30	4.80	2.88	2.89	2.90	2.91	2.92
iii. Loans from Centre (Net)	0.02	0.04	0.03	0.05	0.05	0.04	0.04	0.03
iv. Recoveries of Loans & Advances	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
v. Outstanding ways and means advance (net)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
vi. Others (Net)	0.88	1.02	0.08	0.09	0.08	0.07	0.07	0.06
a. Inter-State Settlement (net)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b. Contingency Fund (net)	0.08	-0.10	-0.09	0.02	0.02	0.01	0.01	0.01
c. Public Account (net)	0.80	1.12	0.17	0.07	0.06	0.06	0.05	0.05
V. Revenue Deficit (II-I) *	0.40	-0.01	2.17	10.45	12.86	14.27	15.06	15.87
VI. Fiscal Deficit [(II+III) - (I + IV (i + iv))]	2.98	2.49	4.98	13.85	16.46	18.07	19.08	20.13
Memo Item								
State Own tax revenues including GST compensation cess	5.79	5.77	5.32	5.53	3.81	3.12	3.07	3.03
State own revenues incl GST compensation cess	7.13	7.61	6.39	6.14	4.40	3.69	3.63	3.57

Source: Department of Finance, GoUK. Note: -ve value indicates surplus. BE indicates budgeted figure for FY 2018-19.

- 7.55 The fall in the ratio of state own tax revenues (excluding GST compensation cess) relative to GSDP from 4.96% in FY 2018-19 to 3.22% in FY 2021-22 reflects a) the lower expected buoyancy of state GST revenues (excluding GST compensation cess) based on its past performance and b) the adverse impact of Covid-19 on economic activity and consequently all streams of tax revenues. Further state own tax revenues continue to fall over the forecast period reaching 3.03% in FY 2025-26 due to an expected slow recovery

process combined with a low buoyancy for GST. State own tax revenues including GST compensation cess also fall to 5.53% of GSDP in FY 2021-22 from 5.79% in FY 2018-19. Further, with the compensation period coming to an end in June 2022, this ratio dips sharply to 3.81% in FY 2022-23 and further to 3.03% in FY 2025-26. Thus, the state's fiscal position weakens considerably in the absence of GST compensation receipts. This would translate into a higher revenue deficit, and consequently lesser space to undertake critical capital expenditure.

Constitutional position regarding revenue deficit grant

- 7.56 In the past post devolution, non-plan revenue deficits were obtained by adding the respective state's share in central taxes to the pre-devolution deficit assessed in a normative manner so as to obviate the effect of inadequate revenue effort or excessive expenditure. However, since the distinction between plan and non-plan has been obliterated, the methodology to assess the gap needs to be worked out wherein the interests of the states are duly protected.

Table 7.7: Plan, Non-Plan Revenue Expenditure in various years

S.No.	FY	Revenue Expenditure (Rs. in crores)		As % of Revenue Expenditure	
		Non Plan	Plan	Non Plan	Plan
1	2010-11	9138.58	2472.47	78.72	21.28
2	2011-12	10654.09	2321.11	82.11	17.89
3	2012-13	11532.46	2427.76	82.61	17.39
4	2013-14	13449.43	2766.97	82.94	17.06
5	2014-15	15531.53	5632.17	73.39	26.61
6	2015-16	16698.21	6388.24	72.33	27.67
7	2016-17	18927.60	6343.89	74.90	25.10
	Average			78.14	21.86

Source: Uttarakhand Finance Account, AG

- 7.57 It is evident from the above table that the ratio of non-plan revenue expenditure to total revenue expenditure averages around 78%. Revenue deficit grants have been given by various Commissions based on non-plan revenue deficit. As the distinction between plan and non-plan expenditure has been abolished, the **15th FC is requested to accordingly take the average of 78% of total revenue expenditure for calculation of revenue deficit grants.**

- 7.58 Grants to supplement the revenues of a state that are assessed to be in need of revenues based on suitable principles are mandated by Article 275 (1) of the Constitution. Its rationale is the equalization formula based on the fiscal needs and fiscal capacity of different states due to the different development status of the states. It takes into consideration the present development status and future needs of the states, in order to provide equal level of services to all citizens of the country, irrespective of their place of stay, so that they can fully realise their human potential.
- 7.59 As discussed in chapter 4 the state of Uttarakhand lost heavily due to the recommendation of the 14th FC. The buoyancy in GST revenues, which is estimated at 0.3 in 2019-20 (RE) is also forecasted to be much lesser than 1. The only saving grace is the compensation being received by the state, but that is only till 30th June 2022. However, the current trend suggests that the GST compensation amount is received after much delay and without much certainty. After June 2022 the state is staring at a fiscal abyss. The ongoing economic slowdown is also likely to put pressure on the state's own revenues as well as lead to lower central transfers due to a reduction in the divisible pool of Centre's gross tax revenues. This situation is accentuated by uncertainties relating to Covid-19 which may require increased social sector expenditure particularly on medical and health services. Keeping in mind that Uttarakhand (a) is largely a production driven economy, a characteristic which contributes to low fiscal capacity under the GST regime which is consumption driven, (b) has a relatively higher unit cost of provision of public services due to difficult terrain, (c) bears a significant opportunity cost due to large forest cover and stringent environmental regulations, (d) has inadequate infrastructure and (e) has a large international boundary, **the state government requests the 15th FC to provide adequate transfers by way of both devolution and grants. It is strongly proposed that in times of economic uncertainties which is the characteristic of the current scenario, we earnestly request for an increase in the revenue deficit grant for the state.** This will enable the state government to fulfil all its constitutional duties towards its citizens and to the rest of the country.

Chapter 8

Eco-system services: compensation for externalities

According to a report titled "Composite Water Management Index" (CWMI) released by NITI Aayog in June, 2018, India is suffering from **the Worst Water Crisis** in its history, with about 60 crore people facing high to extreme water stress and about two lakh people dying every year due to inadequate access to safe water. The report also noted that "By 2030, the country's water demand is projected to be twice the available supply, implying severe water scarcity for hundreds of millions of people and an eventual **6% loss to the country's GDP.**"

- 8.1 Drying up of major rivers in India, drying up of small rivers and springs in Uttarakhand, high frequency of flash floods and disasters in Himalayan region, increasing frequency of sandstorm and hailstorms, acute air pollution in winter in almost all major cities in the country, decreasing ground water level in almost every part of the country etc. are not isolated events, but are linked to larger climate change events. Through these events, nature is sending very unambiguous signals to effect a change in the behaviour and priorities of the human civilization so as to preserve the ecosystem to sustain ecosystem services for posterity.
- 8.2 River Yamuna is slowly drying up. One of the reasons is large scale urbanization in the catchment and encroachment in the river basin area but the main cause is the change in Himalayan ecosystem and retreating glaciers. Uttarakhand is the place of origin of major rivers of North India like the Ganges, Yamuna, Mahakali, Saryu etc. If anything goes wrong in Uttarakhand, **a major part of the country (around 40% of the population) will be adversely affected directly or indirectly.** The crisis can only be averted by preservation of Himalayan ecosystem through more investment in Himalayan states in lieu of their contribution to ecosystem services.
- 8.3 The drying up of river and water resources along with loss of soil health due to erosion or other reasons affects the whole primary sector, a large portion of secondary sector and that portion of services sector which caters to primary and agriculture dependent secondary sector. It requires multipronged strategy to preserve the ecosystem and improve the quantity and quality of ecosystem services.

- 8.4 The United Nations 2004 Millennium Ecosystem Assessment (MEA) and The Economics of Ecosystems and Biodiversity (TEEB) grouped ecosystem services into four broad categories:
- a. Provisioning services which include food, timber, water, aromatic and medicinal herbs etc.
 - b. Regulating services which lead to climate control, carbon sequestration, air quality, moderation of extreme events etc.
 - c. Habitat and supporting services like maintenance of biodiversity and gene diversity etc.
 - d. Cultural services like recreation, tourism etc.

Himalayan Mountain Ecosystem and its significance for Ecosystem Services

“Mountains are the beginning and the end of all natural scenery.”

-John Ruskin

- 8.5 Himalayan mountain ecosystem is important for economic growth and human well-being as they provide numerous public goods and services including fresh water, food, lifesaving medicinal products, energy, biodiversity & associated traditional knowledge, as well as cultural diversity.
- 8.6 Himalayan mountains are characterized by high biodiversity. Because of the compression of climatic life zones with altitude and small-scale habitat diversity caused by different top climates, mountain regions are commonly more diverse than lowlands and are thus of prime conservation value. They support about one quarter of terrestrial biodiversity, with nearly half of the world's biodiversity hot spots concentrated in mountains.
- 8.7 The Himalayan Mountains are among the most fragile environments in the world and among the most vulnerable ecosystem to catastrophic events. The recent unfortunate developments in the state of Uttarakhand have been testimony to this fact. If mountains become degraded or fail to generate services, the costs will be severe for the entire country.
- 8.8 Strengthened highland-lowland linkages improve sustainability for both upstream and downstream populations. The environmental conservation and sustainable land use in the Himalayan Mountains are not only a necessary condition for sustainable local livelihoods, they are also key to human well-being for nearly 50% of the country's population who live downstream and depend on mountain resources.

Uttarakhand and its unique significance for the nation

8.9 Uttarakhand has 0.827% share in all India population, 1.632% share in total geographical area of the country and 4.77 % share in total forest cover of the country. India has 0.266 Km² forest cover per 1000 population, whereas Uttarakhand has 1.339 Km² forest cover per 1000 population. Moreover, the percentage area under National Parks and Wildlife Sanctuaries is very high in Uttarakhand. The habitations/villages of the State are interspersed with the forest areas. Table 8.1 shows that with a share of 33.4%, Uttarakhand ranked 6th in terms of the share of forest area in total area of the state.

Table 8.1: State wise area under forest

Sl.no	States	Area	Forest area	Share of forest area in total area of the state
		km2	km2	
1	Arunachal Pradesh	83,743	51,676	61.7
2	Tripura	10,486	5,902	56.3
3	Meghalaya	22,429	9,839	43.9
4	Sikkim	7,096	2,656	37.4
5	Nagaland	16,579	5,866	35.4
6	Uttarakhand	53,483	17,853	33.4
7	Manipur	22,327	7,418	33.2
8	Goa	3,702	1,114	30.1
9	Chhattisgarh	1,35,192	39,279	29.1
10	Kerala	38,852	11,070	28.5
11	Mizoram	21,081	5,992	28.4
12	Odisha	1,55,707	28,337	18.2
13	Himachal Pradesh	55,673	9,815	17.6
14	Assam	78,438	12,989	16.6
15	Jharkhand	79,716	12,284	15.4
16	Madhya Pradesh	3,08,252	41,134	13.3
17	Karnataka	1,91,791	24,946	13.0
18	Tamil Nadu	1,30,060	14,651	11.3
19	Andhra Pradesh	1,62,923	16,008	9.8
20	Maharashtra	3,07,713	29,388	9.6
21	Telangana	1,12,122	10,334	9.2
22	West Bengal	88,752	7,141	8.0
23	Bihar	94,163	3,592	3.8
24	Gujarat	1,96,244	5,578	2.8
25	Uttar Pradesh	2,40,928	6,686	2.8
26	Punjab	50,362	814	1.6
27	Rajasthan	3,42,239	4,418	1.3
28	Haryana	44,212	480	1.1
	All States	30,54,265	3,87,260	

Source: State of forest Report (2017), Forest Survey of India, 15th FC first report

Forest and Biodiversity

- 8.10 The forests of India mitigate the impact of pollution resulting from economic activity, whether of agricultural or industrial origin. They provide a wide variety of services including carbon sequestration, sediment control and soil conservation, ground water recharge, protection from extreme weather events and preservation of bio-diversity.
- 8.11 The positive externalities of forests benefit population in other states in terms of provision of goods and ecosystem services. However, there are negative externalities relating to forgone economic opportunities, the costs of which have to be borne by the forest-rich states. These negative externalities arise because of the difficulties in obtaining clearances for the purpose of undertaking developmental projects in forest areas. Often there are long procedures for getting such clearances leading to delays and cost escalations.
- 8.12 The need for recognizing the implications of these externalities in the context of the emergence of environmental federalism has been recognized by the recent Finance Commissions starting mainly from the 12th FC which gave certain earmarked grants for environmental purposes. The 13th FC increased the amount of these grants. The 14th FC included forests as a factor in tax devolution but did not give separate grants for forests. These approaches are different in nature. There are two approaches for dealing with environment-related externalities emanating from forests and minerals. One approach is to focus on the compensatory aspect which aims at compensating states for bearing economic losses, both direct and in terms of forgone economic opportunities also called opportunity cost. The second approach is to promote environmental development through supporting or encouraging the development of forests. In the first case, the approach of the 14th FC is the relevant one which provides an unconditional general fiscal transfer. On the other hand, the approach of the 12th FC and 13th FC focused on promoting environmental development through grants. The first report of the 15th FC has retained the criterion relating to share of forest area in its scheme of devolution. It has however increased its weight to 10% from 7.5% as per the devolution scheme of 14th FC. Since the two approaches namely unconditional general fiscal transfers and grants for promoting environmental development serve different purposes, we propose that both should be given due recognition by 15th FC in its final report. In this context it would be beneficial to increase the weight attached to this criterion further to 15%

along with unconditional grants compensating for the opportunity cost borne by the state.

Forests and Environmental Federalism

- 8.13 Forests have been one of the most contentious domains in environmental federalism in India. Their management is distributed between the centre, state and to some extent local bodies depending upon the nature of forests and subject area. Forests and wildlife were recognised as state subjects at the time of framing of the Constitution but were transferred from the state list to the concurrent list through the 42nd Amendment to the Constitution, 1976. Concern for conservation of forests has been cited as the primary reason for making forests a subject of parallel jurisdiction of central and state governments.
- 8.14 The Forest Conservation Act enacted in 1980 made central government approval mandatory before diverting forestland for non-forest use. This was reinforced by the ruling of Supreme Court in T.N. Godavarman vs Union of India. Similarly, in Centre for Environmental Law, (World Wide Fund) WWF vs Union of India, approval from Indian Board of Wildlife was mandated before de-notification of any protected area by the states.
- 8.15 The Indian Forest Act, 1927 defined the procedure for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. The Act aims to regulate movement and transit of forest produce. It also defines what constitutes a forest offence, acts prohibited inside a Reserved Forest, and penalties that can be levied for violations.
- 8.16 Thus the combined effect of the forest laws and judgments delivered by the Supreme Court is that while state governments are empowered to notify reserve forests and protected areas, they have to take prior permission from the Centre before diverting forest land toward any other non-forestry purposes.
- 8.17 Forests are associated with large positive externalities in terms of their environmental benefits and large costs in terms of value of forgone economic opportunities. The environmental benefits accrue largely to other states whereas the economic opportunity cost is borne almost entirely where the forest is located. With a high share of forests, Uttarakhand willingly bears this cost but argues strongly for appropriate recognition of the benefits that flow to other states. In the context of environmental federalism, Uttarakhand should be adequately compensated for playing this role.

- 8.18 While the benefits of the forest linked positive externalities accrue largely to population outside the state, there are certain negative externalities, the costs of which have to be borne by the citizens of the forest-rich states such as Uttarakhand. These negative externalities arise because of the difficulties imposed by the central government on account of environmental concerns for giving forest clearance to developmental projects including hydropower projects. Getting forest clearances is extremely difficult and there are huge cost escalations of these developmental projects because of continuing delays in obtaining the clearances.
- 8.19 The wide variations in the topography and climate in Uttarakhand has given rise to diverse ecosystems, supporting large taxonomic variability in flora and fauna. Uttarakhand is among the few states in India that has more than 60% of its geographical area under natural vegetation cover (FSI, 2011) with a rich and diverse array of forest types from tropical to alpine types. With 12 National Parks and Wildlife Sanctuaries covering almost 14% of the total area, the Biological Richness (BR) in the region is quite high. There are about 4700 species of flowering plants and about 146 species of fodder plants. The rich forest cover is not only intricately associated with the hydrological balance but also forms the life support system for the local inhabitants.

Soil and Agriculture

- 8.20 It is ironical that sediments due to landslides & soil erosion instrumental in making the lowland areas prosperous are actually ruining the mountain agriculture. The state is also under constant threat of water erosion. Nearly 65% of the area is affected with soil erosion hazard (more than the tolerance limit of 10t/ha/yr) and nearly 11% area is affected with sheet erosion.

Water

- 8.21 Uttarakhand state is considered as the **"Water Tower" of India**. The average annual rainfall is about 1600 mm spread over a period of about 100 days, which is much above the national average of 1085 mm. It is the storehouse of glaciers which feed the Ganges river system consisting of Alaknanda, Bhagirathi, Yamuna, Ramganga, Sharda and Kali rivers. About 13% of the area of state is snow covered containing over 900 glaciers. The rivers emanating from these glaciers feed millions of people residing in the Indo-Gangetic alluvial plains, yet the hilly part of the state suffers from water crisis due to heterogeneity in rainfall and very high runoff owing to rugged topography.

- 8.22 The status of knowledge regarding the present day glaciers and their environment hold the key to our understanding of the past, present and future environmental conditions. The impact of global warming is already visible in the Himalayas. It is estimated that the 30 km long Gangotri Glacier is receding rapidly, the rate of retreat during the period 1962-1991 being about 20 mt./yr. Various climate change factors including human activity are believed to be the reasons for the enhanced rate of retreat.

Valuation of Ecosystem Services

- 8.23 The precious ecosystem services provided by Uttarakhand need to be valued, but there are issues regarding the way of valuation. Estimating the change in the value of the flow of benefits provided by an ecosystem requires estimation of the change in physical flow of benefits and tracing through and quantifying a chain of causality between changes in the ecosystem conditions and human welfare. A common problem in valuation is that information is only available on some of the links in the chain and often in incompatible units.
- 8.24 The following valuation of ecosystem services of Uttarakhand is based on the **interim report submitted by Indian Institute of Forest Management (IIFM), Bhopal on “Green Accounting of Forest Resources, Framework for Other Natural Resources and Index for Sustainable Environmental Performance for Uttarakhand state & Capacity Building on Environmental Statistics and Green Accounting.”**

Various Ecosystem Services

Wood	Recreation	Water Provisioning	Climate Regulation	Research, Education and Nature interpretation	
NTFP	Pollination	Employment Generation	Nutrient Retention	Moderation of extreme events	Waste Assimilation
Food	Carbon Storage	Water Purification	Biological Control	Nursery Function and Habitat Refugio	
Fodder	Cultural Heritage	Gas Regulation	Soil Conservation	Gene pool and Bio prospecting	Water Provisioning

- 8.25 **Valuation of Water:** Water is most important service Uttarakhand gives to the nation. It gives irrigation, drinking water supply and clean energy mainly to the downstream states and lowland dwellers. It brings prosperity to 40% of Indian population and is invaluable for our civilization. It cannot be valued in monetary terms as data available is not adequate.

- 8.26 **Valuation of Fertile Alluvial soil:** It is invaluable, as it is essential for the fertility of agricultural land of whole Gangetic Plain. A monetary value cannot be placed on this, as data is not available.
- 8.27 **Valuation of clean Hydropower Energy:** In India, we are burning around 3000 (High Grade)-7000 (Low grade) tonnes of Coal to produce 1 MW of electricity in a year producing a huge amount of Greenhouse Gases (GHGs). This environmental damage can be reduced to a great extent by using clean hydropower energy. Moreover, dams built for hydro-power generation bring a number of benefits to the downstream habitations and lowland dwellers like reduced flooding, irrigation benefits, drinking water supply and clean energy.
- 8.28 **Valuation of Cultural and Spiritual Services:** These services can only be felt and cannot be valued in monetary terms.
- 8.29 **Valuation of Forest Ecosystem:** The benefits from forest can be categorized into stock and flow benefits. Broadly, stock benefits refer to potential supply, while flow benefits refer to real feasible flow of benefits. Thus, standing timber and carbon stock are stock benefits and carbon sequestration is a flow benefit.

