सत्यमेव जयते

REPORT FOR THE YEAR 2020-21

UNION STATES

XV FINANCE COMMISSION

November 2019

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LIST OF ABBREVIATIONS

ACS	Average Cost of Supply
ADP	Aspirational District Programme
ADR	Alternate Dispute Resolution
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ARR	Average Rate of Return
ASFR	Age Specific Fertility Rate
AT&C	Aggregate Technical and Commercial
CAG	Comptroller and Auditor General
CAPI	Computer Assisted Personal Interviewing
CCEA	Cabinet Committee on Economic Affairs
CGA	Controller General of Accounts
CPI	Consumer Price Index
CSS	Centrally Sponsored Scheme
CST	Central Sales Tax
DDP	District Domestic Product
DISCOM	Distribution Companies
DLSA	District Legal Services Authorities
DRI	Disaster Risk Index
FRBM	Fiscal Responsibility and Budget Management
GDP	Gross Domestic Product
GSDP	Gross State Domestic Product
GST	Goods and Services Tax
ICDS	Integrated Child Development Scheme
IFMIS	Integrated Financial Management Information System
IGST	Integrated GST
IIP	Index of Industrial Production
IMF	International Monetary Fund
IP	Interest Payment

MH	Major Head
MoEF&CC	Ministry of Environment Forest and Climate Change
MoHRD	Ministry of Human Resource Development
MoHUA	Ministry of Housing and Urban Affairs
MoSPI	Ministry of Statistics and Programme Implementation
MoWCD	Ministry of Women and Child Development
MSP	Minimum Support Price
NBFCs	Non-Banking Financial Companies
NCCD	National Calamity Contingent Duty
NCCF	National Calamity Contingency Fund
NCR	National Capital Region
NDMA	National Disaster Management Authority
NDMF	National Disaster Mitigation Fund
NDRF	National Disaster Response Fund
NDRMF	National Disaster Risk Management Fund
NE&H States	North East and Himalayan States
NFHS	National Family Health Survey
NFSA	National Food Security Act
NIDM	National Institute of Disaster Management
NMAM	National Municipal Accounts Manual
NPS	New Pension Scheme
NSO	National Statistical Office
ODF	Open Defecation Free
ONTR	Own Non Tax Revenue
ORR	Own Revenue Receipts
OTR	Own Tax Revenue
PDNA	Post-Disaster Needs Assessment
PDR Deficit	Pre-Devolution Revenue Deficit
PFMS	Public Financial Management System
PMGSY	Pradhan Mantri Gram Sadak Yojana
PRIAsoft	Panchayati Raj Institutions Accounting Software
PSUs	Public Sector Undertakings

RBA	Rashtriya Barh Ayog
RBI	Reserve Bank of India
SDG	Sustainable Development Goal
SDL	State Development Loans
SDMA	State Disaster Management Authority
SDMF	State Disaster Mitigation Fund
SDRF	State Disaster Response Fund
SDRMF	State Disaster Risk Management Fund
SFC	State Finance Commission
SIDM	State Institute for Disaster Management
SMEs	Small and Medium Enterprises
SNP	Supplementary Nutrition Programme
TFR	Total Fertility Rate
ToR	Terms of Reference
TPI	Trade Preparedness Index
TRE	Total Revenue Expenditure
UDAY	Ujwal DISCOM Assurance Yojana
UNDP	United Nations Development Programme
UT	Union Territory
VAT	Value Added Tax

Chapter 1

Approach and Summary

1.1 The Fifteenth Finance Commission (FC-XV) was constituted by the President of India under Article 280 of the Constitution on 27 November 2017 to make recommendations for a period of five years commencing 1 April 2020. The terms of reference (ToR) and the composition of the Commission are annexed with this report (Annex 1.1 to 1.6). The Commission was expected to make its recommendation by 30 November 2019. The Commission has visited nearly all the States, undertaken detailed consultations with the Union Government, think-tanks, domain experts and relevant stakeholders. Even as the work of the Commission was in a fairly advanced stage, designed towards submitting the report by the stipulated date, there were new developments.

1.2 First was the enactment of the Jammu and Kashmir Reorganisation Act, 2019, leading to the creation of two new Union Territories. The Commission needs to closely examine how best the needs of the Union Territory of Jammu and Kashmir can be addressed keeping in view all relevant factors.

1.3 Second, the global scenario is unpredictable and experiencing a synchronised slowdown. After successive downward revisions, the International Monetary Fund (IMF) forecast global growth for 2019 at 3 per cent, which is the lowest since the global financial crisis of 2008-09, with further downside risk. The United States-China trade war enhances the uncertainty and a volatile geo-political backdrop has implications for the behaviour of oil output and prices in the medium term. These contribute to the global uncertainty and slowdown. The IMF has observed that this synchronised slowdown will result in slower growth for 90 per cent of the world this year and that it will be more visible in some of the largest emerging markets such as India and Brazil.