Table 8.2: Value of Standing Timber

S.No.	District	Value (in crore)
1	Almora	17795.00
2	Bageshwar	15670.00
3	Pithoragarh	64632.60
4	Champawat	Data not available
5	Nainital	64569.60
6	U.S. Nagar	Data not available
7	Pauri Garhwal	80915.50
8	Rudraprayag	67224.70
9	Chamoli	94626.30
10	Tehri	90412.80
11	Uttarkashi	153940.00
12	Dehradun	63219.00
13	Hardwar	8096.60
Total		721102.10

Source: IIFM Study, 2017

- a. **Standing Timber:** Growing stock of standing timber in each district, shown in table 8.2, was sourced from FSI and the economic value of timber at district level is calculated by deriving the weighted average selling price of wood across the state for FY 2013-2014 @ Rs. 19455/m³. Total growing stock in Uttarakhand accounted to approximately 370.65 million.
- b. **Gene Pool Protection:** The economic value of gene-pool protection is envisaged in terms of its biological information value and its insurance value. Biodiversity is not only a source of new drugs with large market potential, but is also a very important source of germ-plasm for agricultural crops. The wild cultivars and crop wild varieties serve as the world's repositories of crop genetic diversity and represent a vital source of genes that can ensure future food security.
- c. **Insurance Value:** The insurance value of forest areas relates to the role of biodiversity in guaranteeing resilience of ecological systems at the local, regional, and national scale, and thereby guaranteeing service provision in the future.
- d. **Carbon Storage:** Carbon storage in forest biomass (biological material) is an essential attribute of stable forest ecosystems and a key link in the global carbon cycle.
- e. **Carbon Sequestration:** Carbon sequestration is the process involved in carbon capture and the long-term storage of atmospheric carbon dioxide and other forms of carbon to mitigate global warming.
- f. **Water Provisioning:** The role of forests in augmenting water flow is widely acknowledged. When precipitation falls on a forested landscape, it is intercepted by the dense canopy cover, thereby reducing its intensity. Some of the water that reaches the land surface evaporates back, some goes away as run-off and some of it is absorbed back by the roots of the trees and moves out into the atmosphere through transpiration. After the soil moisture reaches its field or saturation capacity, the remaining water recharges the groundwater.
- g. **Water Purification:** Natural ecosystems filter out and decompose organic wastes introduced into inland water.
- h. **Soil Conservation/ Sediment Regulation:** Due to dense canopy cover and thick humus layer on ground, forests play an important role in arresting soil erosion and ensuring slope stabilization.

- i. **Nutrient Cycling/Retention:** Forests and other natural ecosystems prevent significant erosion into nearby rivers and streams. An indirect benefit of prevention of soil erosion is retention of nutrients which would have been lost forever along with the soil.
- j. **Biological Control:** Forests and other natural ecosystems moderate the risk of infectious diseases by regulating the population of disease organisms (viruses, bacteria and parasites), their hosts, or the intermediate disease vectors (e.g. rodents and insects).
- k. **Habitat for Species:** Tiger reserves provide suitable living space and food for wild animals. Natural ecosystems within the tiger reserves with their buffering functions (e.g. cooling effects, interception of precipitation and evapotranspiration, water storage and wind shield) significantly contribute to the mitigation and adaptation to extreme weather events.
- l. **Gas Regulation:** Natural ecosystems regulate chemical composition of various atmospheric gases such as oxygen, ozone and sulphur oxides.
- m. **Waste Assimilation:** Similar to water purification services, natural vegetation and biota within forest areas break down nutrients and compounds and help in pollution control and detoxification.
- n. **Flood Regulation:** Floods are the most frequent natural disasters and cause damage in terms of not only human life, but also physical property.

8.30 The total stock value from the eco system is shown in table 8.3 and is **valued at Rs.14,13,676.20 crore, which is more than six times the state GSDP.**

**Table 8.3: Summary sheet: Valuation of Ecosystem Services
(Stock Values)**

Uttarakhand Forest Ecosystem Service (Stock Values)	Physical Volume	Economic Value (Rs. in crore)
Timber Stock (million m ³)	370.65	7,21,101.70
Carbon Stock (million tonnes of carbon)	290.33	2,55,725.50
Land Value (km ²)	Total forest cover 38,139.18	4,36,849.00
Total Stock Value	N.A.	14,13,676.20

Source: IIFM Study, 2017

8.31 Table 8.4 lists out **18 eco-system services** sourced from the interim report submitted by IIFM Bhopal. The total assessed economic value from these **services is Rs.95112.52 crore /year, which is about 48.7% of state's nominal GSDP in 2016-17.**

Table 8.4: Summary sheet: Valuation of ecosystem services (Flow values)

Uttarakhand Forest Ecosystem Service (Flow Values)	Physical Volume	Economic Value (Rs. in crore/ year)
Fuel wood (tonnes/year)	67,90,469	3,395.2
Fodder (tonnes/year)	2,59,20,296.47	7,776.1
Timber (m ³ /year)	6,38,994	1,243.2
Non-Timber Forest Products	Multiple units	303.7
Employment Generation	1 crore person days	300
Gene-Pool Protection	N.A.	73,386.5
Carbon Sequestration (tonnes/year)	61,760.16	1,482.2
Water Provisioning (m ³ /year)	40,43,74,400	745.3
Water Purification (m ³ /year)	12,28,22,047.4	655.7
Sediment Regulation/ Retention (tonnes/year)	2,36,20,000	561
Nutrient Cycling/ Retention (tonnes/year)	NPK present in 2,36,20,000	420.9
Biological Control	N.A.	251.7
Pollination	N.A.	441.1
Habitat for Species	Total forest cover 38,139.18 km ²	892.5
Gas Regulation	N.A.	176.5
Waste Assimilation	N.A.	1,764.6
Flood Regulation	N.A.	1,306.5
Recreation (Tourist)	3,22,936	9.9
Total Flow Value		95,112.52

Source: IIFM Study, 2017

Endangered Ecosystem of Himalayas

8.32 Under the anthropogenically accelerated climate change, the water resources of the highest Water Tower of the earth, viz., the Himalaya are under deep stress, consequently the hydrologic cycle in the region has been perturbed alarmingly leading towards the process of desertification. The sharp hydrologic indicators of the beginning of desertification in Himalaya are:

- Fast diminishing regulatory effect of glaciers.
- Transformation of glacial fed river to non-glacial rivers.
- Very high overland flows on hill slopes.
- Alarmingly accelerated floods.
- Drastic reduction in groundwater recharge.
- Disappearance and fast drying of natural springs.
- Disappearance of perennial streams from their headwater regions.
- Fast dwindling in base flow of rivers.
- Transformation of perennial rivers into non-perennial rivers.
- Dwindling capacity of lakes.

8.33 In case of the water resources, the present condition of the Himalayas is approaching similar to the mid-1980s Middle-East and Arabian countries and the process of desertification has been started in the young Himalayan

region. Recent hydrological and glaciological studies in the Central Himalaya reveal that:-

- a. The snow cover area in the Uttarakhand has reduced to about 17.98% (i.e., about 738.34 km² area) during the last one decade.
- b. The main glaciers are retreating at the rate of 20 m/year to 24 m/year and the tributary glaciers are retreating at faster rates, i.e., 35 m/year to 81 m/year, hence the regulatory effect of glaciers is diminishing gradually resulting in low summer discharge of the mighty glacial fed rivers.
- c. In Uttarakhand the glacial fed rivers have been started transforming in non-glacial fed rivers due to complete glaciers and snow cover depletion in their catchment areas, e.g., the Saryu river which has recently changed from glacial fed river to non-glacial fed river.
- d. The rivers like Eastern Ramganga and the Pindar are next in queue which shall be transformed completely in to non-glacial rivers within the next coming decades as at present the snow cover in the catchment areas of these mighty rivers remains, respectively 1.3% and 8.6% only.
- e. The summer flow of the non-glacial fed rivers of the Uttarakhand State (like the Kosi, Suyal, Gaula, Gomati, Gagans Western Ramganga, Panar, Ladhiya and many others) is dwindling very fast due to very low groundwater recharge caused by anthropogenically accelerated climate change induced disturbance in rainfall rhythm.
- f. Due to man induced climate change impact in the State, the process of transformation of non-glacial fed rivers in to seasonal rivers has also started as the mighty Kosi and Gagans rivers which are life lines of the Almora and Ranikhet towns have been converted in to seasonal rivers for the first time in their life history in the year 2003 and 2005 respectively.

8.34 Based on the data sourced from the report of Envi Stats India 2018, published by the MOSPI, it can be seen that the five Himalayan states namely Arunachal Pradesh, Himachal Pradesh, Jammu and Kashmir (presently a UT), Sikkim and Uttarakhand together have about 63,954 square kilometers of area under snow and glaciers amounting to slightly over 15.1% of the total geographical area of these five states put together. In the case of Uttarakhand close to 7.2% of its total area is covered under snow and glaciers making it unusable for economic activities particularly because of environmental concerns. Any indiscriminate use of these areas would be damaging to the environment. In addition, as discussed earlier in this

chapter, glaciers are critical part of the overall eco-system services and benefits entire nation by being the source of important perennial rivers of the subcontinent. Though the onus of preserving its origin (glaciers) is on Uttarakhand, the benefits flow to the whole nation. Uttarakhand should be compensated for having preserved the pristine environment. These incentives are critical in meeting the developmental needs of the state without which the state may face significant outmigration and unemployment.

- 8.35 State wise data shown in table 8.5 suggests that, among the five Himalayan states/UTs, the share of erstwhile state of Jammu and Kashmir in the total area under snow and glaciers was the highest at 64.4% in 2010-11. The share of area under snow and glaciers in Arunachal Pradesh and Himachal Pradesh was 13.4% and 13.0% respectively while that of Uttarakhand was at 6.1%. The lowest was Sikkim with a share of 3.2% (Table 8.5).

Table: 8.5 State wise area under snow and glaciers

States	Total geographical area	Area under snow and glaciers (2011-12)	State wise share in total area under snow and glaciers	Share of area under snow and glaciers in respective state's total area
1	2	3	4	5
	km ²	km ²	%	%
Arunachal Pradesh	83,743	8,548	13.4	10.2
Himachal Pradesh	55,673	8,316	13.0	14.9
Jammu and Kashmir	2,22,236	41,160	64.4	18.5
Sikkim	7,096	2,059	3.2	29.0
Uttarakhand	53,483	3,871	6.1	7.2
Total	4,22,231	63,954	100	15.1

Source (basic data): 14th FC report and Report of Envi Stats India 2018, MOSPI

- 8.36 If no river regenerative measures are taken immediately, all the non-glacial fed rivers of the Uttarakhand State may be converted into seasonal rivers within the next two/three decades, and the summer discharge of all the non-glacial fed rivers will dwindle alarmingly. This would not only impact the hydrological cycle of Uttarakhand but also adversely impact the availability of water resources in 50% of the country. Thus, the Himalayan eco-system needs to be preserved for long term sustainable development of the country.

Payment for Ecosystem Services (PES)

"We won't have a society if we destroy the environment."

- Margaret Mead

- 8.37 Are Uttarakhand and other Himalayan states worthy of economic incentives for ecosystem services they provide to the Nation? Can the country even imagine the consequences that will befall if its perennial mighty rivers like Ganga and Yamuna changing into seasonal rivers? The glaciers are formed over millennia and now they need care and investment. Mountains and forests are exceptional natural machines. They suck in rainwater and release water slowly to feed the civilization. In the present form, these have been formed over millennia by interplay of physical forces and now they are dying due to climate change and anthropogenic factors. They need our attention and be looked after as they have looked after human civilization for centuries.
- 8.38 The Hon'ble Finance Commission has been given the Constitutional mandate for development of the nation that is not just inclusive but also sustainable. **Apart from interest of the present generation, it has to think about posterity and inter-generational equity.** Under equalization principle, it must take into account the strengths and weaknesses of states, amount of ecosystem services the state provides to the nation for present and posterity, cost and use disability of states, level of development of the states, and vulnerability of the people in the states, in addition to contribution towards taxes and performances.
- 8.39 Himalayan states carry special burden on account of (a) historically weak infrastructure and economy, (b) the constraints of having to care and protect for a large share of the nation's forests, mountains, water sources, biodiversity and general environmental heritage, and (c) the vulnerability & disability they face in terms of life, livelihood and essential services like health, education etc. **These states need to be compensated on account of the special burdens, that they carry for the rest of the nation and to preserve their ecosystems for posterity.**
- 8.40 It is clear, that Uttarakhand's mountains and forests provide a variety of eco-system services to the nation having substantial monetary value and 15th FC is requested to consider it to build it in the devolution formula so that the state can get benefit in lieu of ecosystem services, it provides to the rest of the country and it would be a win-win situation for all the states of the country for sustainable overall development and protection of the precarious eco-system.



Nanda Devi Peak: In Uttarakhand the nature is revered as living Gods & Goddess.

“The environment and the economy are really both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves.”

-Wangari Maathai

Chapter 9

Proposed devolution

The 15th FC has submitted its first report for the year 2020-21 giving its devolution scheme in terms of vertical and horizontal dimensions. As per the amended Terms of Reference (ToR), the 15th FC has been asked to submit its recommendations for devolution for the period 2021-22 to 2025-26 in its final report which is to be submitted by end-October 2020.

- 9.1 The constitution of India has assigned to the Finance Commission, the important task of laying down the principles of vertical and horizontal devolution of resources. Since, taxes are less decentralized than expenditures, there occurs an imbalance between resources and needs of different tiers of governments. States performing major expenditure functions need resources by way of revenue sharing and grants. The inter-se distribution of fiscal transfers has to take into account equity as well as efficiency issues.

Vertical Devolution

- 9.2 In the first report of the 15th FC, the vertical devolution covers 28 rather than 29 states since the erstwhile state of Jammu and Kashmir has now been given a new status. It has been bifurcated into two union territories (UTs), one with a legislature (Jammu and Kashmir) and one without a legislature (Ladakh). In order to take this change in the number of states into account, the 15th FC reduced the share of states in the divisible pool from 42% to 41%. The 15th FC set aside 1% point arguing that had J&K been considered as a state under the earlier arrangement, it would have been entitled to a share of 0.85% of the divisible pool. J&K's share in the horizontal distribution formula used by the 14th FC would amount to 0.779% of the divisible pool. The figure of 0.85% may be with reference to the application of 15th FC criteria to the divisible pool.
- 9.3 The original ToR had asked the Commission to study the impact of substantially enhanced tax devolution to states on the fiscal situation of the Union Government following the recommendations of the 14th FC, coupled with continuing National Development Programme, including New India-2002. This particular ToR may be examined in greater detail in the final recommendations of the 15th FC. As far as the so called "substantially enhanced devolution" from 32% to 42%" is concerned, it is not as substantial

as it prima facie appears to be. The Union Government has been assigned the expenditure responsibility of defence, railways, telecommunication etc., while the state governments have the onerous duty to incur expenditure on roads, water supply, health, education, irrigation, agriculture and allied activities, policing, law and order, social welfare, forests, environmental conservation etc., along with its share in central and centrally sponsored schemes. In the absence of the untied plan grants which used to flow earlier through the mechanism of the Planning Commission, the above responsibilities put fiscal stress on the states due to reduced budgetary support for centrally sponsored schemes.

- 9.4 Another aspect of non-transparency of fiscal data relates to the information on cost of collection. The cost of collection is determined by the CAG but the methodology for this is not disclosed and therefore it remains an unknown amount. Although in the Union Budget, on the expenditure side, under fiscal services, there is an entry for cost of collection, but what is actually deducted from Centre's gross taxes is not known. The CAG, in its Report on Compliance of FRBM Act, 2003, published in 2016 (Report No. 27) made the following observation: *"During the certification of 'net proceeds' by the CAG, based on the recommendations of the successive Finance Commissions, it was noticed that during the period 1996-97 to 2014-15 an aggregated amount of Rs. 81,647.70 crore was short devolved to the States."*
- 9.5 As indicated in Article 270, cesses are meant to be earmarked and spent on specific purposes for which the central government may have enacted a separate law. Surcharges are levied for temporary objectives. While revenues from surcharges may be merged for general spending, revenues from cesses levied under specific Union Government Acts should not be so merged. They must be spent for the purpose for which they have been levied.
- 9.6 The central government has often used cesses and surcharges for long periods of time and used these as a means of reducing the divisible pool of the central taxes. Various Finance Commissions have made specific observations regarding this practice and have suggested that these instruments namely cesses and surcharges should be levied for limited periods for the stated objectives and once the objectives have been met, these should be discontinued.
- 9.7 In this context, the 13th FC had noted the following: *'8.4 The states have, for the first time, submitted a joint memorandum to the Commission. In this joint*

memorandum, the Commission has been urged to enhance the share of the states in the net proceeds of central taxes from 30.5 per cent to at least 50 per cent considering the fact that the state's share in the combined developmental expenditure is much higher than that of the Centre. The states have further urged that the divisible pool of central taxes should include all cesses and surcharges.'

- 9.8 Further, 14th FC made the following observation: '*8.10 A related issue in the assessment of vertical imbalance is the issue of the non-divisible pool of resources, namely cess and surcharges. The share of cess and surcharges in gross tax revenue of the Union Government has increased from 7.53 per cent in 2000-01 to 13.14 per cent in 2013-14. The States have argued that this denies the States their rightful share in the devolution. However, Constitutionally, it is not possible to include cess and surcharges in the divisible pool, as under Article 270, taxes referred to in Article 268 and 269 - surcharges on taxes and duties and cesses levied for specific purposes - should not form part of the divisible pool. Earlier Finance Commissions had recommended that the Union Government review the current position with respect to the non-divisible pool arising out of cess and surcharges and take measures to reduce their share in the gross tax revenue. However, this has not happened. There are two ways of addressing this legitimate concern of the States - by amending the Constitution to include these items in the divisible pool, or increasing the share of (states in) the divisible pool to compensate States on this account. We ruled out the first option given the record of experience so far.'*
- 9.9 The new GST regime constrains the capacity of the state to raise their own resources. In order to raise resources, the Union Government has the option of levying cesses and surcharges which are not sharable with the states. The position regarding cess and surcharges has not changed even after the analysis and recommendations of 14th FC. Thus, reiterating, the argument used by 14th FC and taking note of the fact that a constitutional amendment is not possible for this purpose, it is submitted that in order to make the states equal partners in development process, the **vertical devolution may be raised from 41% as recommended by the 15th FC in its one-year report, to 50% of the net proceeds of taxes.**
- 9.10 As shown in table 9.1 the difference between the recommended share and the effective share of states in the central taxes has increased over time because of the excessive use of cesses and surcharges by the central government. For the 14th FC period, covering the period from 2015-16 to

2019-20 (RE) on an average only 34.4% of the gross central taxes constituted the share of all states. For the 15th FC, only one year namely 2020-21 (BE) has been considered and the effective share of states in gross central taxes is at 32.4% as compared to the recommended share of 41%.

Table 9.1 States share in central taxes: Recommended and effective

Commission	Recommended share in divisible pool (%)	Effective share in gross central taxes (%)	Shortfall in effective share relative to recommended (% points)
Tenth (alternative devolution scheme)	29.0	27.4	(-) 1.6
Eleventh	29.5	27.1	(-) 2.4
Twelfth	30.5	26.3	(-) 4.2
Thirteenth	32.0	28.2	(-) 3.8
Fourteenth	42.0	34.4*	(-) 7.6
Fifteenth	41.0	32.4**	(-) 8.6

Source: (basic data) Union Budget Documents, Finance Commission reports|*averaged over the period from 2015-16 to 2019-20 (RE), **for 2020-21 (BE)

9.11 As stated earlier, special category states used to be categorized as such because of their weak fiscal capacity, a narrow economic base, cost disabilities and other various development constraints. While, the 11th FC emphasized the need for special consideration for special category states, the 14th FC treated them at par with the general category states. In the 15th FC also, the erstwhile special category states (hilly and north-eastern states) have been treated on par with the general states as far as devolution is concerned.

9.12 The earlier Finance Commissions have provided these states with special purpose grants and up-gradation grants, which were discontinued in the 14th FC award. In the absence of special purpose grants, it is requested that at least **30% of the sharable pool may kindly be set aside to be shared amongst the small and hilly states**. It will go a long way in compensating for the loss of assistance by way of plan grants to these states.

Horizontal Devolution

9.13 The revenue sharing principles which have emerged over the years have been guided by three main principles, (1) capacity equalization (2) allowance for cost disability (3) performance incentives.

9.14 Revenue sharing is guided by the principle of horizontal equity wherein fiscal resource deficiencies across the states arising out of systemic and identifiable factors have to be evened out, while certain normative principles

have to be followed to assess the fiscal capacity, revenue resources and expenditure needs of the state.

- 9.15 To avoid principle of deficiency becoming a 'perverse incentive' to remain resource deficient, efficiency incentives become important.
- 9.16 As we have amply justified that some of deficiencies and constraints are endemic because of geographical & environmental factors and historical baggage on which state policies have little control, which are systemic, clearly identifiable and deserves serious consideration while working out the formula for horizontal distribution.
- 9.17 Finance commissions in the past have by and large assigned higher weightage to population and income, as compared to other factors. A state like Uttarakhand with a forest area of almost 70% which includes tree covered forests, glaciers and Himalayan snow-clad mountains, the water towers of the nation, low population density, high operational and maintenance cost for services, diseconomies of scale, deficient infrastructure, disaster vulnerability etc. is constrained with regard to its income generating economic activities and economy of service delivery. A skewed habitation pattern over a far-flung area with a low population density leads to higher cost for providing services.
- 9.18 The 15th FC first report has given a weight of 15% to the area criterion. The weight given to the share of forests has been increased to 10% from 7.5% in the horizontal devolution scheme of the 14th FC (Table 9.3). The 15th FC has however retained the computations for state-wise shares under the area criterion similar to that used by the recent FCs by artificially giving a minimum share of 2% to states where the share of area is less than 2%. This is an ad-hoc way of making adjustments and requires modification particularly because the weight attached to the area criterion at 15% is quite large. In fact, the area criterion can be suitably modified to accommodate differential cost disabilities of states such as forest cover, area under glaciers, share of hilly areas, area reflecting international borders. We have discussed this further in greater detail subsequently in this Chapter. To reflect the higher per person cost of providing public goods and services in states like Uttarakhand which are characterized by larger area per person that is, the population of the state is sparsely distributed, the area criterion can be modified by making use of population density in defining this criterion.

Population and demographic performance criteria

- 9.19 Among the need-based criteria, the first report of the 15th FC has assigned a weight of 15% to the population criterion. As mandated by their ToR, the 15th FC has used the state wise population data of 2011 census for estimating the inter-se shares based on this criterion. Although, it may be ideal to use the latest available population data from CSO - MoSPI, we have used the 2011 census-based population data for our exercise. This criterion along with the recommended weight may be retained.
- 9.20 ToR 7 (ii) of the commission had indicated the consideration of “efforts and progress made in moving towards replacement rate of population”. The commission has introduced a criterion of demographic performance. For this purpose, the inverse of ‘Total Fertility Rate’ (TFR) was used as an indicator of progress of a state. TFR was calculated using state wise age specific fertility rates drawn from 2011 census. Some critical observations in this context are: (1) demographic performance should be measured in relative rather than absolute terms, However, the 15th FC has not made any inter-state comparisons. (2) demographic performance should be considered as improvement over time and not as a given level in a given year. (3) The performance variable has been scaled up using 1971 population instead of that for 2011 as mandated by the ToR. The government of Uttarakhand suggests that 2011 population should be used as the scaling factor instead of 1971 population with reference to the demographic performance criterion.
- 9.21 In the light of the above observations, we are suggesting a modification in the criterion relating to demographic performance. We have estimated the TFR for 2001 along with that for 2011 based on the respective census data. We may note that latest data on TFRs may also be sourced from National Family Health Survey (NFHS) and compared with a suitable benchmark. The latest available NFHS is for 2015-16. Improvement in a state’s performance has been captured by calculating the percentage change in TFR over this period. Considering positive percentage change as indicative of an improvement, the average improvement for all states is estimated at 16.55%. This average percentage improvement has been indexed to 100 and the corresponding state-wise index values are estimated accordingly (Annexure 9.1). The inter-state index values have then been scaled up using the 2011 population.

The total fertility rate of the *i*th state was calculated from the age-specific fertility rate. The relevant age groups considered for this purpose were 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49. The age-specific fertility

rate is given by:

$$ASFR_{i,k} = \frac{\text{Number of live births last year in the } k\text{th age group of females in the } i\text{th state}}{\text{Mid year female population in the } k\text{th age group in the } i\text{th state}}$$

These average fertility rates were multiplied by a factor of 5 in order to obtain the total fertility rate for female population in the age group of 15 to 49, including 15 and 49. The total fertility rate is given by:

$$f(2011)_i = 5 * \sum_{k=15-19}^{45-49} \frac{\text{Number of live births last year in the } k\text{th age group of females in the } i\text{th state}}{\text{Mid year female population in the } k\text{th age group in the } i\text{th state}}$$

Total fertility rate for 2001 has been estimated using the same approach.

We can define the percentage change in TFR of a state during this period as p_i .

The average percentage change is defined as p^* . We can define D_i for each state as

$$D_i = \frac{p_i}{p^*} * 100$$

$$\text{inter-se share } Z_i = \frac{D_i N_i}{\sum_{i=1}^{28} D_i N_i}$$

Where N_i , is the 2011 population of the i^{th} state.

The 15th FC may consider a modification to the 'Demographic Change' criterion as discussed above while retaining its weight at 12.5%.

Income distance and credit-deposit (CD) criteria

- 9.22 While per capita income is a good criterion for determining revenue raising capacity of a state, the structure of economy along with intrastate disparities need to be factored in. With the new GST regime in place where the tax is destination based the impact for Uttarakhand is going to be substantial because of a weak consumption base.
- 9.23 The share of agriculture income in GSDP in the state is around 10% at present and the work force employed in agriculture is more than 50% of the total work force, majority of which is constituted of small, marginal farmers and agricultural labour and therefore the overall per capita income in a macro context gives a different picture. Majority of the people are poor and cannot bear the burden of any additional taxation, thus limiting the revenue raising capacity of the state.

- 9.24 The resource flow to the states is not confined to transfers through the Finance Commission. Most of the special category states on account of their low population, skewed population distribution, geographical factors, diseconomies of scale, problem of agrarian economy, are not able to attract private investment in industry, manufacturing and services sectors. These constraints also leave little scope for projects in a public private partnership mode in remote regions of hill areas. Further, if we look at the credit deposit ratio of the commercial banks, most of the special category states have very low CD ratio, which further goes to show that the resources by way of private investment through bank credit is very limited. Weak infrastructure and disaster proneness too impact investment, therefore any differential treatment does not violate the principle of equity and equalization.
- 9.25 The 15th FC has given a weight of 45% to the distance criterion. It may be noted that four states at the upper end of the per-capita GSDP distribution namely Goa, Himachal Pradesh, Haryana and Sikkim were given the same per-capita distance. This per-capita distance was calculated with reference to the difference between per-capita GSDP of Himachal Pradesh and Haryana as Haryana was used as the benchmark state. We propose to retain the distance criteria while lowering its weight to 25%.
- 9.26 In the distance criterion, the per-capita GSDP is used as an indicator for measuring fiscal capacity. It is meant to reflect the taxable base with respect to the state taxes. After the implementation of the GST, per-capita GSDP which reflects per-capita output in the state is no longer relevant for reflecting the GST tax base. The tax base of GST is consumption rather than output. That part of income which is not consumed constitutes saving and it should be kept outside the measure of GST tax base. However, state level savings are not estimated and state level consumption can at best be captured by National Sample Survey data. In fact, the saving of a state, if it is not invested within the state, becomes available for investment in other states. In this sense it represents a financial externality. In other words, the savings of one state benefits the investors of other states. This benefit is also difficult to capture. But an indirect indicator of this financial externality is the Credit-Deposit ratio (CD ratio). We have suggested that the credit-deposit ratio should be used to reflect the financial externality that one state offers to others in terms of providing savings over and above its own investment needs. We propose that this criterion may added to the devolution formula with a weight of 15%.

- 9.27 Economic growth and development are a function of investment, both public and private. A look at credit deposit ratio of the states in table 9.2 makes it amply clear that the CD ratio of most of the special category states is well below the national average. As is evident from the table 9.2 the CD ratio for Uttarakhand for the last few years has been consistently less than 50% of the national average, which clearly demonstrates that resource flow through private investment is very low and most of the savings of the state goes to more developed regions of the country thereby enhancing development in these states.
- 9.28 The state of Uttarakhand is suggesting the utilization of contribution to the overall investment in the country as a whole which is sourced from different states. Some of the states contribute more in the form of savings while the corresponding investment is done in other states. This is so because financial resources move with greatest flexibility within the common market of India. Since state wise savings/investment data are not compiled we are suggesting that a proxy such as the credit to deposit ratio (CD ratio) may be used. The higher is the credit relative to deposits for a state, the larger is the amount that the concerned state draws from the savings of other states. States with a relatively lower CD ratio are the states which provide savings for the benefit of other states. The government of Uttarakhand would like to suggest that this contribution to country's investment by individual states should be rewarded. In fact, a variant of the distance formula can be used for this purpose. This formula may be written as follows: Defining the CD ratio of a state as c_i and the highest CD ratio among states as c^* , the relevant criterion can be defined as follows:

$$\text{Share of a state under CD criterion} = \frac{N_i * (c^* - c_i)}{\sum N_i * (c^* - c_i)}$$

Where i varies from 1 n where ' n ' is the number of states and N_i refers to the population of the i^{th} state. In our exercise we have considered Tamil Nadu as having the highest CD ratio for the year 2017-18. The inter-se share of states for this criterion is given in the annexure to this chapter.

- 9.29 Keeping in view the above discussion, we suggest that apart from income distance criteria for devolution to the state, private and public investment being undertaken in the state as symbolized by the CD ratio should also be taken into consideration for devolution. **Accordingly, we suggest that 25% weight should be given to the income distance criteria and 15% weight to CD distance criterion**, which will be calculated on the lines similar to

income distance criteria, which presumes that the state further from the highest CD norm would be compensated accordingly.

- 9.30 Although the Government of Uttarakhand had emphasized the point of using the CD criterion in the devolution formula, it was not considered in the first report of the 15th FC. The Government of Uttarakhand suggests that this may now be taken up in the final report.

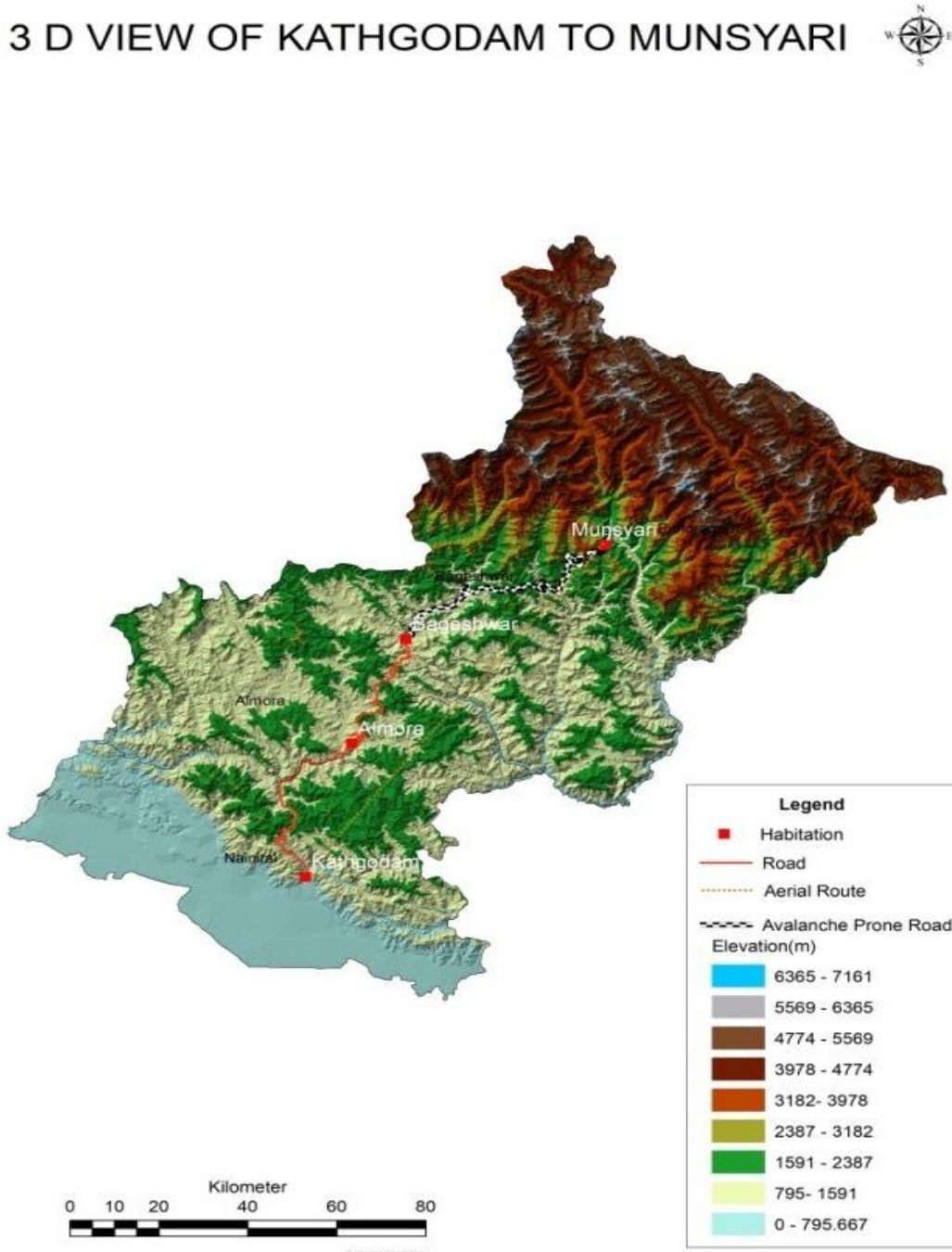
States	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Andhra Pradesh	96.4	105.1	109.7	111.3	112	111.3	105.3	106	101.1	112.6
Arunachal Pradesh	25.5	27.5	23.7	23.9	21.8	23.7	26.8	29	24	25
Assam	38.5	37.8	36.5	37.7	37.2	37.7	36.7	42.2	40.3	42.6
Bihar	26.8	29	29.5	29.7	30.5	32.8	33.6	33.4	30.9	32.2
Chhattisgarh	46.3	52.3	52.3	53.6	53.8	59.5	61.6	63.5	62.4	63.2
Goa	26.7	26.5	29.1	28.1	28.8	28.7	26.7	27.1	25.7	26.7
Gujarat	63.7	65.3	66.2	70.4	72.8	74.7	72.7	75.4	68.9	75.6
Haryana	61.4	63.3	71.7	79.4	76.5	78.1	75.8	69.9	59.1	58.6
Himachal Pradesh	38.6	42.2	41.6	38.9	35.1	35.8	35.3	32.9	29.7	31.1
Jammu and Kashmir	47.2	46.4	38.1	33.8	36.9	40.1	42.2	44.2	39.8	42.9
Jharkhand	32	35.1	34.4	33.9	32.1	31.8	29.6	29.6	27.1	27.7
Karnataka	77.3	77.6	72.7	71.4	71.9	71	67.7	70.1	67	69.7
Kerala	59.7	63.1	73.1	76.4	73.1	67.7	64.6	62.1	59.8	63.8
Madhya Pradesh	57.4	60.6	55.6	56.6	58.2	60.4	54.8	61.2	60.9	65.1
Maharashtra	91.2	82.9	83	91.8	89.4	89.8	92	102.9	106	106.9
Manipur	36	42.1	34.8	31.3	28.6	33.6	34	41.1	38.7	44.6
Meghalaya	28.3	25.6	24.4	25.8	24	27.4	25.9	24.8	25.9	27.2
Mizoram	57.9	53.2	46	38.9	35.3	37.8	37.8	40.1	36.4	35.8
Nagaland	30.8	30.3	26.1	27.2	28.4	31	32.7	34.1	31.5	34.7
Odisha	50.8	54.4	52.5	47.3	46.3	44.6	41.9	40.8	38.1	37.6
Punjab	65.7	71.5	77.8	80.9	81.6	79.1	75.1	69.8	69	63.5
Rajasthan	80.6	88.4	90.4	90.9	92.6	87.1	86.2	72.4	67.8	76.6
Sikkim	41.6	37.2	37.9	33.1	27.2	26.5	25.6	28	27.4	26.6
Tamil Nadu	108.1	113.8	115.1	116.9	123.3	121.8	119	113.7	105.8	113.5
Telengana	-	-	-	-	-	-	101.6	104.5	97	107.4
Tripura	30.7	30.7	32.2	31.3	32.8	32.4	33.7	35.3	35.9	40.7
Uttar Pradesh	42.2	43.3	44	44	44.1	44.6	45.4	44.6	40	41.2
Uttarakhand	25.3	33.7	35.4	35.6	34.8	35.6	34.5	34.9	34.3	36.4
West Bengal	60.7	61.5	63.7	63.8	62	61.6	57.8	55.1	50.3	51.1
ALL INDIA	72.6	73.3	75.6	79	78.8	79	77.1	78.4	73.8	76.7

Note: Nil/Not Applicable/Negligible.

Source: Basic Statistical returns of schedule commercial Banks in India RBI. Various issues

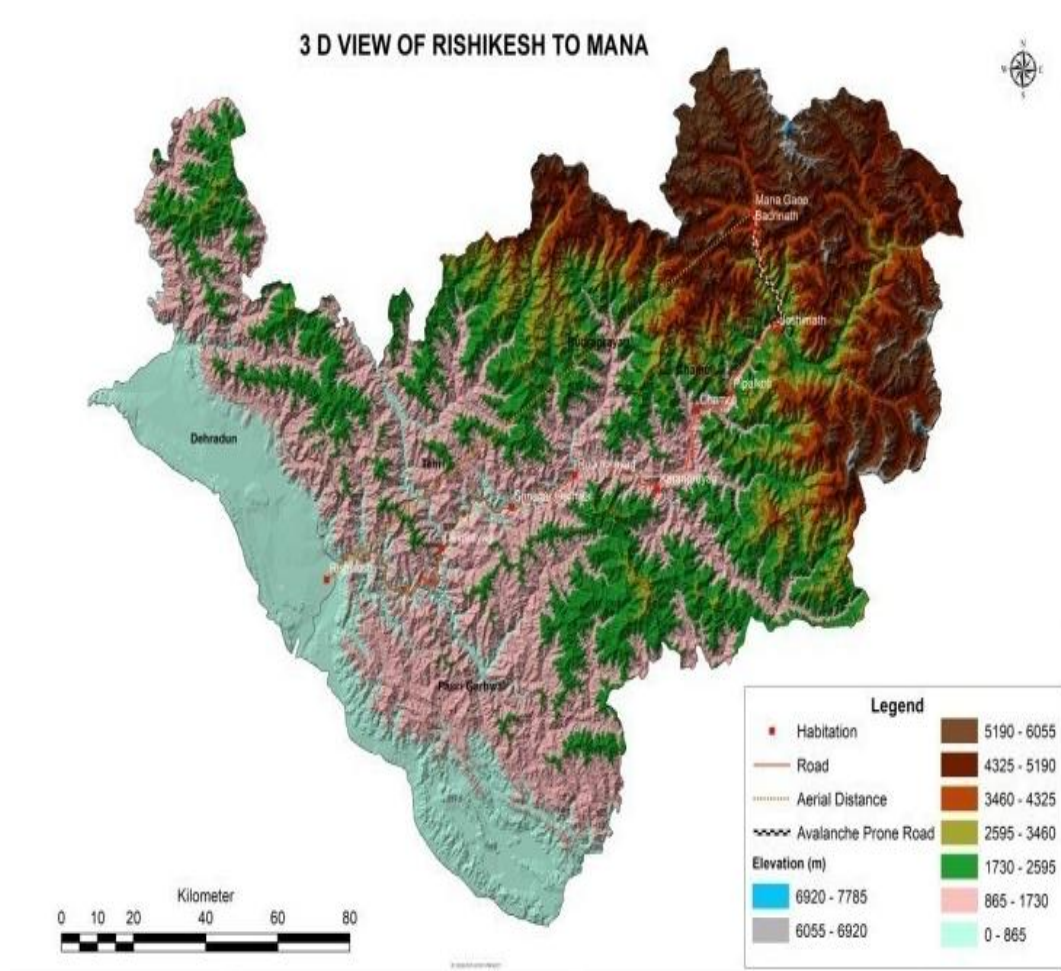
Area Criterion

- 9.31 While the criterion of area justifies the fact that catering to a scattered population over a larger area implies higher expenditure needs. However, the



geographical area in a hill state has a three dimensional nature in the form of mountain peaks, hill slopes, undulations etc. We are submitting two maps which illustrate the situation. The aerial distance from Kathgodam, the last rail head in Kumaon region, to Munsiyari a border village is 112 kms, while the road distance is 278 kms of which 129 kms is avalanche prone. Similarly, in the Garhwal region the aerial distance, road distance and avalanche prone

distance, from Rishikesh the last rail head to Mana village on the border is 141 kms, 300 kms and 50 kms respectively. Thus, expenditure needs, both capital and maintenance are much higher due to three dimensionality in the area criterion. Accordingly, we propose that weightage should also be given to the mountain area of a state as a proportion of the total geographical area.