1.4 Third, like many other countries, India too is going through a period of economic sluggishness. The growth in real gross domestic product (GDP) is expected to slow down from 7.2 per cent in 2017-18 to around 6 per cent estimated for 2019-20. The slowdown is driven by both external and domestic factors. While investment and exports have been slowing since 2011-12, the slowdown in consumption since early 2018, partly associated with a sharp decline in consumer confidence, is more worrying. Confidence, debt and risk aversion issues in the financial sector continue, imparting a downward bias to the short-term growth forecasts by different government and private agencies. The Union Government and the Reserve Bank of India (RBI) have acted to address the slowdown through various measures such as making monetary policy more accommodative, a slew of structural measures to boost housing, exports and small and medium enterprises as well as with a sharp cut in corporate tax to make India a competitive investment destination. The Union Government expects all of these measures to start bearing results over the next few quarters.

1.5 Weak revenue collections, driven by slowing activity as well as teething problems in implementing some of the newly introduced structural reforms, have elevated the fiscal risks. With real economic growth at a seven-year low, combined with relatively low inflation, growth has been weak in nominal terms as well, leading to a weak tax base. Nominal GDP growth in the last reported quarter was a low 8 per cent. Not surprisingly, revenue collections have been sluggish. The collections under goods and services tax (GST) are running short of the target by nearly Rs. 1 lakh crore (at least a similar level of shortfall vis-à-vis originally envisaged targets was reported in the 2018-19 accounts), with structural implications for the low consumption states. Also, direct tax collections have performed weakly. The total revenue foregone in 2019-20 as a result of the reduction in corporate tax rates and other relief measures is estimated by the Ministry of Finance at Rs. 1.45 lakh crores (0.7 per cent of GDP; 19 per cent of corporate tax revenues and 6 per cent of gross tax revenues). The revenue loss may turn out to be less than initially estimated because some corporates may not avail of the lower corporate tax rates.

1.6 Significantly, the current slowdown in India also coincides with major structural reforms in the economy over the last five years – a new monetary policy framework; a bankruptcy code for resolution of stressed assets; demonetisation; introduction of GST in July 2017; a new corporate tax order; a series of other announcements by the Union Government to boost the housing sector and exports; plans to privatise a large set of public sector entities including oil companies; and introduction of direct tax reforms.

1.7 The short-term transitional difficulties in implementing these structural reforms can create a pessimistic view on the medium-term prospects of economic growth and revenue collections. For example, slow input tax refunds on GST collections have depressed growth for many small and medium enterprises (SMEs). Importantly, the economy is going through a unique process of formalisation and digitalisation – post demonetisation and introduction of GST. While this process would lead to enhanced productivity, higher wages and incomes in the medium term, it is creating significant challenges in the short term.

1.8 Recent announcements to expedite GST refunds (sixty and thirty days for new and existing refunds respectively) should alleviate some of these bottlenecks. Similarly, some of the other announcements such as measures to boost the housing and exports sectors, credit guarantees for non-banking financial companies (NBFCs), expedited payments by public sector undertakings to SMEs, should all work to address the supply bottlenecks and raise aggregate demand. The RBI has reduced interest rates sharply (by 135 basis points) during this easing cycle over a short period of eight months and has also taken steps to enhance the speed of transmission of its policies to the real economy. All these changes would require some time to filter through the economy, and may start to get reflected in the economic data over the next few quarters. Going forward, growth should respond to the measures taken by the Union Government and RBI so far to boost the economy by improving financial conditions, sentiment and confidence.

1.9 Forecast uncertainty is high around major structural changes in any economy. It is particularly so if changes are of the magnitude experienced by India over recent years. Many of these changes have a wide-ranging impact on GDP, the financial sector and the behaviour of the private sector. The behaviour of fiscal variables too is influenced by the induced changes in nominal GDP and tax buoyancy. Forecasts tend to run the risk of being either excessively myopic or unduly exuberant. It is important, therefore, to tread with caution. The structural changes and the ensuing behavioural pattern need to play out for a while so as to allow a robust assessment of the impact of these changes and enable more credible forecasting for the medium term.

1.10 The Commission believes that in view of the uncertainties outlined above, making credible projections for five years using the current year as the base runs the risk of turning out to be excessively aspirational and inaccurate. Alternatively, projections attended by excessive conservatism that is reasonable in the current conjecture may result in forecasts not only way below India's growth potential but also lower than what could be the outcome. This would be true not just for the Union Government, but also for the States. We need, therefore, to tread with caution and wait for the next few quarters' figures on key macro variables.

1.11 In the light of the aforesaid consideration, the Commission is submitting this *Report for the Year 2020-21*.

1.12 Given the uncertainties of some key macro areas, our recommendations in the final report would undergo changes and adjustments as appropriate, in the light of subsequent data and analysis.

Approach and Recommendations

1.13 As we have to give our recommendations for the financial year 2020-21, we considered the option of either continuing with the architecture of the FC-XIV for another year beyond March 2020, with nominal increment in the projections over our assessment for 2019-20, or alternately addressing the issues in the light of our own analysis and understanding developed after interactions with the States and Union Government. We are guided in our approach by our ToR, which is a departure from that of our predecessor and yet retains some broad themes of previous Finance Commissions by way of continuity. Keeping in view the fact that there has to be a certain degree of predictability and stability in federal finances, our approach to vertical devolution mirrors that of our predecessor Commissions with modifications due to the change in the status of Jammu and Kashmir. The significant points of departure are:

(i) Our ToR clearly stipulates that we use the population data of 2011 for our recommendations. As population is a major factor in the determination of the devolution formula, and it is also used for scaling other criteria, our recommendations are appropriately calibrated to address the parameters of equity and efficiency in the devolution of resources to the States.

(ii) The ToR enjoining us to use the population data of 2011 created apprehensions that in the process those States that have achieved greater progress in reducing population growth since 1971 would be adversely affected. We have attempted to dispel these doubts by introducing a new criterion of total fertility rate (TFR) as a measure of demographic performance.

(iii) During our interactions with the States and the Union Government, it was argued that issues relating to environment and climate change need to be given greater impetus and attention. We have continued with the approach of the FC-XIV in this regard, with a higher weightage to forest and ecology not only because of their impact on the revenue disabilities and expenditure needs of States, but also for the huge ecological benefits to the nation and for meeting our international commitments.

(iv) Incentivising tax effort had received the attention of several Commissions, though the FC-XIV did not use it as a criterion. At a time when fiscal consolidation is a matter of concern, we have chosen to address it in our devolution mechanism.

(v) We have provided grants-in-aid for local bodies, disaster relief and for States with a post devolution revenue deficit. As the recommendations of this report are only for one year, we have refrained from giving any State-specific grants but have provided a road-map for sector-specific grants and performance-based incentives that we expect to address in greater detail in the final report.

1.14 Based on the aforesaid architecture, the Commission has made the following key macro assumptions. The Union Budget of 2019-20 implied a nominal GDP growth of 11 per cent in 2019-20, but the nominal growth observed in the first quarter (Q1) of 2019-20 was only 8 per cent. The economic data released subsequently do not show any perceptible improvement in economic activity. Nonetheless, since the GDP growth rates of Q2 to Q4 of 2018-19 were low, there is a base advantage in the subsequent quarters of the current year. The supply side measures announced by the Union Government may also have a positive impact on economic activity. Taking a full view of the possible growth rates during Q2 to Q4 of the current year, we have assessed that nominal GDP growth in 2019-20 would be 10 per cent with a downward bias. With some pick-up in economic activity and a mild increase in inflation rate, the nominal GDP can be expected to grow at 11 per cent in 2020-21.

1.15 Our assessment of gross tax revenue of the Union Government for 2019-20 and 2020-21 is based on the provisional accounts for 2018-19. Based on recent trends and tax policy changes, our assessment is that gross tax revenue for 2019-20 will be about Rs. 22.55 lakh crore, against the budget estimate of Rs. 24.61 lakh crore. The Commission's projection of gross tax revenue for 2020-21 is based on the reassessed level of this revenue for 2019-20. We expect overall tax buoyancy to improve to 1.14 in 2020-21, translating into a gross tax revenue of Rs. 25.38 lakh crore. The expenditure projections spelt out by the Union Budget 2019-20 were adopted by the Commission, with a modest downward adjustment.

1.16 The approach followed in the projection of gross state domestic product (GSDP) has been to progressively reduce the variability in growth observed across States in the previous years. For making an assessment of the revenue and expenditure of States, we broadly followed the approach of previous Finance Commissions. We applied norms for projections from the base year after making adjustments to the latest available actuals (2017-18). The tax buoyancy for States was projected uniformly at 1.16 during the period 2018-19 to 2020-21. For assessing the revenue expenditure of States, we took a disaggregated view on the committed and other revenue expenditure to arrive at the State-wise projections for 2020-21. The aggregate revenue expenditure of all the States taken together shows an average growth of 9.4 per cent in 2020-21.

1.17 For the year 2020-21, we are inclined to leave the vertical split of the divisible pool at the same level as recommended by the FC-XIV. However, we have to take into account recent changes due to the re-organisation of the erstwhile State of Jammu and Kashmir. We have notionally estimated that the share of the erstwhile State of Jammu and Kashmir would have come to around 0.85 per cent of the divisible pool. We believe that there is a strong case for enhancing this to 1 per cent of the divisible pool to meet the security and other special needs of the Union Territories of Jammu and Kashmir and Ladakh. Since this enhancement has to be met from the Union's resources, we recommend that the aggregate share of States may be reduced by 1 percentage point to 41 per cent of the divisible pool.

1.18 The Commission sought to balance the principles of fiscal needs, equity and performance for determining the criteria for horizontal sharing. Another important principle followed is the broad need for stability and predictability in transfers. Towards these objectives, the criteria and associated weights for determining horizontal sharing of taxes is summarised in Table 1.1.

Table 1.1: Criteria and Weights Assigned for Horizontal Devolution

Criteria	Weight (%)
Population	15.0
Area	15.0
Forest and Ecology	10.0
Income Distance	45.0
Demographic Performance	12.5
Tax Effort	2.5
	100

1.19 We recommend revenue deficit grants and special grants, besides laying out the broad contours of the sectoral grants and performance-based incentives that we intend to provide in the final report. This should enable governments to undertake the necessary preparatory work during 2020-21 to optimise the utilisation of resources in the remaining period of the award. Based upon our assessment of the post-devolution revenue surplus/deficit of the States for 2020-21, we have estimated that fourteen States will need revenue deficit grants amounting to Rs. 74,340 crore. We have also provided special grants of Rs. 6,764 crore for three States in which the sum of tax devolution and revenue deficit grants is projected to decline in 2020-21 over 2019-20. Malnutrition of infants is a human capital issue that cannot wait to be addressed. Hence we have made an exception in the case of the nutrition sector by giving it a grant of Rs. 7,735 crore in 2020-21 itself.