Modifying the area-based criterion

9.32 The 15th FC has continued to use the area criterion with an artificial floor of 2% for states with a share in area below 2%. This procedure was followed by the 13th and 14th FC and it leads very large per-capita transfers for very small states. Since the artificially added shares have the effect of reducing the share of other states, this adjustment should be kept to a minimum. The Government of Uttarakhand is of the view that the area criterion should reflect cost differentials amongst states. Cost disabilities such as forest cover, area under glaciers and share in hilly areas can all be incorporated in the area criterion by re-defining it. It is meant in our view to reflect the much larger unit costs of providing services in the hilly and sparsely populated states. Accordingly, we suggest that the present method of setting a common

floor of 2% for states with area equal or less than 2% be given up and a different kind of modification is used for this purpose.

The area criterion can be modified by giving higher weights to the share of hilly area in total area. The higher weight to hilly area would reflect the cost disability.

We may write total area of a state as $A_i = H_i + NH_i$, Where H_i is the hilly area and NH_i is the non-hilly area of the i th state.

In determining the share of the i th state, we can give a higher weight to H_i . Thus, the share of i th state is:

$$\text{inter se share } \psi_i^h = \frac{wH_i + NH_i}{\sum (wH_i + NH_i)},$$

where in illustration $w=2$, reflecting a higher weight given to hilly area. The related inter-se shares for modified area criterion are given in Annexure 9.1

- 9.33 **We propose that the weight of the modified area criterion may be kept at 15%**

Forest and Ecology Criterion

- 9.34 As discussed in chapters 5 and 8, that there exists ample justification for economic incentive for stewardship of eco system services. Following the 'conservation ethic' with regard to natural resources management in the overall national and global interest, we have given the details of the 'cost disability' and 'use disability' as well as 'development disability' along with a broad idea of valuation of eco-system services and its bearing on climate change issues. **Accordingly, the forest and ecology criterion should incorporate area under moderate and very dense forest and area under snow and glaciers. The weight attached to this criterion may be enhanced from the current 12.5% to 15%. The proposed modification to this criterion is as follows:**

$$F_i = f_i + g_i$$

Where f_i is the area under moderately dense and very dense forest and g_i is the area under snow and glaciers of the ' i th' state. The inter se share can be given as

$$\text{inter se share } FE_i = \frac{F_i}{\sum_{i=1}^{28} F_i}$$

The inter-se shares based on the modified forest and ecology criterion is given in Annexure 9.1.

Tax effort criterion

9.35 The 15th FC has used the tax effort criterion which was earlier used by 12th FC. This criterion has been introduced as a performance incentive so as to reward states which show a higher tax-GSDP ratio. As discussed in Chapter 2, the period over which the tax-GSDP ratio has been calculated relates to the pre-GST period. Further, the tax base of GST is better reflected by final consumption expenditure of goods and services rather than GSDP. The autonomy of fixing tax rates and the scope of tax bases has now moved to the GST Council and the states have adopted uniform rate structures. In this context, the pre-GST calculation of the tax effort does not seem to be justified. The tax effort criterion should either be modified or dropped from the scheme of devolution. If the criterion is retained, then the appropriate approach would be to consider GST and non-GST taxes separately for the estimation of tax effort. In our illustration as given in annexure 9.1, we have considered this criterion as specified by the 15th FC, retaining its weight at 2.5%.

Suggested Devolution

Vertical Devolution

- 9.36 The vertical devolution should be increased from 41% to 50%
- 9.37 A total of 30% of the total devolution should be earmarked for small and hilly states.

Horizontal Devolution

- 9.38 Thus, as against the recommended devolution scheme of the first report of 15th FC, we propose the following modifications to the horizontal devolution:

Table 9.3: Suggested Horizontal Devolution

#	Criteria	FC 15 (1 st report)	Proposed weight (%)
1	Population	15	15
2	Demographic Change/Performance	12.5	12.5
3	Distance	45	25
4	CD ratio	-	15
5	Area	15	15
6	Tax Effort	2.5	2.5
7	Forest cover/Forest cover and ecology	10.0	15

Source: Report of the 15th FC

Annexure

Annexure 9.1 Criteria wise inter-se shares: an illustrative exercise

Criteria	Population	Demographic Change /Performance	Distance	CD ratio	Area (including hilly area)	Tax effort	Forest (including glaciers)	Total
Weights (%)	15.0	12.5	25	15	15.0	2.5	15	100.0
States	inter se share (%)							
Andhra Pradesh	4.208	5.117	3.203	0.576	4.612	4.393	3.904	3.545
Arunachal Pradesh	0.117	0.337	0.097	0.208	4.742	0.055	14.687	3.031
Assam	2.649	2.886	3.767	3.913	2.763	1.938	3.168	3.225
Bihar	8.836	2.553	16.324	14.479	2.666	8.486	0.876	8.641
Chhattisgarh	2.168	3.348	2.706	2.222	3.827	2.480	9.579	3.826
Goa	0.124	0.023	0.024	0.218	0.105	0.139	0.272	0.120
Gujarat	5.130	3.706	2.007	4.163	5.556	5.000	1.360	3.521
Haryana	2.152	2.978	0.417	2.066	1.252	2.087	0.117	1.367
Himachal Pradesh	0.583	0.490	0.113	0.958	3.152	0.473	4.422	1.469
Jharkhand	2.800	2.172	4.269	4.818	2.257	2.297	2.996	3.327
Karnataka	5.186	0.349	1.103	4.686	6.790	5.792	6.084	3.876
Kerala	2.835	0.761	0.634	2.911	1.937	2.988	2.700	1.886
Madhya Pradesh	6.164	8.226	8.612	6.590	8.727	7.152	10.031	8.087
Maharashtra	9.538	8.341	2.554	2.146	10.690	9.454	7.167	6.349
Manipur	0.242	0.195	0.355	0.326	1.264	0.100	1.809	0.662
Meghalaya	0.252	0.189	0.345	0.446	1.270	0.168	2.399	0.769
Mizoram	0.093	0.065	0.067	0.143	1.194	0.034	1.461	0.459
Nagaland	0.168	0.111	0.184	0.273	0.939	0.058	1.431	0.483
Odisha	3.563	4.346	4.642	5.325	4.408	3.509	6.911	4.822
Punjab	2.355	0.010	1.562	2.093	1.426	2.495	0.199	1.365
Rajasthan	5.818	11.297	6.604	4.413	9.689	5.529	1.077	6.351
Sikkim	0.052	0.310	0.010	0.091	0.402	0.026	1.150	0.296
Tamil Nadu	6.124	0.577	2.070	0.842	4.327	6.513	3.573	2.982
Telangana	2.971	2.560	0.918	0.631	3.174	3.250	2.520	2.025
Tripura	0.312	0.268	0.360	0.486	0.594	0.187	1.439	0.553
Uttar Pradesh	16.959	23.418	27.116	24.243	6.821	18.337	1.631	17.613
Uttarakhand	0.856	1.797	0.213	1.359	2.817	0.711	5.298	1.845
West Bengal	7.747	13.570	9.725	9.375	2.602	6.351	1.741	7.506
All States	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Source (basic data): 15th FC, RBI, Census 2001 and 2001, MoSPI

Chapter 10

Natural calamities

The State of Uttarakhand by virtue of its geo-tectonic setting, physiographic condition and extreme seasonal precipitation is vulnerable to a number of disasters that include droughts, earthquake, landslides, floods, flash floods, cloudbursts. These repeatedly cause loss of human lives, inflict misery upon the affected population besides causing immense loss of infrastructure and property.

- 10.1 Disasters disrupt the pace of growth and development and roll back the efforts of many years in one single stroke. Economic activity is also disrupted seriously by the disasters and there is loss of livelihood for large number of persons. Disasters thus adversely affect the quality of life of the people. Besides planning for, financing and implementing risk mitigation strategies, massive funds have to be routinely provided for post-disaster reconstruction, rehabilitation and restoration. Disaster management, particularly for the multi-hazard prone state of Uttarakhand is an issue related with development, and adequate investment is required to be made in this field for sustaining the pace of growth and development. The State Governments incur most of the disaster-related expenditure through their State Disaster Response Funds (SDRF) and these funds could be augmented and replenished through the National Disaster Response Fund (NDRF) when disasters of rare severity necessitate it.
- 10.2 For instance, NCovid-19 has been declared by the Ministry of Home Affairs as a “notified disaster”, and states have been permitted to withdraw sums upto 25% of the SDRF allocation²². The state government can use SDRF for providing temporary accommodation, food, clothing and medical care for people affected and sheltered in quarantine camps, other than home quarantine, or for cluster containment operations.
- 10.3 It is noteworthy that besides providing for disaster response in its first report for the year 2020-21, the 15th FC has aptly recognised the need and provided resources for the purpose of disaster risk mitigation which may be used for those local level and community-based interventions which

²² <https://www.livemint.com/news/india/india-declares-coronavirus-outbreak-as-a-notified-disaster-11584184739353.html>

reduce the risks and promote environment-friendly settlements and livelihood practices. **It has recommended setting up of national and state disaster mitigation funds in accordance with the Disaster Management Act.** This was missing in the recommendations of the recent finance commissions even though the Disaster Management Act had become effective since 2005. **The 15th FC has also introduced an innovative concept of developing a disaster risk index.** Table 10.1 shows the recommended national and state level disaster risk management fund. The share of mitigation has been kept at 20% and that for disaster response has been kept at 80%.

Table 10.1: National and states level allocation for disaster risk management for 2020-21 (INR crore)

Funding windows/ sub-windows	National corpus	States' corpus
Mitigation – 20%	2478 (NDMF)	5797 (SDMF)
Response – 80%	9912 (NDRF)	23186 (SDRF)
Total	12390 (NDRMF)	28983 (SDRMF)
Distribution of NDRF/SDRF		
i. Response and relief-40%	4956	11593
ii. Recovery and reconstruction -30%	3717	8695
iii. Capacity building -10%	1239	2898

Source: One-year report of Fifteenth FC

- 10.4 As shown in Table 10.1, Rs. 28,893 Cr has been allocated to the states under the State Disaster Risk Management Fund (SDRMF) which covers both State Disaster Relief Fund (SDRF – 80%) and State Disaster Mitigation Fund (SDMF – 20%). Out of this total allocation, Rs. 22,184 crore is centre's contribution while the states' contribution is Rs. 6,799 Cr for the year 2020-21. Table 10.2 gives the break-up of Union's share of the SDRMF grant provided to Uttarakhand by applying the respective ratios to the amount of Rs. 937 Cr allocated to the state. The state's share in the total amount has been kept at 10% in line with that of other north-eastern and Himalayan states.

Table 10.2: Breakup of SDRMF grant provided to Uttarakhand (in INR Cr)

Item	Union's share in SDRMF allocated to Uttarakhand	Share in total SDRMF	Share in SDRF
Allocation to SDRMF of which:	937	100%	
SDRF of which:	750	80%	100%
Response and relief	375	40%	50%
Recovery and reconstruction	281	30%	38%
Preparedness and capacity building	94	10%	13%
SDMF	187	20%	

Source: 15th FC

10.5 The FC has gone beyond the expenditure-based methodology used by previous FCs in determining the inter se share of states. It has also included the criteria of a) risk exposure through area and population, and b) proneness to hazard and vulnerability through the disaster risk index. The disaster risk index (DRI) is quite comprehensive. It has been developed through a quantitative exercise assigning scores to the probability of hazards such as floods, drought, cyclone, earthquakes, and other natural disasters striking states, and the extent of vulnerability of a state. Scoring is done based on a three-part scheme namely high-risk, medium-risk and low-risk. For high risk, a score of 15, for medium risk, a score of 10 and for low risk, a score of 5 is given for four specific disasters namely cyclones, floods, drought, and earthquakes. For other risks, every state has been kept in the medium risk category and given a score of 10. The consideration for exposure to risk has been supplemented by the consideration of vulnerability which is measured by the incidence of poverty for which the estimates available for 2011-12, based on Tendulkar methodology have been used. In this case, the scoring system utilizes two benchmark lines of 13% and 26% of poverty rate. States with a poverty rate of less than 13% have been given a score of 10; those between 13% and 26% have been given a score of 20; and those above 26% have been given a score of 30. The state-wise reading of the DRI has been summarized in Appendix to this chapter. Table 10.3 and 10.4 provide the scoring scheme and scoring system of the Disaster risk index respectively.

Table 10.3: Scoring Scheme (Disasters)

Disasters	High	Medium	Low
Floods	15	10	5
Drought	15	10	5
Cyclone	15	10	5
Earthquake	15	10	5
Others		10	

Source: First report of 15th FC

Table 10.4: Scoring System

Scoring System	Poverty
Low – 10.0	Below 13%
Medium – 20.0	Between 13% and 26%
High – 30.0	Between 26% and 40%

Source: First report of 15th FC

- 10.6 Although the index appropriately assesses the probability of most disasters in Uttarakhand, the state has not received any score under the “drought” parameter. States which have a larger share of “chronically drought-prone” areas are assigned a higher score of 15, while those with a significant share of “drought-prone areas” are assigned the middle score of 10. The remaining states, except for the states in the North-East, Uttarakhand and Goa, have been assigned a score of 5. However, Envi-Stats 2019 data released by MoSPI reveals that several district in Uttarakhand have also experienced drought periodically.
- 10.7 Table 10.5 shows that in Uttarakhand drought occurred in four years out of the eleven-year period 2005-2015. It can be seen that a) states including Gujarat (2) and Bihar (3), having occurrence of drought in less than four years during 2005-2015, have been given a score of 15 and 10 respectively, and b) excluding Uttarakhand, Assam and Nagaland, all the other states which have been given a zero score under drought are states with no occurrence of drought. Assam and Nagaland had an occurrence of drought in two and one year respectively during the given period.

Table 10.5: State-wise frequency of drought and score given by 15th FC

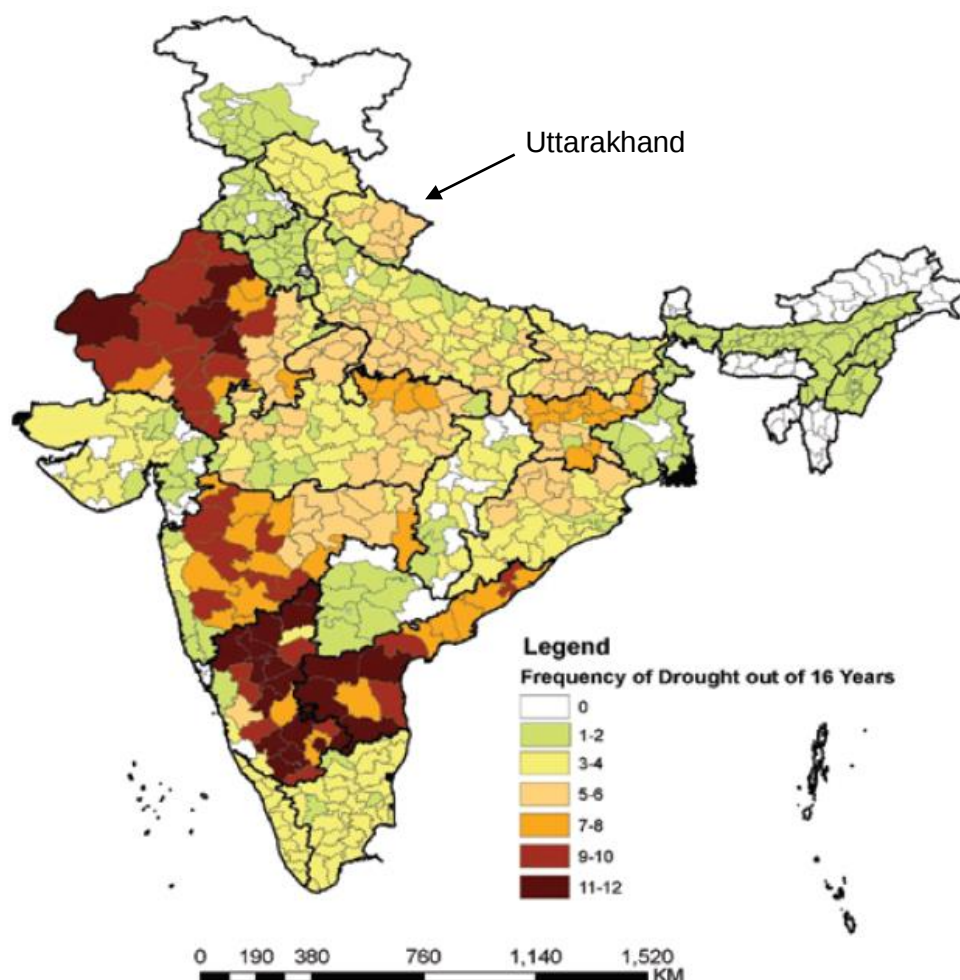
State	Score given under the category drought	Frequency of drought during the period 2005-15 (no. of years)	State	Score given under the category drought	Frequency of drought during the period 2005-15 (no. of years)
Andhra Pradesh	15	8	Manipur	0	1
Arunachal Pradesh	0	-	Meghalaya	0	-
Assam	0	2	Mizoram	0	-
Bihar	10	3	Nagaland	0	1
Chhattisgarh	5	1	Odisha	15	3
Goa	0	-	Punjab	5	0
Gujarat	15	2	Rajasthan	15	7
Haryana	5	1	Sikkim	0	-
Himachal Pradesh	5	2	Tamil Nadu	10	1
Jharkhand	10	4	Telangana	15	1
Karnataka	15	8	Tripura	0	-
Kerala	5	2	Uttar Pradesh	10	4
Madhya Pradesh	10	4	Uttarakhand	0	4
Maharashtra	15	5	West Bengal	5	2

Source: First report of 15th FC; EnviStats 2019 - MOSPI

- 10.8 Chart 10.1 depicts the district-wise frequency of agricultural drought occurrence in India over the period 2005-2015 using data sourced from the Ministry of Agriculture. A cursory glance at the chart shows that out

of 13 districts in Uttarakhand, 8 districts or 61.5% of the total districts faced a frequency of drought in the range of 5-6 times over the assessed 11-year period. This was higher than that in several other states such as Punjab, Haryana, Gujarat, Odisha, Chhattisgarh, Telangana, Tamil Nadu and Kerala which have been assigned a score of 5, 5, 15, 15, 5, 15, 10 and 5 respectively.