1.20 The Commission has received a large number of proposals for State-specific grants. However, given the financial constraints in 2020-21, we propose to make appropriate recommendations on such grants in our final report.

1.21 We recommend an amount of Rs. 90,000 crore as grants to local bodies for 2020-21, which is 4.31 per cent of the estimated divisible pool. We have also identified the need to increase the inter se share of local bodies grants for urban areas from the 30 per cent given by FC-XIV, as we regard cities as engines of growth. Furthermore, unlike the FC-XIV, we have now provided grants to all the three tiers of panchayats, as also to areas under the Fifth and Sixth Schedule of the Constitution and Cantonment Boards in urban areas. While 50 per cent grants to rural local bodies are untied, the remaining 50 per cent would be tied as grants for sanitation and water supply which are identified national priorities. For rural local bodies, no conditions have been prescribed for getting the grants in 2020-21. However, from 2021-22 onwards, the entry level conditions for rural local bodies getting these grants is the timely submission of audited accounts.

1.22 In the case of urban local bodies, we differentiated between cities by dividing them into two categories: (a) Million-Plus urban agglomerations/cities and (b) all other cities and towns with less than one million population. Larger cities will have a tendency to grow faster, and grants are provided to fifty Million-Plus cities on agglomeration basis, with special emphasis on meeting the challenges of poor air quality, ground water depletion and sanitation. For non Million-Plus towns, 50 per cent of the funds are untied and the remaining 50 per cent tied, with an equal share for drinking water and sanitation. Though we have not recommended any conditions for urban local bodies in 2020-21, we recommend two entry level conditions in the subsequent years – notifying the floor or minimum rates of property tax to improve own revenues and timely submission of audited accounts.

1.23 For determining state-wise allocations for disaster risk management, we recommend a new methodology which combines capacity (as reflected through past expenditure), risk exposure (area and population) and proneness to hazard and vulnerability (disaster risk index). The total amount recommended for the States is Rs. 28,983 crore in 2020-21, of which Rs. 22,184 crore is the Union share. In line with the provisions of the Disaster Management Act, 2005, we recommend the setting up of mitigation funds at both national and state levels in the form of a National Disaster Mitigation Fund (NDMF) and State Disaster Mitigation Funds (SDMF). We have also recommended funds for the National Disaster Response Fund (NDRF) since the levy of National Calamity Contingent Duty (NCCD) utilised to fund it has now largely been subsumed under the GST.

Fiscal Roadmap

1.24 The tax revenue of the Union and States in India stood at around 17.5 per cent of GDP in 2018-19 – far below India's estimated tax capacity – and has remained broadly unchanged since the early 1990s. In contrast to India, tax revenue has been rising in other emerging markets. There is a compelling case for raising India's tax ratio from both macroeconomic and redistributive perspectives. Additional tax revenue is essential for building fiscal space to meet infrastructure needs and drive inclusive growth. Most importantly, the driver of tax reforms must be broadening of the base and streamlining the rates, with parallel steps to increase the capacity and expertise of the tax administration at all tiers of government.

1.25 Para 5 of the Commission's ToR mandates us to review the finance, deficit, debt and fiscal discipline efforts of the Union and the States and recommend a roadmap for sound fiscal management. However, in the light of the aforesaid analysis, a credible fiscal and debt trajectory roadmap remains problematic. While the budget estimates for the fiscal deficit of the Union Government for the current year remains 3.3 per cent, there is anecdotal, analytical and other evidence to suggest that this may not be achieved. The Commission believes that while the actual fiscal numbers for the current fiscal year would only be better known next year, the letter and spirit of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 (as amended in 2018) should be fully adhered to.

1.26 Meanwhile, the Union Government has the option to invoke the escape clause in the amended FRBM Act and deviate from the stipulated fiscal target by 0.5 per cent of GDP. The trigger conditions for invoking the escape clause include "structural reforms in the economy with unanticipated fiscal implications". In doing so, the Government should also ensure that there is a "clear commitment to return to the original fiscal target in the ensuing year".

1.27 The Commission also believes that apart from the fiscal deficit, the Union Government and State Governments should also comply with the recommended path of debt consolidation. In doing so, they must abide by the definition of both debt and fiscal deficit as contained in the FRBM Act, which recognises issues connected with off-budget borrowings, contingent liabilities and guarantees.

Chapter 2

Assessment of the Union and the State Finances for 2020-21

Context and Approach

2.1 This chapter outlines our projection of the revenue, expenditure and deficit of the Union and State Governments for the year 2020-21. Projections for the Union Government for 2020-21 have been made based on the budget estimates for 2019-20, calibrated to reflect the Commission's assessment of developments subsequent to the presentation of the Union Budget in July 2019. Projections for the State Governments are based on the Finance Accounts for 2017-18 and the State Budgets of 2019-20.[1]

Finances of the Union Government

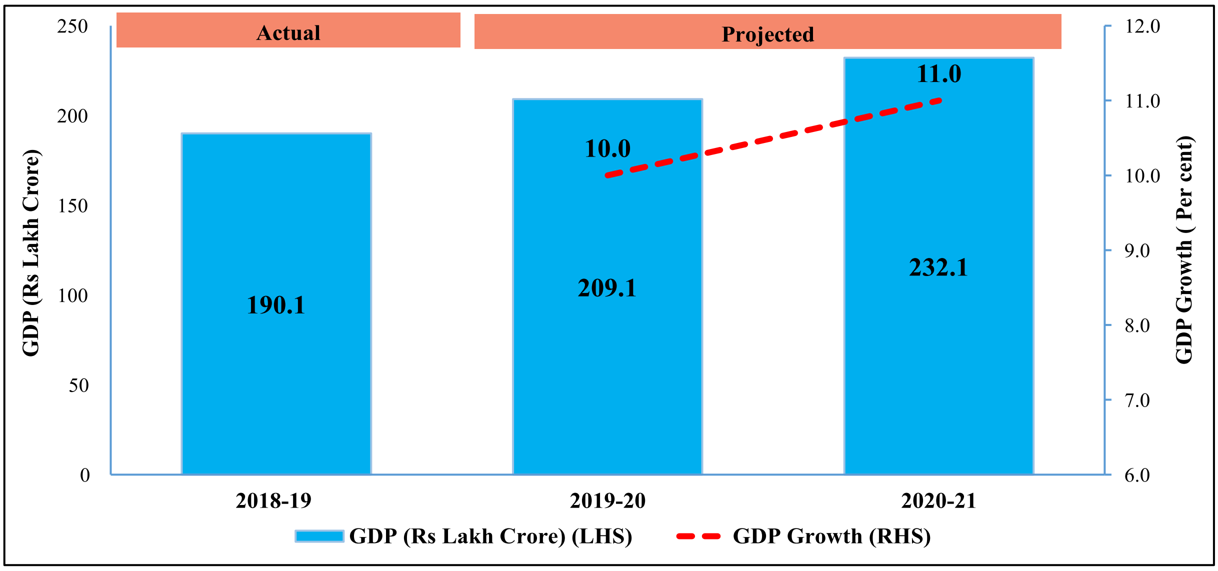
Gross Domestic Product

2.2 Gross domestic product (GDP) at current market prices, or nominal GDP, forms the basis for important fiscal ratios of the Union Government. The Union Budget of 2019-20 implied GDP growth of 11 per cent in 2019-20 over GDP of Rs. 190.1 lakh crore in 2018-19. This was expected to take the GDP of 2019-20 to Rs. 211 lakh crore. However, the nominal GDP growth observed in the first quarter (Q1) of 2019-20 was only 8 per cent. The economic data released subsequent to Q1 of 2019-20 do not show any perceptible acceleration in economic activity.

2.3 Nonetheless, since the GDP growth rates of Q2 to Q4 of 2018-19 were low, there is a base advantage in the subsequent quarters of the current year. The Union Government expects that the supply side measures it has announced will also have a positive impact on economic activity. Taking a full view of the possible growth rates during Q2 to Q4 of the current year, we have assessed nominal GDP growth in 2019-20 at 10 per cent, with a downward bias (Figure 2.1). This implies that GDP at current market prices will be at a level of Rs. 209.1 lakh crore in 2019-20.

[1]There are borrowings outside the Consolidated Fund, which, de jure, may not add to the debt of the relevant government but may do so in de facto terms. Such quasi-fiscal operations are not reflected in the calculations in this chapter of the Report.

Figure 2.1: Nominal GDP and its Growth



2.4 With expected pick-up in economic activity and a mild increase in the inflation rate, the nominal GDP is projected to grow at 11 per cent in 2020-21 and reach Rs. 232.1 lakh crore (Figure 2.1).

Gross Tax Revenue

Reassessment of 2019-20

2.5 Assessment of gross tax revenue for 2019-20 and 2020-21 is based on the provisional accounts of the Union Government for 2018-19, which was Rs. 20.80 lakh crore. Going by the available trends till October 2019, there is likely to be a sizeable shortfall in gross tax revenue for the year as a whole, vis-à-vis the budget estimates of July 2019. The shortfall reflects, apart from the unanticipated slowdown in economic activity, the tax policy changes made by the Union Government subsequent to the regular budget.

2.6 The slowdown in important sectors like automobiles, garments and construction that contribute to goods and services tax (GST) collections has significantly affected aggregate revenue growth. Considering the sluggishness in imports, it is likely that the custom duty collections for 2019-20 will also be moderately short of the budget estimates. The bulk of the excise duty collections of the Union Government are from petroleum products and most of the tax rates on these products are specific rates. The tepid growth in the consumption of petroleum products in the current year indicates that there will also be downward pressure on excise collections.

2.7 On the direct tax front, personal income tax grew by 8.9 per cent during April-September 2019. However, the revenue foregone on account of the reduction in the rate of tax for existing and new domestic companies and other relief measures has affected corporate tax collections.

Keeping these considerations in view, the Commission's assessment, with a downward bias, is that gross tax revenue for 2019-20 will be about Rs. 22.55 lakh crore, vis-à-vis the budget estimate of Rs. 24.61 lakh crore. This will mean growth of 8.4 per cent from the provisional figure of Rs. 20.80 lakh crore in 2018-19, implying low tax buoyancy of 0.84, driven down mainly because of tax policy changes.