Chart 10.1: District Level Agricultural Drought Occurrence Frequency (2000-15)



Source: Drought Management Plan, November 2017; Ministry of Agriculture and Farmer's welfare, Government of India

10.9 **Since drought also imposes considerable strain on limited resources of the government besides other natural disasters, the government suggests that the 15th FC may provide Uttarakhand a score of 10 under the disaster category “drought” while constructing the Disaster Risk Index in its final report.**

10.10 In addition to drought, Uttarakhand routinely faces flash floods, cloudbursts and landslides during the monsoon season besides

avalanche, hailstorms and forest fires. Though enhanced by anthropogenic activities, most disasters are caused by natural geological processes and it is not always possible to predict these.

- 10.11 The entire land mass of Uttarakhand falls under the highly seismic earthquake zone, zone IV and V (area of very high to highest risk of damages due to earthquakes respectively). Out of 13 districts of the state, four come under zone V, while five others are partially under zone IV and zone V and rest under zone IV. It is thus an area of '**geological belligerence**'.
- 10.12 Moderate magnitude earthquakes that struck Uttarakhand in the previous decades have exposed the level of seismic vulnerability of the state. The Uttarkashi earthquake that occurred on 28th October, 1991 and Chamoli earthquake on 29th March, 1999 resulted in a loss of 768 and 100 human lives respectively. These earthquakes caused injury to thousands of people, and inflicted significant damage to property, land and infrastructure including roads, bridges, telephones, water and electricity lines.
- 10.13 Uttarakhand has not witnessed a major earthquake since 1999 Chamoli earthquake, though low magnitude earthquakes are very common. At the same time it has not been affected by a great earthquake ($M > 8$) for more than 200 years. This has been **denoted as a Seismic Gap**, following which there is a high probability of a major earthquake according to experts.
- 10.14 Uttarakhand is prone to landslide disasters as well evidenced in the year 1998, when it witnessed two major landslide events at Malpa (Pithoragarh) and Ukhimath (Rudraprayag) that resulted in a loss of 219 and 109 human lives respectively.
- 10.15 In the year 2003, the Varunavrat landslide cause major damage to the town of Uttarkashi. In the year 2010, various landslides, flash floods and floods led to a loss of 233 human lives and caused widespread damage in Uttarakhand. The actual losses caused by these to property and infrastructure were estimated to be Rs. 22,568.31 crore of which only Rs. 6,895.64 crore qualified for assistance out of NCCF. As against these losses, the state government received assistance of only Rs. 572 crore out of the NCCF.
- 10.16 Uttarakhand witnessed disasters yet again in the year 2012, when Uttarkashi and Rudraprayag districts were adversely affected by flash

flood/cloudburst incidences. 105 human lives were lost at various places in these incidences. The actual losses caused by these incidences were estimated to be around Rs. 658.11 crore of which only Rs. 272.88 crore qualified for assistance out of NDRF. As against these losses the state government received assistance of only Rs. 72.76 crore out of NDRF.

- 10.17 The incidents in the year 2012 brought forth the problem of abnormal aggradation in the riverbeds of Uttarakhand. Many human habitations are under the threat of being washed away, if this issue is not addressed on a timely basis. It is estimated that during the flash flood of August 2012, more than 150 lakh cubic meter sediment got deposited in a 15 km long stretch along Asiganga and Bhagirathi rivers leading to a rise in the river bed to the tune of 3-5 meters.
- 10.18 In the year 2013, Uttarakhand had witnessed the worst ever catastrophic calamity in the Himalayas. Large stretches of Uttarakhand in the upper hills extending from Himachal Pradesh in the west to Nepal in the east, received unusually heavy rains. Thousands of people were swept away in the rivers or buried under the debris of the landslides, mainly in the narrow Kedarnath valley. The magnitude of damage to infrastructure like roads, bridges, drinking water schemes, buildings etc. was valued at more than Rs. 15,000 crore. The loss to infrastructure was very extensive as all the major rivers were in spate and the upper hill areas had been totally cut-off. Tourism activities came to a standstill with long term adverse impact on the economy of Uttarakhand. It had also impacted the tourist psychology to the extent that any adverse weather forecast even now, leads to decreased footfalls in all major tourist destinations.

Photo 1: Kedarnath Temple after 2013 disaster



Photo 2: Rudraprayag Bridge during 2013 Flash floods
Before **After**



Photo 3: (a) Landslide at Kapkot, Bageshwar (b) Damaged Bridge at Ramganga, Munsyari, Pithoragarh (2018)



10.19 Consequent to the June 2013 disaster in Uttarakhand, a financial package of Rs. 7346.89 crore was approved in 2013 by the Central Government. The sources of funding for the package along with year wise phasing are given below:

Table 10.6: Financial Package approved by Central Government

Rs. in crore					
S.No.	Sources	2013-14	2014-15	2015-16	Total
1	Centrally Sponsored Scheme (CSS)-Reconstruction-Central Share	516.39	688.42	680.11	1884.92
2	Central Plan	7.50	22.50	20.00	50.00
3	Special Plan Assistance (SPA) Reconstruction	165.00	495.00	440.00	1100.00
4	Externally Aided Project (EAP)	461.84	1367.03	1275.23	3104.10
5	NDRF (Non-Plan)	1207.87	0.00	0.00	1207.87
	Total Assistance	2358.60	2572.95	2415.34	7346.89

Source: Department of Planning, GoUK

10.20 The funds under CSS, Central Plan, EAP and NDRF were to be provided to the state government from the concerned Ministries/Departments. The allocation and recommendation under SPA (Reconstruction) was to be done by the erstwhile Planning Commission.

10.21 Details of disaster induced losses in various years are summarized in the table below:

Table 10.7: Details of losses in Disaster in different year

S.No.	Year	Human losses			Animal loss	Damage to dwelling units		Agriculture land lost (in Ha)
		Dead	Missing	Injured		Full / Severe	Partial	
1	2018 as on 31.07.18	52	09	24	423	54	22	Not available
2	2017	84	27	66	1020	535	1067	21.04
3	2016	119	05	102	1391	1091	2684	112.25
4	2015	55	-	64	3717	206	1313	15.48
5	2014	66	-	66	371	660	1260	1285.53
6	2013	225	4021	238	11268	5296	11938	1308.96
7	2012	176	-	96	997	285	743	40.34
8	2011	83	-	71	876	514	5814	806.35
9	2010	220	-	139	1798	1215	10672	240.93
Total (2010-17)		1028	4053	842	20562	7062	35491	3830.88
Average		129	507	105	2570	883	4436	478.86

Source: Department of Disaster Management, GoUK

10.22 Forest fires and building fires is a common phenomenon in the state of Uttarakhand. Precious life and property is lost on this account in almost all parts of the state. Part of the reason is the haphazard growth of towns and habitations. Rural villages in the state are particularly vulnerable because the construction of houses involves use of substantial quantity of timber which is inflammable. This is exacerbated by the use of fuel wood, as source of energy for cooking and warming. Every year, there are numerous incidences of fires causing huge losses of material and forest wealth.

10.23 Amongst the human-induced disasters, road accidents are the cause of most of the deaths. Due to the topography of the state, massive investments are required in proper road constructions, and implementation of road protection and various road safety measures.

10.24 Though the damages & loss caused by wild animals is yet to be included in the list of disasters identified in the relief manual, yet the issue has assumed alarming proportions in the hill areas of the state. The damages caused to agriculture and horticulture by the wild animals and monkeys has become a cause of serious concern and a threat to the livelihood of

thousands of the farmers in the state, especially in the hill areas.

- 10.25 Agriculture is the mainstay of the state's economy with a majority of it being dependent on rainfall. The landholdings are small and fragmented. Over dependence of agriculture upon rainfall, makes the state vulnerable to crop failure. In the year 2006, winter rains were deficient by 79.10% and 63 Tehsils of 11 districts suffered from drought. An assistance of Rs. 284.58 crore had to be sought from the Central Government under NCCF. Again in the year 2008, 45 tehsils of the state faced drought conditions and an assistance of Rs. 241.56 crore was sought from the Central Government out of NCCF.
- 10.26 The subsistence farmers of the state also suffer from severe winters resulting in loss in crops due to frost and cold wave. Permanent loss of land due to landslides is also a major issue in the hills.
- 10.27 In case of major disaster incidences as in 2010, 2012 and 2013 the allocation under SDRF have fallen short of the required amounts for search, rescue and restoration of essential services. Consequently funds had to be mobilized from various other sources. **The state takes note and appreciates the higher magnitude of grants received under SDRMF as recommended in the first report of the 15th FC.** In view of increasing incidents of extreme climate events there is enhanced possibility of the state being affected by such incidences more frequently. **It is therefore required that SDRMF allocation of the state be enhanced significantly.**
- 10.28 Also, the norms of relief admissible under SDRF for rescue, relief and restoration are inadequate and do not reflect the actual ground realities, especially in the hill areas. **These norms need to be revised to take into consideration the actual requirements of the state.**
- 10.29 In view of the above specificities, vulnerabilities and high-risk profile of the state, it is submitted that the list of natural calamities should be enhanced to include disasters which are specific to various states. It is therefore, necessary to revise eligible list of calamities keeping in view the disasters as defined in the Disaster Management Act, 2005. The issue of man and animal conflict like monkey menace have acquired the dimensions of a disaster in the state of Uttarakhand. It should along with snowstorms, cold waves, road accidents, damages to agriculture and horticulture crops due to extreme cold weather conditions and frost, be included in the list of relief compensation admissible under SDRF.

- 10.30 Post-disaster losses are assessed by the revenue department of the state and in accordance with the norms of relief issued by the Ministry of Home Affairs, Government of India, relief is provided to disaster victims, out of State Disaster Response Fund (SDRF). In the event of a major disaster, the state government also provides additional relief to disaster victims out of its own resources and seeks assistance out of National Disaster Response Fund (NDRF).

State specific issues

- 10.31 **Rehabilitation of disaster affected villages:** Landslides and bank erosion that are frequent in the state causes permanent loss of agricultural and other lands and also make some areas prone to ground subsidence and landslides. More than 350 such habitations spread across the state have thus been rendered unfit for human habitation. Geological surveys carried out over the years have indicated that mitigation measures would not be cost effective and most of these villages will have to be rehabilitated at alternative safe locations. People residing in these habitations perpetually face the threat of a calamity and need therefore to be rehabilitated at alternative safe places to avoid loss of life and property.
- 10.32 The state government has formulated a Rehabilitation Policy for disaster-affected areas and has started the process of rehabilitating this population out of its own resources. The task of rehabilitating all the villages is immense and requires huge amount of resources and cannot be done by the state alone.
- 10.33 To give an example, to rehabilitate an average 50 families of the affected 350 villages at alternative safe locations as per the rehabilitation policy, resources to the tune of Rs. 875 crore are required. Besides, resources would also be required for providing community assets and facilities in the rehabilitated villages. **Assistance of Rs. 1000 crore is therefore requested from 15th FC over the award period of 05 years for rehabilitation of the disaster victims.**
- 10.34 **Disaster Mitigation Fund:** In accordance with the provisions of the Disaster Management Act, 2005 the state government has formulated **State Disaster Mitigation Fund**. A number of natural calamities, particularly landslides can be averted by timely mitigation measures, thereby averting loss of resources, human lives. It is therefore urgently required that a mechanism be formulated for regularly receiving Central

Share of the State Disaster Mitigation Fund. Thus, a central share of Rs. 1160 crore may be provided by 15th FC over the forecast period to the state government every year under the State Mitigation Fund. This is estimated using an annual amount of Rs. 200 crore in 2021-22 grown at an annual average rate of 5% after adjusting for inflationary factors. **The government recognises and appreciates the recommendation by 15th FC in its first report that a State Disaster Mitigation Fund be created. An amount of Rs. 187 crore is to be allocated to the state as per the recommendations for the year 2020-21**

- 10.35 **River aggradations to be included in the list of natural calamities:** Riverbeds in many areas in the state of Uttarakhand are rising at an alarming rate. The fast rate of river aggradation is attributed to both increase in the sediment supply and reduced carrying capacity of the rivers. This is mainly due to the increase in the number of landslides, flash floods and cloudburst events together with unscientific debris disposal and reduced water supply.
- 10.36 Raised riverbed has made many habitations on the banks of major rivers prone to floods. The incidence of excessive rainfall can also devastate many areas. The riverbeds are therefore required to be excavated and cleared on a regular basis. Inclusion of river aggradation in the list of notified natural calamities would enable the state government to undertake this work out of the funds available under SDRF. **It is therefore requested that removal of river sediment aggradation be included in the list of notified natural calamities.**
- 10.37 In view of the high earthquake vulnerability of the region, the state government is undertaking vulnerability assessment of its lifeline buildings and the results suggest that large proportion of these are required to be retrofitted. If these buildings are not retrofitted or made earthquake resilient, the state might suffer major losses in the event of an earthquake. It is therefore requested that **special retrofitting grant of Rs. 1000 crore be provided to the state** for the retrofitting of the life line buildings and infrastructure such as emergency support buildings, hospitals, police stations, fire stations and schools situated in high risk areas and districts in the state.
- 10.38 Till the 14th FC period the SDRF covered only basic rescue and relief and did not address the issues of recovery, reconstruction and rehabilitation. The 15th FC has expanded the ambit of the SDRF to include a) recovery and reconstruction and b) preparedness and capacity building. The state

government has very limited resource base for post disaster reconstruction process and in the aftermath of a disaster it is constrained to move resources from other development activities. In any disaster, it is very difficult to assess/predetermine the funds required for response/relief and the funds required for recovery and reconstruction. In this context, the 15th FC has given some flexibility within the three sub-windows of the SDRF. However, such reallocation should not exceed 10% of the allotted amount for the year 2020-21. This flexibility may not be adequate, and Uttarakhand suggests that there should be discretion to use 40% of funds earmarked for relief/response and 30% of funds allotted for recovery/reconstruction interchangeably as the situation demands. Without adequate flexibility, the government may not be able to provide relief support to the victims of a disaster due to constraints on the usage of funds. An ongoing example is the COVID-2019 pandemic where it is difficult to assess the impact and hence the exact requirement of funds for relief measures and recovery. Furthermore, **the government requests that the allocation towards recovery and reconstruction be increased to Rs. 400 crore on an annual basis over the forecast period as compared to the amount of Rs. 281 crore recommended for the year 2020-21. This implies a total amount of Rs. 2000 crore over the five- year period.**

- 10.39 The capacities of the state government to deal with disaster are inadequate in terms of infrastructure, trained manpower and equipment. To bridge this infrastructure deficit, an infrastructure fund should be created to build the capacity of the state government, thereby making them more disaster resilient.
- 10.40 **Risk Transfer:** Given the fact that due to climate change disasters will increase in the future, it is very important to provide for risk insurance instruments. Disaster insurance cover may be provided to the people out of SDRF funds. These risk instruments apart from providing financial support to the community in their need of hour, will also lead to sharing and spreading of risks among different stakeholders.
- 10.41 The SDRF norms are based on immediate disaster events and do not take into account the long-term disaster events. It has been anticipated that these long-lasting disaster events are far more harmful for economics and communities. Hence, we need to have separate funds which will address important issues like melting of glaciers, increasing cloud bursts activities, shifting rainfall patterns etc. This fund will also be closely tied up with the commitments of the state government under the

state action plan for climate change, thereby addressing the various adaptation and mitigation strategies to address the long-term disaster scenario.

- 10.42 In view of the ongoing outbreak of Covid-2019 the health infrastructure of the state assumes a critical role. It may be noted that the state currently lacks the kind of facilities including the number of doctors, hospital beds, quarantine facilities, etc. needed to contain such an outbreak. The 15th FC may consider these factors and also take cognisance of the need to provide for mitigation and containment of such outbreaks while recommending grants for disaster risk management. There would be spillover expenditure in 2020-21 and 2021-22.
- 10.43 In view of the hazard and vulnerability profile of the state and specific problems being faced by the state, the 15th FC is requested to provide funds to the tune of Rs. 7910 crore to the state over the award period.
- 10.44 In addition, we request a special grant of Rs. 1,000 crore during 2020-21, if not for future years, to cope with the unanticipated outbreak of Covid-19. Depending on how the country is able to deal with this pandemic and how quickly economic recovery takes place, the FC may consider additional grants to deal with Covid-19 and its aftermath on the remaining period covering 2021-22 to 2025-26.

Table 10.8: Demand for grants under specific heads

#	Head	Fund Requirement (in INR Cr)					
		2021-22	2022-23	2023-24	2024-25	2025-26	Total
1	SDMF	210.00	220.50	231.53	243.10	255.26	1160.38
2	SDRF	475.00	500.00	525.00	550.00	575.00	2625.00
3	Rehabilitation of disaster affected villages	200.00	200.00	200.00	200.00	200.00	1000.00
4	Retrofitting of lifeline buildings	200.00	200.00	200.00	200.00	200.00	1000.00
5	Recovery and Reconstruction Fund	400.00	400.00	400.00	400.00	400.00	2000.00
6	Infrastructure Fund	25.00	25.00	25.00	25.00	25.00	125.00
Total		1,510.00	1,545.50	1,581.53	1,618.10	1,655.26	7,910.38

Chapter 11

Local bodies

While in public administration decentralization is based on ‘principle of subsidiarity’, in economics it is the ‘*decentralization theorem*’ where welfare gains are based on the argument that the best appreciation and assessment of needs of a local nature can be done at the local level and thereby expenditure corresponding to locally differentiated output leads to higher welfare gains. This provides, among other reasons, the rationale for local self-government and consequent existence of both urban and rural local bodies. The Constitution 73rd and 74th Amendment Acts, 1992 are a recognition of the above mentioned principle which along with the provision for setting up of State Finance Commission (SFC) provides a constitutional mandate for strengthening these institutions both administratively and financially for providing quality services within the local framework which is demand driven with need based.

11.1 The 10th FC was the first to recommend central grants for local bodies. The subsequent Central Finance Commissions including the 15th FC were asked in their ToR to “*make recommendations on measures to augment the Consolidated Fund of a state to supplement the resources of Panchayats (Rural) and Municipalities (Urban) in the state on the basis of recommendations made by the Finance Commissions of the state*”.

Recommendations of the 15th Central Finance Commission

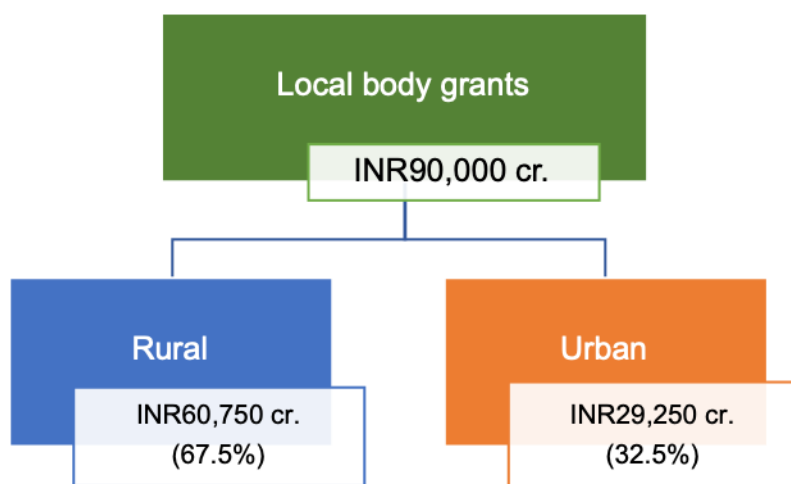
11.2 The 15th FC made some significant departures as compared to the approach of the 14th FC. First, the 15th FC recommended grants for all tiers of local bodies whereas the 14th FC had given grants only to gram panchayats leaving district and block level panchayats committees. Second, the 15th FC recommended grants for fixed scheduled areas as well as cantonment areas. Other innovations that the fifteenth FC has introduced include recommendations relating to tied grants for sanitation and drinking water. In line with the rapid urbanization of India’s population, the 15th FC has recommended that the local body grants for urban areas may be increased to 40% over the medium term.

11.3 In order to further emphasis urbanization and related needs for municipal services, the Commission has recommended earmarked grants for million plus cities in India. It may be observed that in the provision for the million plus cities, almost all the erstwhile special category states that is the north-

eastern and hilly states have been excluded. The state of Uttarakhand has not been given any grant on this account.