Gross Tax Revenue for 2020-21

2.8 The Commission's projection of gross tax revenue for 2020-21 is based on the reassessed level of gross tax revenue for 2019-20. The expected low tax buoyancy in 2019-20 (continuing from the previous year) is mostly on account of tax policy changes. Hence, stability in tax policy should restore tax buoyancy in 2020-21 to the levels observed in the past. Tax buoyancy can also improve if the teething troubles associated with GST get mitigated, especially after the simplification of the reporting format and other possible changes that may be effected. Expected improvements in the tax database and efforts at widening the direct tax net can also help improve collections in 2020-21. The Commission, hence, expects that tax buoyancy will improve to 1.14 in 2020-21, which is around the average of 2011-12 to 2016-17, the six years prior to the introduction of the GST. With a projected GDP growth of 11 per cent, this will mean that the gross tax revenue will grow by 12.5 per cent in 2020-21 and achieve a level of Rs. 25.38 lakh crore. Details are at Annex 2.1 of this report.

2.9 The pool of tax resources of the Union Government to be shared with the States – the divisible pool – excludes the following items from gross tax revenue: cost of collection of taxes, cesses and surcharges including the GST compensation cess, tax revenue of the Union Territories and transfer from the National Calamity Contingency Duty (NCCD) to the National Disaster Response Fund (NDRF). Taking the difference between the projected gross tax revenue and the items to be excluded from the divisible pool, we have estimated that the divisible pool will be around 82.2 per cent of the gross tax revenue in both 2019-20 and 2020-21. The corresponding amounts work out to Rs. 18.53 lakh crore in 2019-20 and Rs. 20.86 lakh crore in 2020-21.

2.10 Annex 2.1 combines the Commission's recommendation for vertical sharing of taxes between the Union Government and the States presented in Chapter 3 with the projection of gross tax revenue presented in this chapter, and provides the projection of the States' share of taxes for the year 2020-21.

Non Tax Revenue

2.11 Non-tax revenue consists mainly of dividends and profits from public sector undertakings and entities, dividends and surpluses from the Reserve Bank of India (RBI), receipts from the auction of spectrum, interest receipts and other receipts. Non-tax revenue for 2019-20 is budgeted at Rs. 3.13 lakh crore.

2.12 Subsequent to the Union Budget of July 2019, the RBI announced its central board's decision to transfer a sum of Rs. 1.76 lakh crore to the Government of India. After adjusting the interim dividend paid to the Government in 2018-19, and after accounting for other gains and shortfalls in the different components of non-tax revenue, the total non-tax revenue of the Union Government for 2019-20 is estimated at Rs. 3.55 lakh crore.

2.13 In a growing economy, non-tax revenue, especially of dividends and profits, can be reasonably expected to keep pace with GDP growth, while revenues from fees, fines and user charges should outpace GDP growth. During 2011-12 to 2017-18, the non-tax revenue of the Union grew almost at the same rate as the GDP. Hence, the Commission has taken a consolidated view of the non-tax revenue for 2020-21 and conservatively projected it to grow at the rate of GDP growth. This will take the non-tax revenues to Rs. 3.94 lakh crore in 2020-21.

Gross Revenue Receipts

2.14 The sum of gross tax revenue and non-tax revenue – gross revenue receipts – is reassessed to be at Rs. 26.10 lakh crore in 2019-20 and Rs. 29.32 lakh crore in 2020-21.

Non-debt Capital Receipts

2.15 Non-debt capital receipts have two components – recovery of loans and advances and proceeds from public sector disinvestment. The receipts under recovery of loans and advances have been declining over the years, because of negligible fresh lending to the States except through back-to-back transfer of loans against externally-aided projects. We have adopted the budget estimate of Rs. 14,828 crore in 2019-20 and kept it at the same level for 2020-21.

2.16 In 2017-18, the total receipts from disinvestment were a little over Rs.1 lakh crore. The disinvestment receipts were Rs. 85,045 crore in 2018-19 (provisional actual) and are budgeted at Rs. 1.05 lakh crore in 2019-20. The pace of disinvestment is expected to pick up in the later part of the year. We have adopted the budget estimate for disinvestment and assessed that it will remain at the same level in 2020-21.

Revenue Expenditure

Interest Payments

2.17 Interest payment liabilities of the Union Government depend on three factors — level of interest-bearing outstanding liabilities, effective interest rate on these liabilities and weighted interest rate on incremental borrowings. Considering the progressive easing of policy interest rates by the RBI, the Commission has assumed that the interest rate on fresh borrowings will be 6 per cent. Applying standard calculations for arriving at the average interest cost and projecting the fiscal deficit of the Union Government at 3.5 per cent of GDP in 2020-21 (the rationale for which is detailed later), the interest payment liabilities of the Union for 2020-21 work out to Rs. 7.10 lakh crore.

Pensions and Salaries

2.18 We have adopted the budget estimates of pensions and salary expenditure for 2019-20. Considering the normal annual increment of 3 per cent to the pay of employees, dearness allowances aligned to consumer inflation that is assumed to be within the targeted band and continuation of the trend in the size of the Union Government, we estimate that the pay and allowances of the Union Government will grow at 8 per cent in 2020-21. We also estimate that the annual growth in pensions will be 9 per cent in 2020-21, taking into account the enhanced contribution of the Government share for the New Pension Scheme (NPS). While arriving at these estimates, we have also considered the average growth in pensions and salaries in those years which were not affected by the implementation of the last two pay commissions.

Defence Revenue Expenditure

2.19 Defence revenue expenditure consists of salaries of defence services and civilians in the defence segment, other establishment expenditure and expenditure on maintenance of defence assets. Out of the defence revenue expenditure, 56.9 per cent was spent on the pay and allowances of the forces and another 5.1 per cent was on account of the pay and allowances of the civilians in 2017-18.

2.20 We have adopted the budget estimates of 2019-20 as the base. The salary component of defence expenditure is assessed to grow at 8 per cent in 2020-21, consistent with the growth in salaries of other employees of the Union Government. The Commission's view is that the non-salary component should be allowed to grow at a robust pace so as to allow for a reasonable level of maintenance of defence assets. An annual growth of 11 per cent in total defence revenue expenditure allows the expenditure on maintenance of defence assets (the non-salary component of defence revenue expenditure) to grow at around 15.5 per cent in 2020-21, compared to an average growth of about 8 per cent in previous two years.

Major Subsidies

2.21 Food, fertilizer and petroleum subsidies are the major subsidies presented in the Union Budget. Report 20 of 2018 of the Comptroller and Auditor General of India (CAG) on Union Finances showed that the full impact of subsidies was not absorbed in the Union Budget for a number of years. Our view is that the accumulated off-budget liabilities relating to insufficient provision for subsidies should be clearly identified and not increase further. Further, the outstanding balance should be eliminated in a time-bound manner.

2.22 The budget estimate for 2019-20 accommodated the requirements of food subsidy for the year plus a fractional provision to take care of previous balances. We have adopted this estimate of Rs. 1.84 lakh crore. Given the current levels of minimum support price (MSP) and beneficiary coverage under the National Food Security Act (NFSA), growth in food subsidy is likely to be largely limited to the inflation indexation of MSP. We have projected that for 2020-21, provision of an amount equalling the budget estimates of 2019-20 will take care of the full subsidy requirements for that year, without requiring off-budget financing. Besides, we expect that the Union Government will take steps to increase the central issue prices of subsidised food grains, which is permissible under the NFSA. This, coupled with the much-required improvement in the operational efficiency of food-handling agencies, including the Food Corporation of India, will create fiscal space for liquidation of some part of the previous years' liabilities.

2.23 Considering the trends in disbursements of petroleum subsidy and fertilizer subsidy till September 2019, we have adopted the budget estimates for 2019-20 for these items. We have also adopted an increase of 4 per cent in these subsidies in 2020-21 over the budget estimates of 2019-20.

Other Revenue Expenditure

2.24 The remaining portion of revenue expenditure (excluding transfers to sub-national governments) includes the non-salary, non-subsidy expenditure in different sectors by the Union Government and its institutions. This expenditure increased significantly in the budget estimates of 2019-20, vis-a-vis the provisional actuals of 2018-19. This is partly due to the increase in the allocation for Pradhan Mantri Kisan Samman Nidhi from Rs. 20,000 crore in 2018-19 (revised estimate) to Rs. 75,000 crore in 2019-20 (budget estimate). The Commission has adopted the spending plans of the Union Government with a modest downward adjustment of about 2 percentage points in the budgeted revenue expenditure. For 2020-21, we have assessed a growth provision equalling the projected GDP growth for this part of expenditure, providing for important sectors like science and technology, atomic energy, external affairs, space, etc.

Transfers to the States, Union Territories and Local Governments

2.25 The transfers from the Union Government to the States, Union Territories and local self-governments on the revenue account consist mainly of schematic transfers (central sector schemes and centrally sponsored schemes), GST compensation, revenue deficit grants, grants for disaster relief funds, grants to the local self-governments and other grants recommended by the Finance Commission.

2.26 As per the budget estimates for 2019-20, these transfers totalled Rs. 5.96 lakh crore on the revenue account. We have adopted this budget estimate. We have projected transfers to the sub-national governments[2] at Rs. 7.22 lakh crore on the revenue account for the year 2020-21. This has been done for the following reasons: (a) the Finance Commission grants – including revenue deficit grants, grants for disaster relief and grants to local bodies – are binding expenditures for the Union Government; (b) considering sluggish trends in tax collection, the requirement for GST compensation will be high; and (c) reduction in schematic transfers will constrain the State budgets, especially in a year of revenue strain. Details are presented at Annex 2.1 of this report.

[2]This also factors in requirements of the Union Territory of Jammu and Kashmir.

2.27 The sum of the projections of the different components of revenue expenditure yields a growth of 10.8 per cent in the aggregate revenue expenditure of the Union Government for 2020-21.

Capital Expenditure and Fiscal Deficit

2.28 Financing expenditures, which should legitimately be covered within the budget, through off-budget borrowings and through para-statal entities detracts from compliance with the letter and spirit of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 (amended in 2018). The Commission will address this issue in its final report.