- 11.4 Apart from the million-plus cities, the capital city of states houses regulatory institutions, important government establishments, offices of main financial and other corporate institutions and important transportation channels for intra state travel as well as travel outside the state. The capital city is also the hub of all commercial activities particularly in small states where there are no alternative commercial centres/cities. The citizens of the state are therefore heavily dependent on the capital city for these services. The onus of providing infrastructure for such important institutions of the state is thus on the capital city. It is also imperative to meet the needs of both the residents of the capital city as well as the mobile population which comes to the capital cities for availing these services or in the search of employment. Furthermore, the capital city plays an even more important role in states where there are no million-plus or similar cities.
- 11.5 **In the context of the grants for million plus cities, we propose that the concept of million plus cities may be modified to include capital cities along with million plus cities wherever capital cities have not been included in million plus cities already. This will ensure that every state gets a share in this segment of the grant. In fact, in many of the hilly states including Uttarakhand, it is the capital city which bears the burden of the needs of residents as well as transitory population. For instance, the economic activity of Uttarakhand is largely centered around the capital city of Dehradun. It being a famous tourist destination is characterized by a large influx of tourist population. Further, the rural population of the state also migrate to Dehradun in search of better paying jobs and amenities. In this context, it is critical to upgrade infrastructure and other facilities in the capital city of Dehradun and therefore its requirements should also be considered on par with the million plus cities by the 15th FC.**
- 11.6 The 15th FC has increased the magnitude of local body grants to INR 90,000 crores which amounts to 4.31% of the estimated divisible pool for 2020-21. In 2020-21, the proportion of grants for rural and urban areas has been kept at 67.5% and 32.5% each (Chart 11.1).

Chart 11.1: Local body grants as recommended by 15th FC



Source (basic data): 15th FC report

- 11.7 Although FCs have been making a distinction between rural and urban local bodies in the allocation of local body grants, it may be noted that in urban areas, the pattern of agglomeration varies distinctly in plains and hilly areas. Townships in the hills generally do not meet the specified 'township criteria' devised keeping in mind the townships in the plains. Nevertheless, these are, in all aspects, urban areas and for practical purposes, have to provide amenities to the public. Further, the urban areas of the hills have to cater to the needs of the large tourist population. Hence, it is important to augment the capacity/resources of townships in hilly areas just like the townships in the plain areas to ensure commensurate development. The state suggests that within the urban local bodies, the 15th FC may make a distinction between urban areas in the plains and those in the mountainous regions and use different parameters for allocation of funds.
- 11.8 The inter-se distribution of grants among states is based on population and area in the ratio of 90:10. It may be noted that the share of Uttarakhand in total area is only 1.751%. First, this is less than the floor of 2% for small states which is artificially given to states with a share in total area of less than 2% for the purpose of estimating inter-se shares for the area criterion within the devolution scheme. Second, as discussed in Chapter on Proposed Devolution, the inter-se share in the area criterion should be calculated considering the cost disabilities of north eastern and hilly states. **As illustrated in this Memorandum, a higher weight could be given to share of hilly area in the total area of the state. This modification gives a share in total area for Uttarakhand at 2.817 which is higher than both, 1.751% (used by the 15th FC) as well as the floor of 2.000% (used by 15th FC in the devolution scheme). The state suffers on account of lower grants to local bodies which are based on a lower share of Uttarakhand in total area.**

- 11.9 In the context of the extensive use of area for distribution of grants amongst local bodies, **we propose that the 15th FC may use the modified share in area, which provides for a 2% share as a floor, as a criterion for recommending inter-se share in local body grants during its award period covering 2021-22 to 2025-26 as this is a better indicator of the cost disabilities faced by the north-eastern and hilly states.**
- 11.10 In relation to the recommendations of the state finance commission (SFC), the 15th FC has indicated that intra-tier distribution among the relevant entities within a state may be based on population and area in the ratio of 90:10 or as per the accepted recommendations of the latest SFC. By not mandating the need for SFC recommendations for intra-tier distribution of local body grants, this provision may incentivise higher defaults with respect to the constitution of SFC and delaying decisions regarding acceptance of the SFC reports. **It is noteworthy that four SFCs have been successfully constituted in Uttarakhand and their recommendations have been largely implemented. The 5th SFC has been constituted on 4th November 2019 and is expected to submit its report within a year. The 5th SFC's award period is for the five years covering 2021-22 to 2025-26. States such as Chhattisgarh, Gujarat, Jharkhand, Manipur and Mizoram have lagged behind in constituting their SFCs. In this context, we propose that timely constitution of SFCs and implementation of their recommendations may be incentivized and taken into account for determination of local body grants.**

Approach of the 14th Central Finance Commission

- 11.11 Instead of using any indices for devolution, the 14th FC recommended distribution of grants to states with weight of 90% to 2011 population data and with a weight of 10% to area. The grant to each state is to be divided into two parts. One, for duly constituted Gram Panchayats and the other for duly constituted Municipalities, according to their population ratio as per the 2011 census data.
- 11.12 The grant constituted a 90% basic grant and a 10% performance grant for Gram Panchayats on 90:10 basis and 80:20 basis for Municipalities. The grant was to be utilised for delivery of basic services at the Gram Panchayat level. Inter-se distribution was to be determined according to SFCs formula and in case if the SFC recommendations are not available then the devolution will be according to population and area.

Basic Statistics of Local Bodies in Uttarakhand

11.13 Rural areas in Uttarakhand have a 3-tier system of Panchayati Raj Institutions (PRIs) (Table 11.1) namely Gram panchayats (GPs), Kshetra Panchayat (KP) and Zilla Panchayat (ZPs), governed by a single Uttarakhand Panchayati Raj Act, 2016, which is a recent legislation. Prior to it, PRIs were governed by two UP Panchayati Raj related legislations of 1947 and 1961. The new legislation brings about some clarity in the mutual relations of the three tiers by establishing a hierarchical structure.

Table 11.1: Number of Panchayati Raj Institutions

PRIs	GPs	KP	ZP
Number	7953	95	13

Source: Directorate of Panchayati Raj, GoUK

11.14 There are three categories of Urban Local bodies (ULBs) primarily depending on the size and population. Nagar Nigams (NN) or Municipal corporations (MC), Nagar Palika Parishads (NPPs) and Nagar Panchayats (NPs). Till 2011 the total number of ULBs was 63 but now the state government has constituted 29 more new ULBs taking the total to 91 (Table 11.2).

Table 11.2: Number of Urban Local Bodies

ULBs	NN	NPP	NP
Number	08	41	42

Source: Directorate of Urban Development, GoUK

There are 3 non-elected NPs i.e. Badrinath, Kedarnath and Gangotri where the entire population shifts during the winter period.

4th SFC observations and recommendations

11.15 The 4th SFC observed that there is a clear mountain and plain divide in terms of number and population of villages and urban centres. Villages in the mountainous districts are generally scattered over a wide area, have small population, are large in number, have poor connectivity and physical infrastructure. The number of villages in the hill region is 6868 whereas the number of villages in the plain regions is 1085. Similarly, the number of municipal bodies in hills and plains are **56 and 35** respectively, whereas, in terms of urban population, the hill region has a population of about **6.16 lakh** and the plain regions has a population of about **27.69 lakh**.

- 11.16 Many ULBs and PRIs are located in remote areas and at quite a distance from the rail head. Some of these in mountain regions are vulnerable to natural hazards and disturbances in the form of landslides, earthquakes, snowstorms, glacier movement, cloudbursts, flash floods etc. causing considerable damage to roads, bridle paths, irrigation channels, water supply systems, power lines, buildings etc. that adversely affects crops and livelihoods too.
- 11.17 In ULBs a major chunk of the non-plan revenue expenditure is on salary & pension which is largely unavoidable. The state government should explore suitable measures for containing the other components of non-plan revenue expenditure so that a surplus of resources could be gained for allowing scope for assets creation and sustainable development. The state should explore the possibility of mobilizing additional resources through tax and non-tax resources by ensuring better tax compliance and rationalising the user charges/fees respectively.
- 11.18 The local bodies in Uttarakhand suffer from deficient infrastructure, low administrative capacity, lack of sufficient resources, remoteness and weak institutions. The 4th SFC also observed that the local bodies have not been given requisite funds, functions and functionaries as mandated by the Constitution and many functions have been taken over by the state government and its para-statal agencies. Further, the ULBs in the state are required to cater to large minimal revenue paying floating population on account of the fact, that many of them are pilgrim destinations or are enroute to the pilgrim destinations. Coupled with this is the seasonality factor which makes it very difficult to benchmark the service levels. When the major shrines like Badrinath, Kedarnath, Gangotri and Yamunotri are closed, it has almost zero local population and almost zero tourist traffic. Thus, while the level of the economic activity and paying capacity are low, the responsibilities are disproportionality more onerous.

The 4th SFC Devolution Formula

- 11.19 As per 4th SFC, 11% of the state's own tax revenue will be the devolution amount to be shared between ULBs and PRIs on 55% and 45% basis respectively (table 11.3). As against the above recommendations, due to its limited financial resource, the state government has accepted only 10.5% sharing of its own tax revenue.

Table 11.3: Sharing of Devolution resource within local bodies

Local Body		Inter-se Devolution share	Total share in devolution
ULBs (55%)	1. NN	40	22
	2. NPP	45	24.75
	3. NP	15	8.25
PRIs (45%)	1. ZP	35	15.75
	2. KP	30	13.5
	3. GP	35	15.75
Source: 4 th SFC report, GoUK			

11.20 The horizontal share by the 4th SFC of different local bodies based on different parameters are given in table 11.4:

Table 11.4: Horizontal share of different local bodies

Local Body		Population	Area	Tax effort	Remoteness	Centrality Index
ULBs (55%)	NN	50	20	20	-	10
	NPP	60	10	20	-	10
	NP	60	20	20	-	-
PRIs (45%)	ZP	50	20	15	15	-
	KP	50	30	-	20	-
	GP	60	20	-	20	-
Source: 4 th SFC report, GoUK						

11.21 The recommendations by different SFC and the corresponding release by the state government are shown in table 11.5:

Table 11.5: Details of amount recommended by various SFCs and released by state government

Rs. in Crore			
S.No.	Institutions/Tenure of Commission	Amount recommended by the Commission	Amount released by the state government
1	2	3	4
A. Panchayati Raj Institutions			
1	First State Finance Commission (01.04.2001- to 31.03.2006)	149.28	145.28
2	Second State Finance Commission (01.04.2006 to 31.03.2011)	824.22	824.84
3	Third State Finance Commission (01.04.2011 to 31.03.2016)	1686.77	851.99
4	Fourth State Finance Commission (01.04.2016 to 31.03.2021)	4087.64	752.55 (up to July 2018)
B. Urban Local Bodies			
1	First State Finance Commission (01.04.2001- to 31.03.2006)	186.44	204.04
2	Second State Finance Commission (01.04.2006 to 31.03.2011)	549.48	551.31

3	Third State Finance Commission (01.04.2011 to 31.03.2016)	1686.78	1156.47
4	Fourth State Finance Commission (01.04.2016 to 31.03.2021)	4996.00	1136.76 (up to July 2018)

Source: Reports of the State Finance Commission and Directorate of Finance Commission

11.22 Disbursement of grant under 14th FC covering the period FY 2015-16 to FY 2017-18 is given in table 11.6:

Table 11.6: Details of Disbursement of Grant under 14th FC

Rs. in Crore			
Financial Year	ULBs	PRIs	Total
FY 2015-16	75	203	278
FY 2016-17	118	318	436
FY 2017-18	108	325	433
FY 2018-19 (as on July 2018)	54	188	242

Source: Directorate of Finance Commission, GoUK

11.23 FY 2020-21 is the first year of the recommendations of 15th FC and the last year of recommendations under the 4th SFC. Hence, an assessment of resource requirement of the local bodies has been made for the period from FY 2021-22 to the end of award period which is 2025-26. The assessed resource requirement for local bodies as per the 4th SFC for 2020-21 was at Rs.1,847 crore. Considering this amount as the base figure, a growth of 11% has been used to arrive at the resource requirement for the remaining five years under 15th FC award period (Table 11.7). The assessed total local body grants have been divided in the ratio of 55:45 between ULBs and PRIs as per the recommendations of 4th SFC.

Table: 11.7 Assessed resource transfer to local body

Rs. In Crore			
Year	Assessed resource transfer to local body		
	ULBs	PRIs	Total
2020-21	1,016	831	1,847
2021-22	1,128	923	2,051
2022-23	1,252	1,024	2,276
2023-24	1,390	1,137	2,527
2024-25	1,543	1,262	2,805
2025-26	1,712	1,401	3,113
Total	8,040	6,578	14,619

Source: Projections of Directorate of Finance Commission, GoUK.

11.24 Table 11.7 shows that the state government has to provide Rs.14,619 crore to local bodies during the award period of 15th FC.

Suggestions for the 15th FC.

- 11.25 The inter-se distribution of grants for local bodies amongst different states needs a micro and more localized approach because of large scale local variations in socio-economic geographical circumstances. The unit cost of providing local public goods and services may be considered while determining the inter-state distribution of local body grants. This is because unit cost of provision of public goods and services is considerably higher in states with low density of population and difficult terrain. States like Uttarakhand which have a higher share of mountainous area suffer from cost disabilities due to various factors like limited connectivity, various environmental regulations like forest clearances etc. and disaster vulnerability. **As discussed in paragraph 11.5, this consideration can be incorporated by using modified area, where a share of 2% is provided for as a floor, as a criterion in the determination of state-wise grants. Further, since, most of the local bodies, urban-rural both suffer from capacity deficiencies, hence the conditionalities associated with local body grants should be minimal.**
- 11.26 As discussed in paragraph 11.3, the state of Uttarakhand has not been given any grant for million plus cities. **It is argued that the concept of million plus cities may be modified to include capital cities along with million plus cities wherever capital cities have not been included in million plus cities already. This will ensure that every state gets a share in this segment of the grant. This would also provide resources for developing the much-needed infrastructure and other amenities in the capital cities of north-eastern and hilly states who bear the burden of the needs of residents as well as transitory population.**
- 11.27 **The 15th FC may consider incentivizing the constitution of SFC and the status of the implementation of their recommendations in determining intra-state allocation of local body grants, as per the provisions of the Article 275 of the Constitution.**
- 11.28 An amount of Rs. 30 crore is required for the establishment of an Urban Training and Research Institute, so that capacities of urban development functionaries, as well as, representatives could be enhanced.

- 11.29 For effective implementation of SWM, there is a need of sufficient land for the construction of landfill sites. Hence, an amount of Rs. 250 crore should be provisioned for the purchase of land for the said purpose.
- 11.30 There are about 1,75,000 light points in Municipalities (excluding Municipal Corporations), which cannot be converted to LED under EESL scheme. On the basis of the cost of Rs. 6000 per LED, the state would require approximately Rs. 60 crore for the installation of one lakh LED street lights. This would help to bring down the power consumption and lower expenditure of ULBs.
- 11.31 Many of the ULBs, especially on the routes of Chardham Yatra, have huge parking problem, hence reasonable grants amounting to Rs. 300 crore should be provisioned for the construction of multilevel parking.
- 11.32 Since many cities of Uttarakhand face water logging during monsoon season, therefore it is very necessary to develop proper drainage plan. Hence an amount of Rs. 500 crore should be provisioned for storm water drainage for the cities of the state.
- 11.33 An amount of Rs. 50 crore should be provisioned for the creation of database through GIS and strengthening of IT network of ULBs. This will also help them in correct assessment of property taxation, thereby leading to enhanced revenues for ULBs.
- 11.34 Most of the ULBs are tourist towns and attract lakhs of visitors throughout the year. The condition of urban roads is not good as the resources with ULBs are very limited, hence a provision of Rs. 500 crore is requested for the above purpose.
- 11.35 Proper master planning is very necessary for planned development of ULBs, hence a provision of Rs. 50 crore may be given for this purpose. Similarly, most of the ULBs in the state are tourist towns and hence good wayside amenities should be provided. Accordingly, a provision of Rs. 70 crore be provisioned for this purpose. Most ULBs do not also have proper bus stand or parks, hence a grant of Rs. 50 crore is requested for building of bus stands in ULBs and a further grant of Rs. 25 crore is requested for the beautification of parks.
- 11.36 Badrinath, Kedarnath & Gangotri ULBs are not getting grant due to non-conduct of elections. However, there is immense pressure on these ULBs

during Yatra period for providing amenities and services to tourists/ pilgrims. Hence, precondition of election should be relaxed and accordingly, grant must be provisioned for these ULBs. As mentioned earlier, the local body has been constituted for facilitation purpose of tourist and these towns do not have permanent resident population.

11.37 Two main tourist towns of the state namely Nainital and Mussoorie, attract a very large number of tourists during the summer season, long weekends and holidays. Traffic management and parking facilities pose a big challenge. Suitable grant may be provided for developing better infrastructure including parking facilities to meet the challenge of increased tourist inflows in an environment friendly manner. These ULBs also face severe water crisis during the summer month due to increase in the number of tourists. Hence an allocation of Rs. 500 crore should be provisioned for infrastructure upgrade and drinking water facilities of these tourist towns.

11.38 The state government has to provide resources to the local body as per the recommendations of the 4th SFC to fulfil the statutory duties and other functions as mandated by law. As the resources of the state are very limited, **it is requested that the above resources amounting to Rs.14,619 crore may be given to the state government as an untied transfer.** In addition, as indicated in the previous paragraphs, in order to fulfil certain specific/special needs of the local bodies, we propose that the 15th FC may also provide for a special purpose grant. Details of resources required 'by purpose' are given in table 11.8.

Table 11.8 Devolution for local bodies requested from 15th FC

		Rs. in crore
A.	Devolution to the Local Bodies during 15 th FC award period based on the recommendations of 4 th SFC	14,619
	Total (A)	14,619
B	Special Purpose Grants	
1	Establishment of Training and Research Institute	30.00
2	Purchase of land for Solid WM	250.00
3	Installation of one Lakh LED	60.00
4	Construction of parking in ULBs	300.00
5	Construction of storms water drainage in ULBs	500.00
6	Strengthening of IT infrastructure in Local Bodies	50.00
7	Maintenance of roads of ULBs	500.00

8	Master planning study of all ULBs	50.00
9	Construction of way side amenities	70.00
10	Construction of modern bus stands in ULBs	50.00
11	Beautification of parks and tourist ULB towns	25.00
12	Infrastructure up-gradation & Drinking Water Supply in Mussoorie and Nainital	500.00
	Total (B)	2,385.00
	Total (A+B)	17,004

11.39 The state government has endeavored to implement the recommendation of 4th SFC in letter and spirit, but as the resources of the state are very limited and due to the fact that no revenue deficit grant was given to the state by the 14th FC, the state has been unable to meet the aspirations of the local bodies. **In this context, the provision of revenue deficit grant by the 15th FC in its first report for the year 2020-21 is a positive step and we propose continuation and augmentation of these grants to Uttarakhand, especially in the light of economic uncertainties which are currently unfolding. This will enable the state to fulfil its constitutional obligations towards the local bodies.**

Annexure 1

Notes on Incentive related terms of references

We have submitted detailed information regarding various points listed in Para 4 of the TOR, by way of topic notes. However, a brief mention is being made here in the Annexure to this memorandum.

A. Efforts made by the State in expansion and deepening of tax net under GST

1. Goods and Services Tax was implemented from 1st July 2017. Since inception of the new system, a multi-dimensional strategy for bringing efficiency in tax collection is being implemented. Various important steps have been taken in this direction.
2. **Training of personnel:** Prior to GST, Commercial Tax Departments was dealing merely with goods and not with services. With GST, a new concept of supplies got introduced instead of sales, along with allowances of credit of tax paid during inter-state transactions. To adapt to these changes and to gain knowledge about the new law and rules thereof, the officers and staff of the tax department have been imparted elaborate training for proper implementation.
3. **Outreach Programmes for tax payer's awareness:** Regular meetings with different stakeholders i.e. tax payers, advocates and public have been organised in order to create awareness as also to encourage voluntary compliance and get useful feedback.
4. Uttarakhand is a hilly state, with a difficult geographical terrain and problem of accessibility. Therefore, to increase the outreach **GST Mitra** have been appointed on the basis of certain prescribed qualifications and trained for increasing awareness among tax payers.
5. **Migration of dealers:** Efforts were made for complete migration of VAT dealers to the new regime. By the timely migration, it was ensured that all eligible dealers have adopted the new system and have registered with GST.
6. **Information gathering and bringing new dealers on record:** Four units of Special Task Force (STF) at Dehradun, Hardwar, Kashipur and Rudrapur respectively have worked for cross verifications and information gathering purpose. Elaborate information has been gathered in this regard, particularly

in the field of security services, works contract services, rent a cab service etc. so as to increase the tax base.

7. **Creating awareness among tax payers:** Tax payers were made aware of the benefits of registration and were persuaded to take registration, as a result of which 57218 new registrations were applied for and granted under GST in state this year, whereas last year only 15502 new registrations were granted in the comparable period.

B. Efforts & progress made in moving towards replacement rate of population growth

8. The state formulated its Population Policy in 2002, which was thereafter revised in 2013. Among the various measures for moving towards the replacement rate of population growth, some are outlined below:
 - a. In Uttarakhand “State Population Stabilization Fortnight” is celebrated every year, under which related commodities are distributed.
 - b. To increase the participation of men in the family planning programme, every year doctors are trained in NSV method.
 - c. Post Partum IUCD insertion Service is being provided to pregnant women within 48 hours of child birth, to promote spacing between children.
 - d. In all districts, ASHA activists have been deployed, through which the pregnant mothers are being followed up, till the vaccination of the new born child.
 - e. Health and nutrition day is organised in rural and urban areas on second Wednesday of every month, under which Anganwadi / ASHA/ANM workers give health related information during pregnancy and adolescent phase.
 - f. World Vasectomy Fortnight is being organised in the month of November, every year for increasing the participation of men, under family planning programme.
 - g. Under the National Health Mission, RMNCH+A counsellors have been appointed in all districts to spread awareness by providing information related to reproductive health to overcome various types of misconceptions.
 - h. For increasing the service providers of spacing method in family planning services, training programme of IUCD, PPIUCD, PAIUCD and injectable contraceptive (Antara) are conducted every year in the state.

C. Rationalisation of Centrally Sponsored Schemes in 2015-16 & its effect on implementation.

9. Based on the recommendations of Sub-Group of Chief Ministers on the rationalisation of Centrally Sponsored Schemes, Government of India has taken a major decision to overhaul and rationalize all the existing Centrally Sponsored Schemes in 2015.
10. In year 2015, for the financial year 2015-16, out of the existing 66 CSS, 49 schemes were clubbed together and rationalized into 29 schemes, 6 schemes were delinked and 11 Schemes were made Central Sector Schemes. Out of 29 CSS, the Core CSS are 90:10 and optional CSS are in 80:20 basis between centre and the state. Presently, as per Public Finance Management System report, under different components of CSS, the state is getting disbursement from Central Government under 86 components.
11. After rationalisation of schemes, it has become easier for the state government and district administration to implement and monitor the schemes with due emphasis on outcomes and impacts. Almost, every scheme has its own MIS and many of the MIS has geo-tagging facility. In rationalization process although the number of schemes was reduced but the guidelines of the schemes, with few exceptions, were not modified to give states more flexibility to suit their local existing condition during implementation of schemes. The country has states with different level of development facing different issues and challenges. Even within state, different districts/regions have different situations with a specific challenge on the ground. In this context, it is very important to modify the guidelines of the schemes so that the states can customize the schemes during implementation.
12. For hilly states like Uttarakhand, which has very unique characteristics like difficult terrain, extreme climate condition, fragile eco-system, need of strategic infrastructure in border, national and moral duty to preserve forest eco-system and environment, higher cost of infrastructure development and service delivery due to difficult terrain, it is all the more important for the Union Government to indicate allocation to the state, at least for Optional or Non-Core Schemes based on current year allocation and let the state choose the schemes they prefer to implement or customize the available scheme or devise their own scheme. Even after rationalization, many new schemes were introduced by the Union Government, without any serious consultation

with state governments. So, the idea behind the rationalization of schemes to address the problem of “one-size-fits-all” still exists.

13. Analysis of expenditure with respect to budget provisions and increase in annual actual expenditure with respect to previous years during Pre and post rationalisation years:

Table A1.1: Details of Budget provision and increase in annual actual expenditure with respect to previous year during pre and post rationalisation years

Financial Year	% of Expenditure against Approval	Increment in Absolute Expenditure Amount in respect to previous year
2012-13	70%	44%
2013-14	49%	13%
2014-15	47%	45%
2015-16	51%	4%
Post Rationalisation Years		
2016-17	56%	3%
2017-18	56%	14%

Source: Directorate of Budget, GoUK

14. The Centrally Sponsored Schemes in many departments like education, water resources/ irrigation, agriculture department etc. were getting more allocation / resources during pre-rationalization period. It is therefore, requested to look in to the implementation issues and actual releases to states under CSS and start new CSS for Himalayan states or give more flexibility to Himalayan states in CSS, to suit their local existing conditions.

D. Uttarakhand State’s Plan for Sustainable Development Goals (SDGS)

15. State government has taken major initiatives to develop the vision 2030 on the line of SDGs. The state has achieved a lot in terms of high economic growth, per capita income, and has good social/human development indicators. The poverty is also low at around 11% (FY 2011-12) with very little rural-urban difference.
16. However, the economic growth as mentioned earlier has been concentrated mainly in the three districts which are in the plains areas and bypassing to a great extent the remaining ten districts in the hills.
17. The vision for 2030 comprising the SDGs and its indicators will address the followings issues :
 - a. Maintain / accelerate the present high growth regime.
 - b. The gains from development must close the hills-plains gap, which needs creation of sustainable livelihoods in the hills.

- c. More than 60% of the people in the state are dependent on agriculture and thus transforming agriculture and horticulture is a major priority.
- d. Enhancing of human development, especially by improving access to doctors / health facilities in the mountainous regions which is facing a great shortage of doctors.
- e. Enhancing the environmental sustainability by adopting the green energy and green technology for the infrastructure development and opting for renewable sources of energy also.

Growth Drivers and Core Areas:

- 18. Five major growth drivers of the economy identified for hill regions are horticulture / hill agriculture including aromatic and herbal development, tourism (wellness, adventure, rural, eco-tourism and leisure tourism), forestry particularly the non-timber forest products, hydropower (micro and mini) and AYUSH as wellness promotion.
- 19. State government has also developed its vision of development in the line of SDGs with the statement of **“To achieve inclusive and holistic human development of Uttarakhand through socio, economic and environmental sustainability”** and adhered with the motto and mission statement. **“To impart excellence in society through quality education, health well being, improved sanitation, sustainable livelihood, green energy, innovation and technology”**.

Major Theme/Sectors for SDGs:

- 20. State government has divided 17 SDGs into four major and focused sectors/themes which would be easily accessible and monitorable.
 - a. **Human Development:** Three SDGs namely inclusive & equitable quality education, good health & well being and clean water & sanitation are covered under this theme/sector.
 - b. **Sustainable Livelihood:** Four SDGs namely zero hunger, no poverty, decent work & economic growth, industry, innovation & infrastructure are covered under this theme/ sector.
 - c. **Social Development:** Three SDGs namely gender inequality, reduced inequality, peace, justice & strong institutions are covered under this theme/sector.
 - d. **Environmental Sustainability:** Six SDGs, namely affordable & clean energy, sustainable cities & communities, responsible consumption &

production, climate action, life on land and life below water are covered under this theme / sector.

21. About 370 priority, schematic and proxy indicators of different SDGs have been identified and three year action plan, seven year strategy and fifteen year vision is being prepared by the respective departments.

Measures taken by the state government to achieve SDGs targets

22. Mapping of the SDGs targets with Union and state government schemes for effective plan formulation and monitoring of SDGs.
23. State government has taken innovative step to map the important indicators of the Sustainable Development Goals (SDGs) with projected output and outcome of the respective scheme proposed in the budget, wherein the output and outcome are co-related to the budget provision.
24. Mapping of SDGs indicators with outcome budget from FY 2018-19.
25. Six working groups have been formed under the chairmanship of Additional Chief Secretary, Principle Secretary and Secretary for guiding the preparation of roadmap and action plan of achieving the SDGs in systematic and timely manner

E. Disaster Resilience in Uttarakhand

26. Uttarakhand state falls in Zone IV and V as per the seismic zonation and is therefore susceptible to earthquake hazards. The main frontal thrust (MFT), main boundary thrust (MBT) and main central thrust (MCT) pass through the state and it has been experiencing frequent seismic activity- major earthquakes in Year 1991 in Uttarkashi and in Year 1999 in Chamoli. It is more than 200 years since the 1803 Garhwal earthquake and potential threat for a bigger event looms large. Effects of climate change are also contributing to the frequency and severity of disaster events, specifically flash floods, cloud bursts avalanche and landslides.
27. The state government has been proactively taking steps towards disaster risk reduction so that the loss of life and property is minimal and investment on infrastructure development does not suffer recurring disaster induced losses.
28. Following are the major initiatives of the state government towards building Disaster Resilience:
 - a. Standard house designs, have been made which incorporate disaster resilient features.

- b. **Transport Sector Specifics:** As road connectivity is the lifeline for the hill areas, steps are being taken to incorporate disaster resilience features in the design of roads (mainly slope / landslide and river bank protection), bridges (design of structure and abutment design) so that in times of a major seismic event road connectivity is not lost. The state is adapting new techniques for slope stabilization and a dedicated slope cell has been created in the Public Works Department. Plans are to take up bridge construction in the Design Build concept so that new technology, material and design can be adopted.
- c. **Capacity Building:** Major trainings are being done by the state government to all the stakeholders like government employees, police, SDRF, fire, district administration, NGOs and local communities to enhance their capacity and capability to fight disaster and build disaster resilience.
- d. **Multi-Risk Hazard and Vulnerability Assessment:** A specialized agency has been engaged by the state to carry out a multi-risk hazard and vulnerability assessment study across the entire state. In addition to seismic hazards this study will take into account four other hazards and prepare a digital risk database of the state for informed decision making.

F. Progress made in increasing capital expenditure, eliminating losses of power sector and improving the quality of such expenditure in generating future income streams.

29. Generating utility is taking the following steps for improving the quality of expenditure:
 - a. Renovation and modernisation of old plants is being undertaken to enhance the power generation and increase the working life of the plants.
 - b. ERP solution is in the advance stage of implementation.
30. AT&C Losses has been achieved as per target. The details of actual AT&C Losses as against the targets fixed under UDAY are as follows:

Table A1.2: AT&C losses

S.No.	Year	Target	Achievement	Remarks
1	2015-16	17.00%	17.19%	
2	2016-17	16.00%	15.85%	
3	2017-18	15.00%	*15.73%	*provisional
4	2018-19	14.50%		

Source: Department of Energy, GoUK

*Commercial data yet to be complied and finalized.

31. **Action Plan/Action already taken to reduce AT&C losses:**

- a. Vigilance raids have been conducted and cases are registered under Sections 126 and 135 of Electricity Act, 2003 to reduce AT&C losses. Legal proceedings have been initiated against the persons found indulging in theft of electricity.
- b. Mechanical meters are being replaced by electronic meters and defective meters are being replaced with an aim to reduce the level of defective meters to below 3%, as against existing level of 4%
- c. 100% metering of consumers has been completed. Action is being taken to ensure 100 % meter reading.
- d. Automatic meter reading is being done of high value consumers.
- e. L.T. aerial bunch cable is being laid in theft prone areas.
- f. Consumer billing is being checked by internal audit wing to detect errors/ omissions / malafides.

32. **Action Plan/Action already taken to reduce transmission losses:**

- a. All the mechanical meters have been replaced by electronic meters.
- b. Replacement of low accuracy class measuring instruments and energy meters by high accuracy class (0.2) measuring instruments and Availability Based Tariff (ABT) energy meters for efficient and higher accuracy measurement.
- c. Construction of new transmission lines have been taken up to reduce the load on overloaded lines and the losses.
- d. By up-gradation of system & lines, transmission losses have reduced continuously as here under:

Table A1.3: Transmission Losses

Financial Year	Transmission Losses
2013-14	1.81%
2014-15	1.78%
2015-16	1.71%
2016-17	1.51%
2017-18	1.46%

Source: Department of Energy, GoUK

G. The details regarding tax efforts and resource mobilization have been stated in the Topic Note No-39.

33. The State Treasury System and Public Finance Management System (PFMS) have been linked together in 2016, which has been further strengthened by ensuring daily exchange of expenditure data between cyber treasury and PFMS.
34. Regarding Direct Benefit Transfer (DBT), the State DBT cell has been activated in 2017. The State Aadhar Act has been passed and notified. State has developed a DBT portal to bring all DBT schemes of state as well as centre on DBT platform.

H. State has made concerted efforts towards delivery at citizen's door step with following measures.

35. Introduction of single window system for clearances of projects in industry, housing etc.
36. The state has been proactive about digitization. 'Ease of Doing Business' initiative includes rendering departmental services through on line portal by removal of physical touch points.
37. "Uttarakhand Right to Service Act-2011" and "Uttarakhand Single Window facilitation and Clearance Act. 2012" are operational. More than 200 services have been notified under Right to Service Act, 2011.
38. On line services are being provided for various citizen centric services.

I. Provision of grants in aid to local bodies for basic services, including quality human resources, and implementation of performance grant system in improving delivery of services.

39. To support the ULBs and to strengthen the delivery of basic services including water supply, sanitation, sewerage/ sewage and solid waste management besides maintaining of roads, footpaths, street lights, cremation grounds and other basic services, the state government disburses the grant for the said purpose under the state schemes of (1) **Development of urban infrastructure** in which ULBs are given grants for construction and maintenance of parks, drains, retaining walls, cremation grounds etc., (2) Construction of animal birth control centers for controlling the street dogs, (3) Construction of night shelter, (4) Health scheme for sweepers, (5) Assistance for eradication of begging.

40. State government has introduced the scheme of incentives (Uttarakhand Urban Local Bodies Reform Incentive Fund) for the ULBs to improve the delivery of services by Urban Local bodies.

J. Progress made in Sanitation, Solid Waste Management and Behavioral changes in Open Defecation.

41. The State target under Swachh Bharat Mission (U) for Individual Household Latrines (IHHL) construction was 27,640 out of which 11,235 have been completed and 11235 are under construction. Similarly the targets for community/publictoilets are also being actively pursued.
42. Under the 'Support National Urban Sanitation Policy' (SNUSP), Integrated City Sanitation Plans (ICSP) covering solid and liquid waste management have been prepared for 24 local bodies, including 16 Ganga towns with the technical support of GIZ (German International Cooperation).
43. Increase in toilet coverage has led to increase in access to toilets, thereby leading to open defecation free status in cities/ towns of Uttarakhand.
44. State Septage Management Protocol has been prepared regarding proper collection, transportation and disposal of septage / foecal sludge from septic tank/pits.
45. Comprehensive City Sanitation Plans are being prepared.
46. The State Solid Waste Management Plan has been formulated in accordance with SWM Rules 2016, and door-to-door collection and transportation is being encouraged.
47. It is expected that the State Solid Waste Management Strategic Plan (SSWMSP) will ensure scientific waste management in all the urban local bodies of the state.
48. CT/PT- The state target under Swachh Bharat Mission (U) for CT / PT construction is 2000, out of which 433 has been completely constructed and 394 are under construction.
49. Urinals- State target under Swachh Bharat Mission (U) for CT/PT construction is 1000, out of which 65 has been completely constructed and 185 are under construction.

Annexure 2

State Specific Issues (Project of Crucial Importance)

Introduction

Within a few years of its formation in the year 2000, Uttarakhand has emerged as one of the fastest growing state in the country. The recommendations of Finance Commissions in the past for state specific grant to address special problems of Uttarakhand had played a very important role in the high growth rate achieved by the state. After the implementation of the recommendations of 14th FC, the special grants by erstwhile Planning Commission to special category states had stopped which along with other factors like implementation of 7th Pay Commission, low revenue base etc. have led to a situation in which the capital expenditure has suffered adversely. Being a small state with low revenue base faced with numerous challenges due to Cost Disability, "Use Disability" on account of Policy Mandated Restrictions, high floating population on account of religious tourism, responsibility to protect and preserve Forest & Environment for the whole Nation and proneness to disaster, the state has not been able to provide funds for certain urgent state specific requirements.

We humbly request the 15th FC to consider special dispensation for the following state specific problems:

1) Directorate of Economics and Statistics (DES)

For achieving the milestones with respect to grants for statistics as mentioned in the first report of the 15th FC, it is necessary to prepare the District Domestic Product (DDP). This would require surveys and studies to be conducted with emphasis on secondary and tertiary sector surveys. For the preparation of the state IIP, it is essential that the industrial units provide timely data. About 350 industrial units have been identified by the Department for monthly collection of data on industrial production. Regular interaction with industries by way of seminars, trainings and workshops will be necessary for collating data. For constructing the State Consumer Price Index (CPI), the consumer expenditure survey and market selection survey is necessary. The usage of technology for data collection through different surveys would enable timely collation and release of data. Therefore, CAPI based survey, analysis using different statistical software and web-based data dissemination would support the entire statistical system. Further, the monitoring of SDG and its dynamic updating with National SDG dashboard

can be done by using different statistical applications along with GIS based monitoring approach.

For effective data management in the state, a High-Level Data Standard Committee (HLDSC) needs to be formulated. The committee may undertake interactions with various state departments with respect to provision of statistics and set the standard for data coverage, periodicity, timelines and data dissemination practices. Coverage includes selection of variables to be reported and their level of disaggregation. Periodicity indicated the frequency at which the data is reported. Timeliness indicates the time lag between the reporting of data and its reference period. Data Dissemination addresses the aspects of how and when the data is to be shared with public and the formats for sharing of data. The HLDSC can come up with an Advance Release Calendar (ARC) for different departments, which may be reflected on each department's website. The ARC will ensure timely and seamless data dissemination and sharing. Compliance with the ARC may be monitored by the HLDSC or by respective Head of the Department (HoD) or by both. HLDSC may also undertake the task of ensuring the use of appropriate definition of variables and adoption of suitable methodologies for data collection.

The Department of Economics and Statistics (DES) does not have its own building and lacks effective IT infrastructure. **Therefore, a grant of Rs. 30 crores (Rs. 10 crores for physical infrastructure and Rs. 20 crores for IT and statistical work) is requested for.** This will facilitate building of adequate physical and IT infrastructure and undertaking surveys and studies required to construct the State IIP, WPI and CPI series

2) Animal Husbandry, Dairy and Fisheries

These sectors along with agriculture and horticulture are very important for farmer's income and sustainability of agriculture Sector. Doubling farmer's income can only be achieved through the promotion and development of these allied sectors in a scientific and decentralized manner. The state has proposed 13 trout and carp hatchery and Feed plant in districts, state level veterinary hospital cum referral centre in Dehradun to provide latest modern health facilities for livestock and up-gradation and Modernization of Milk Processing Plants and Cattle Feed Plants.

Therefore, a grant of Rs. 200 crore is requested for above aforesaid measures.

3) Up-gradation and modernization of state orchard

The state of Uttarakhand has 93 orchards spread throughout the state which require urgent intervention to make them resource centre for demonstration of new technologies and organic farming, nursery requirements etc. This is also important from agricultural diversification point of view for Hon'ble Prime Minister's vision of doubling farming income.

Therefore, a grant of Rs. 500 crore is requested for strengthening, up-gradation and modernization of state's orchard.

4) Irrigation

a. Upgradation of existing irrigation infrastructure and providing new efficient irrigation technologies in hilly areas

Agriculture and allied sectors is the mainstay of state's economy and more than 60% of state's population is dependent on agriculture for livelihood. Irrigation is one of the most important components for sustainability of agriculture and allied sectors. The net irrigated area of the state is around 50% of the total cultivated area, whereas in hilly areas this ratio is only 13% which is one of the factors responsible for farmers leaving the agriculture sector and migrating to nearby cities and other states. Since doubling farmer's income by 2022 is the most important goal set by our Hon'ble Prime Minister, it is important to upgrade the existing irrigation infrastructure and scale up the new efficient irrigation technologies throughout the state.

Therefore, a grant of Rs. 1000 crore is requested for upgradation of existing irrigation infrastructure and providing new efficient irrigation technologies in hilly areas.

b. Song River Drinking Water Project

After the formation of the state, Dehradun has grown manifold and requires additional drinking water supply to meet the required norm of 135 lpcd and reduce the burden on already depleting ground water. The state government has constituted and accorded administrative approval for Song drinking water dam project for the aforesaid purpose. This project will also help control the flash flood in foothills areas of Dehradun district.

Therefore, a grant of Rs. 900 crore is requested for the construction of the Song river drinking water project.

c. Jamrani River Multipurpose Dam Project

Haldwani and its surrounding areas are gateway to the Kumaon Himalayan region and also the business capital of Kumaon Division. After the formation of the state, this area like Dehradun has grown manifold and requires additional water supply to meet its drinking water and irrigation requirements. The state government has accorded high priority to this project considering the increased tourism & other economic activities in the Kumaon region. This project will also provide irrigation benefits to neighboring districts of Uttar Pradesh.

Therefore, a grant of Rs. 2800 crore is requested for construction of this multipurpose project.

5) Forest Department

a. Development of wildlife habitat and creation of buffer zone for prevention of man-animal Conflict

The growing man-animal conflict over the years is responsible for huge loss of agricultural and horticultural produce and at times even loss of human and animal lives. As agriculture and allied activities are mainstay of people's livelihood, this conflict has resulted in large scale migration from hilly areas. In some of the districts of the state many villages have become ghost villages due to migration.

Therefore, to create wildlife habitat and much required buffer between human being and wildlife habitat to ensure a harmonious survival of both, a grant of Rs. 250 crore is requested.

b. Forest Fire Management

Every year the nation is losing precious and invaluable forest resource due to forest fire which needs urgent intervention from both State and Central Government. Once lost forest either requires hundreds of years to regenerate or may not regenerate at all and the vegetation deficient land is very prone to soil erosion and landslides.

Therefore a grant of Rs. 500 crore for forest fire management, protection of forests and soil and moisture conservation to prevent the forest fire is requested.

6) Medical Health & Family Welfare

a. Two super specialty hospitals for care of neurological, cardiological & cancer patients

In Uttarakhand and Western UP region, we do not have any higher referral center for neurological, cardiological and cancer problems. People from hilly and far flung areas are forced to go to New Delhi, Lucknow, Chandigarh to get requisite medical intervention. Already living in relatively deprived conditions the people from hilly areas have not only to spend large sum of money but face numerous challenges while visiting distant places for medical interventions.

Therefore, a grant of Rs. 1000 crore for establishment of two super specialty hospitals, one in Garhwal and other in Kumaon region is requested.

b. Tele Medicine

To address the health service delivery to habitations in hilly and remote areas the state has adopted the model of tele-medicine as an alternative mode of service delivery and plans to scale it up to all un-served areas.

A grant of Rs. 250 crore for creating state wide facility of Tele-Medicine is requested.

7) Education and Skill Development

Education is regarded as panacea of all human and social problems. Compared to other sectors, investment in education brings maximum benefits to the society and economy. It is the most important endowment that enables an individual to take advantage of the opportunities created in the economy. Impact of investment in inclusive and qualitative education goes beyond the benefits accruing to the present generation and brings inter-generational change. It brings change in individuals, adds values to the state and nation and helps in building a sustainable future of the nation. It is not only required to make an individuals a good citizen but also important for their employability, ecological awareness and holistic thinking of a nation-state.

We are still in a process of building inclusive and prosperous state which requires quality educational institutions accessible to all. We have done a good job so far in providing educational facilities to all citizens of the state. It is time to consolidate, bring quality and strive for excellence in educational institutions.

Therefore, a grant of Rs. 2200 crore for establishing residential schools in hilly areas, providing facilities like laboratories, libraries in schools, bridging infrastructure gaps in degree colleges, modernization of ITIs and polytechnic colleges and providing basic facilities in schools is requested.

8) Rural Growth Centers at Nyaya Panchayat level

To achieve and sustain the goal of doubling farmer's income by 2022, it is important to have extension services at the doorstep of the farmers. In the state of Uttarakhand, we have 670 Nyaya Panchayats where growth centers are proposed to cater to the extension services, market linkage and storage needs of farmers residing in far flung areas of the state.

Therefore, a grant of Rs. 600 crore is requested to conceptualize and establish growth centers at Nyaya Panchayat level.

9) Strengthening of Public Distribution System

In order to control the delivery cost and to save time during emergency condition specially in hill areas state government proposes to adopt innovative hub and spoke model wherein the base godowns will act as hub and the interior food godowns in far flung areas will act as spoke. At present the state has 23 base godowns and 174 interior food godowns. To meet the requirement the state has proposed 43 new godowns to cater to the needs of people living in disaster prone far flung areas.

Therefore, a grant of Rs. 200 crore is requested to repair and upgrade the existing godowns and construction of new godowns.

10) Tourism

a. Development of Meeting, Incentives, Convention & Exhibition (MICE) Center in Rishikesh

Considering the high end tourism and industrial growth potential of the region, the state urgently requires a large capacity convention center along with required infrastructure for exhibitions, luxury accommodations, motels etc to realize the untapped tourism and industrial potential of the state. NITI Aayog is providing technical support for the development of the proposed convention center under "Development Support Services to State Infrastructure (D3s-i) Scheme".

Therefore, a grant of Rs. 450 crore for development of convention center is requested.

b. Development of Tourism Infrastructure and products across the state

The state has a tourist footfall of 5 to 6 crore annually. Most of these tourists are pilgrims and have low paying capacity, but the state has to invest in ensuring requisite infrastructure. There is a huge infrastructure deficit like parking, way-side amenities, inadequate SWM, etc. and lack of attractive tourism related products.

To bridge the infrastructure deficit in tourism and develop requisite tourism related activities, a grant of Rs. 500 crore is requested.

c. Development of Ropeways in the state

Ropeways are a great tourist attraction but are very cost intensive. The state has great potential in development of Mussoorie-Dehradun, Kedarnath, Yamnotri and Hemkund Sahib ropeways. Their construction will boost tourism activities and also provide livelihoods to local communities.

To develop ropeways in various scenic part of the state a grant of Rs. 400 crore is requested.

d. Development of Tehri Lake as Tourist Destination

Tehri lake is one of the highest man-made lake in Asia and has an area of 42 Sq. Km. A whole new tourism town is being planned around it. The whole area around the lake can be developed as a world class tourist destination offering the tourists all sorts of tourism related products. The development would require huge investment in roads, drinking water, sewerage, power and development of various tourism facilities and products.

To develop the Tehri lake area as a tourist destination a grant of Rs. 5000 crore is requested.

11) Modernization of Police and Strengthening of Emergency Services

Considering the importance of police in speedy delivery of justice, control of law and order for peace and tranquility, disaster management, fire management etc., it is important to upgrade the existing infrastructure, construct new infrastructure and bring new technologies to increase the effectiveness and efficiency of police force.

Therefore, a grant of Rs. 300 crore is requested for construction of residential building, multipurpose complex for Nationwide Emergency Response System (NERS), State Disaster Response Force (SDRF), State Crime Record Bureau, Crime & Criminal Tracking Networking

System (CCTNS), Training Center and Fire Stations.

12)Upgrading the Infrastructure and Modernization of Prison

The various prisons in the state of Uttarakhand have about 4900 prisoners against the sanctioned capacity of 3378 prisoners. Most of the prisons are old requiring urgent upgradation and moreover 6 districts have no district prison.

Therefore, a grant of Rs. 400 crore is requested for upgradation and modernization of prisons in Uttarakhand to bring them at par as per Hon'ble Supreme Court guidelines on prison modernization.

13)Up-gradation/Modernization of Revenue Police & Revenue Department

Uttarakhand is the only state in the country which has this unique institution of revenue police system applicable only in hilly areas of the state. In hilly areas revenue police looks after the work related to both land related matters and law & order. As Uttarakhand has 70% of its area under forest with hilly terrain bordering two international boundaries, the importance of revenue police has never been given its due regard. This system was introduced by the British and has worked well till now, but urgently requires training of its personnels, up-gradation & modernization of infrastructure and provision of basic support system.

Therefore, a grant of Rs. 100 crore is requested for the aforesaid project.

14)Roads and Bridges

a. Safety Measures at Accident Prone Areas

Uttarakhand is prone to accident due to its hilly terrain. Many roads in the hill areas have defects which make these places highly accident-prone. Such accident-prone sites have been identified all over the state. In 246 roads and a total length of 2764 Km, it is proposed to erect crash barriers and improve sight distance to ensure safe traffic flow.

Therefore, a grant of Rs. 150 crore is requested for the provision of the aforesaid measures.

b. Up-gradation of Road Network and Treatment of Chronic Slip Zones

Due to hilly terrain, heavy rains, floods and landslides, the roads and bridges in the state requires urgent up-gradation. Due to similar reasons a number of chronic landslide zones have formed which are responsible for

continuous disruption of traffic in monsoon and accidents.

Therefore, a grant of Rs. 600 crore is requested for upgradation of road network and treatment of chronic landslide zones in the state.

In addition to the above two requirements, the state plans to construct two ring roads a) Ring road (Dehradun) and b) Ring road (Haldwani) at an estimated cost of Rs. 1,000 crore and Rs. 250 crore respectively.

Cumulatively, the road department seeks a grant of Rs. 2,000 crore.

15) Urban Development

a. Decongestion and Upgradation of Infrastructure facilities in Mussoorie and Nainital

These cities are very old and attract a large number of tourists throughout the year and basic infrastructure of water supply, sewerage, parking facilities etc. have become old and inadequate, they urgently require decongestion and up-gradation of infrastructure facilities to meet the requirements of citizens as well as tourists. Although, the state government is providing infrastructure facilities to newly developed areas but old part of these cities requires immediate intervention.

Therefore, a grant of Rs. 500 crore is requested to decongest and upgrade the infrastructure facilities for Mussoorie and Nainital.

b. Solid Waste Management as per SWM Rules 2016

The state of Uttarakhand has 92 Urban Local Bodies which are the backbone of the state's economy. To keep the cities and towns livable and sustainable, Solid Waste Management (SWM) is of utmost importance. State action plan of Solid Waste Management for all the cities and towns of the state will require about Rs. 855 crore grant.

Therefore, a grant of Rs. 855 crore is requested for Solid Waste Management in the Urban Local Bodies of the state.

c. Storm Water Drainage System Improvement in the Urban Areas

Due to unplanned development and lack of adequate drainage facilities most of the urban areas in the state are facing temporary flood like situation during monsoon. The state government is preparing a storm water drainage master plan for the urban areas in the state.

Therefore, a grant of Rs. 500 crore is requested for the implementation of storm water drainage master plan.

d. State Capital Infrastructure Development

Dehradun is an interim capital of our state and recently Gairsain has been declared as summer capital of the state. After formation of the state various state level offices have been set up in the city of Dehradun. The official buildings and residences of employees are under construction. Dehradun is basically a tourist city and is now facing the problem of congestion and unplanned development. It needs to be developed systematically as a capital city. Similarly, Gairsain the Summer Capital, also needs to be developed with a master plan. Thus a huge infrastructure has to be created in both of the cities.

Therefore, a grant of Rs. 1000 crore is requested for State Capital Infrastructure Development.

16)Development of District Business Resource cum Incubation Center and Establishment of State Traditional Craft Development Institute

To make a conducive environment in the state for the growth of entrepreneurship and employment generation, the state government proposes to set up district business resource cum incubation centre in all 13 districts headquarters. This is also important to create enabling environment for youths to take advantage of start-up and stand-up policy of government of India. The state of Uttarakhand has rich traditional culture of handicraft know how which requires a centre for excellence for its promotion and linkage with market.

Therefore, a grant of Rs. 300 crore is requested for District Business Resource cum Incubation Center and Establishment of State Traditional Craft Development Institute.

17)Upgradation of Drinking Water Supply and Sewerage System

The State of Uttarakhand has 39,360 rural habitations, 92 urban local bodies. According to the norms for requisite drinking water fixed by government of India i.e. 70 lpcd for rural habitation and 135 lpcd for urban habitations, 16,934 rural habitations are categorized as partially covered and 39 towns have service level below 70 lpcd. At present the state has 3,919 rural gravity schemes, 296 rural pumping schemes, 26 urban gravity schemes and 66 urban pumping schemes, Total 4,307 water supply schemes to cater all the habitations of the state. Most of the drinking water and sewerage schemes have become very old and requires urgent upgradation and modernization.

Therefore, a grant of Rs. 1800 crore is requested for upgradation and

modernization of State's Water Supply and Sewerage Schemes.

18)Up-gradation of Power Distribution System

The state of Uttarakhand has achieved 100% electrification and strives to provide quality and uninterrupted power supply to all its citizens. However, many transmission and distribution network and power stations have become out-dated and are not able to cope with load requirements. Therefore, these outdated distribution network and power stations need urgent upgradation to reduce transmission and distribution losses and improve quality of power in remote areas.

Therefore, a grant of Rs. 1000 crore is requested for upgradation of these systems in rural and remote areas.

19)Information Technology

The information technology has emerged as one of the most important tool for good governance, bringing transparency in the system and improving efficiency of the government and the administration. The State Wide Area Network (SWAN) of the state has now become slow and outdated as compared to rest of the states. To keep pace with the high speed data transmission technologies in other parts of globe, it has now become a necessity to upgrade and modernize the SWAN system of the state. As Uttarakhand is highly disaster prone and remote, it is also important from the point of view of connectivity to the remote areas of the state. The state is also bringing in Balloon Technology for providing Internet facility in far flung and remote areas.

Therefore, a grant of Rs. 500 crore is requested for upgradation of SWAN System and introduction of new technology to provide Internet facilities in remote areas.

20)Heritage Buildings, State Protected Monuments and Temples

The state of Uttarakhand has rich cultural and religious heritage. It has many temples and heritage buildings and 71 state protected monuments. These monuments require urgent state intervention to protect and preserve the rich cultural heritage of the state and Nation for the posterity.

Therefore, a grant of Rs. 150 crore is solicited for renovation and restoration of monuments and upgradation & strengthening of Govind Ballabh Pant Museum in Almora.

21)Estate Department

a. Construction of Vidhan Sabha and Secretariat Complex at Dehradun

The State of Uttarakhand came into existence on 09th November, 2000 and Dehradun was declared as the interim capital of the new state. As a stop gap arrangement, the Secretariat was started from abandoned building of education department. Some addition, alterations and renovations have been made in the existing campus but there is lack of sufficient space in the campus to house Secretariat of adequate size. The campus is located on the main Rajpur road which is a congested place. The present temporary legislature building is located a few kilometres away from the Secretariat and is now proposed to be constructed at a site near Raipur on the outskirts of the city. The new Vidhan Sabha and Secretariat building along with the residences for ministers and senior officers are proposed to be constructed there for administrative efficiency. The forest land transfer case is under process. An amount of Rs. 500 crore is required for construction of the new Vidhan Sabha Complex and other buildings at Raipur, Dehradun.

Therefore, a grant of Rs. 500 crore is solicited for construction of Vidhan Sabha and Secretariat Complex at Dehradun.

b. Construction of Mini Secretariat at Gairsain

The government has declared Gairsain as summer capital of the state, although there is persistent demand from the people in the hills to declare Gairsain to be the capital of the state. Gairsain town is situated almost at the centre of Kumaon and Garhwal division of the state and is located in Chamoli district. However, the town does not have any infrastructure facilities and is not connected with rail and air. A new Assembly building has already been constructed at Bhararisain, Gairsain. As the Vidhan Sabha Sessions are regularly being organized in Gairsain, it is proposed to construct a Mini Secretariat at Gairsain along with transit hostels and other buildings. An amount of Rs. 250 crore is required for the above purpose.

Therefore, a grant of Rs. 250 crore is solicited for construction of Mini Secretariat Building at Gairsain.

Table A2.1: Department wise summary of state specific issues

S.No.	Name of Work/Scheme	Proposed Amount (Rs. in Crore)
1	Department of Economic and Statistics	
i)	Physical infrastructure	10.00
ii)	IT and statistical work	20.00
	Total	30.00
2	Animal Husbandry, Dairy & Fisheries	
i)	Trout Carp Hatchery+ Feed Plants+ State Level Veterinary Hospital	200.00
	Total	200.00
3	Department of Horticulture	
i)	Strengthening, Modernization of Government Gardens	500.00
	Total	500.00
4	Department of Irrigation	
i)	Jamrani River Dam Project	2800.00
ii)	Song River Dam Project	900.00
iii)	Upgradation of Existing Irrigation Network (Canals, Gool etc.)	1000.00
	Total	4700.00
5	Department of Forest	
i)	Development of Wildlife and Creation of Buffer Zone for Prevention of Man-Animal Conflict	250.00
ii)	Forest Fire Management	500.00
	Total	750.00
6	Department of Medical Health & Family Welfare	
i)	Setting up 02 Super Specialty Hospitals	1000.00
ii)	Tele Medicine	250.00
	Total	1250.00
7	Education and Skill Development	
i)	Residential Schools + Bridging Infrastructure Gaps+ Modernization of ITI & Polytechnics	2200.00
	Total	2200.00
8	Rural Development + Panchayats	
i)	Rural Growth Centres	600.00
	Total	600.00
9	Food and Civil Supply and Consumer Affairs	
i)	Strengthening of PDS	200.00
	Total	200.00
10	Tourism Department	
i)	Meeting, Incentives, Convention & Exhibition Centre (MICE) Rishikesh	450.00
ii)	Development of Tourism Infrastructure and products across the state	500.00
iii)	Development of Ropeways in the state	400.00
iv)	Development of Tehri Lake area as a tourist destination	5000.00
	Total	6350.00
11	Home (Police) Department	
i)	Modernization Programme	300.00
	Total	300.00
12	Prison	
i)	Modernization Programme	400.00
	Total	400.00

13	Revenue Department	
i)	Modernization of Revenue Police	100.00
	Total	100.00
14	Roads & Bridges	
i)	Ring road – Dehradun	1,000.00
ii)	Ring road – Haldwani	250.00
iii)	Safety Measures in Accident Prone Zone	150.00
iv)	Upgradation of Road Network+ Treatment of Chronic Slip Zones	600.00
	Total	2000.00
15	Urban Development	
i)	Decongestion & Upgradation of Burdened Cities	500.00
ii)	SWM in 92 ULBs	855.00
iii)	Storm Water Drainage Master Plan	500.00
iv)	Construction of Infrastructure facilities in Dehradun	1000.00
	Total	2855.00
16	Industry	
i)	Development of District Business Resource cum Incubation Centre+ State Traditional Craft Development Institute	300.00
	Total	300.00
17	Drinking Water	
i)	Up-gradation of Urban Drinking Water & Sewerage	1800.00
	Total	1800.00
18	Energy Department	
i)	Up-gradation of Power Distribution System	1000.00
	Total	1000.00
19	Information Technology	
i)	Up-gradation of SWAN system & Introduction of New Technology	500.00
	Total	500.00
20	Culture Department	
i)	Protecting Heritage Buildings, Monuments & Temples	150.00
	Total	150.00
21	Estate Department	
i)	Construction of New assembly building at Raipur, Dehradun	500.00
ii)	Construction of Mini Secretariat at Bhararisain	250.00
	Total	750.00
	Grand Total	26935.00



Brahma Kamal “ The State flower of Devbhoomi Uttarakhand” is endemic to high altitude region of Himalayas. It has its divine and spiritual value to the community of Uttarakhand, also known as ‘the king of Himalayan flowers’.