2.29 We are of the view, therefore, that there is an imperative need to ensure that there is no further addition to the extra-budgetary funding of budgetary expenditure and that the accumulated stock of such liabilities gets eliminated in a time-bound manner. Hence, the revenue expenditure projections spelt out by the Union Budget 2019-20 have been adopted by the Commission, with some adjustments, as the base for projection. If the fiscal consolidation path is to be maintained, the Union Government will have to calibrate its expenditure and revenue appropriately.

2.30 At this stage, the economy requires to be supported with public investment. Keeping in view the need to sustain capital expenditure at reasonable levels, and taking a disaggregated view of the different components of expenditure and also assuming no further increase in off-budget financing, we have estimated that the fiscal deficit of the Union Government in 2020-21 will be around 3.5 per cent of GDP (Annex 2.2). Annex 2.1 presents the Commission's assessment of Union finances for 2020-21.

Security Related Expenditure

2.31 We have been given additional Terms of Reference asking us to examine whether a separate mechanism for funding defence and internal security is to be set up, and if so, how such a mechanism should be operationalised.

2.32 In this regard, we have received the views of the ministries of Defence and Home Affairs and also examined the trend of capital outlay of defence services over the last decade. The defence capital outlay was less than the budgetary provision for five years from 2011-12 to 2015-16. We have noticed a reversal in this trend during 2016-17 to 2018-19.

2.33 The Ministry of Defence stated that though India is currently not engaged in any conflict, the nature of threats that it faces demands complete defence preparedness. Big defence acquisitions require large capital outlays. The current provisions are inadequate to fund these and hence the need for alternate sources of additional funding.

2.34 The Ministry has proposed setting up a non-lapsable fund, levy of cess, monetisation of surplus land and other assets, tax-free defence bonds and utilising the proceeds of disinvestment of defence public sector undertakings. The Commission, with the objective of ensuring predictability and stability in the flow of funds for defence and internal security, intends to constitute an expert group comprising representatives of the ministries of Defence, Home Affairs and Finance to consider the detailed modalities and implementation plan for accretion to, and utilisation of, the proposed non-lapsable fund or an alternative mechanism.

Finances of the State Governments

Approach of the Commission

2.35 We have adopted principles and procedures for assessing revenue and expenditure of the States, keeping in view the approach followed by previous Finance Commissions, past trends and recent changes. Considering that budget and revised estimates differ significantly from the actuals, the base year (2017-18, the year for which the latest Finance Accounts are available) was calibrated with required adjustments to ensure comparability of data across States. Wherever relevant, the budget estimates of 2019-20 have been used. We also commissioned studies by leading research institutions on the finances of the States. The findings of these studies were useful in making our assessment.

Adjustments in Receipts and Expenditure

2.36 Assessment of the fiscal variables of the States entailed developing a comparable data set from the Finance Accounts for 2017-18 with the following adjustments:

i. Lotteries: If net receipt from lotteries (that is, receipts on lotteries at major head (MH) 0075 minus expenditure under MH 2075) was positive, the same was added back to the receipts. If the net receipt from lotteries was negative, it was assumed to be zero.

ii. Power sector: For all the States, we removed the revenue receipts on power (MH 0801). From revenue expenditure, we deducted grants and subsidies on power (from MH 2801). Revenue expenditure on account of the Ujwal Discom Assurance Yojana (UDAY) was also removed (MH 2801). For the States where the power sector is run departmentally, if the net receipt on power (MH 0801-MH 2801) was negative, the same was taken as zero. However, if the net receipt was positive, we factored that into the assessment of receipts.

iii. Transport undertakings: For the transport sector, we carried out adjustments similar to those for the power sector.

iv. Grants in aid from the Union Government: We removed the following items of expenditure which were based on the Union Government grants: (a) revenue expenditure on account of scheme-based Central assistance and (b) grants-in-aid for local self governments. In the case of calamity relief, the expenditure on the same from MH (2245) was excluded from the base year. Considering that the States will have to provide a matching share in the State Disaster Response Fund (SDRF), this portion has been projected separately for 2020-21 (reference Chapter 6) and added back to revenue expenditure.

v. Major State-specific subsidies, that is, food subsidy and loan waiver, have been adjusted in such a way as to ensure uniformity and comparability of data across States.

vi. VAT, CST and GST Compensation: Compensation received by States on account of value-added tax (VAT), central sales tax (CST) and GST have been deducted from grants and added to the own tax revenue of the States.

vii. IGST transfers to the States: The Integrated GST (IGST) amount transferred to the States in 2017-18, using the formula for tax devolution of the Fourteenth Finance Commission (FC-XIV), has been added to each State's own tax revenue as per the ratio of an individual State's own tax revenue to the all-States' own tax revenue in 2017-18.

viii. Reserve Fund Expenditures: Revenue expenditure from the reserve funds (except Consolidated Sinking Fund and Guarantee Redemption Fund) have been netted out.

ix. Contra Entry for Receipts/ Payments: Receipts/payments of contra-entry nature have been removed from both non-tax receipts and revenue expenditure. For example, in the case of irrigation projects, some States pay interest on capital, which may get reflected in own non-tax revenue as interest receipts. Entries of such nature have been adjusted to avoid double counting.

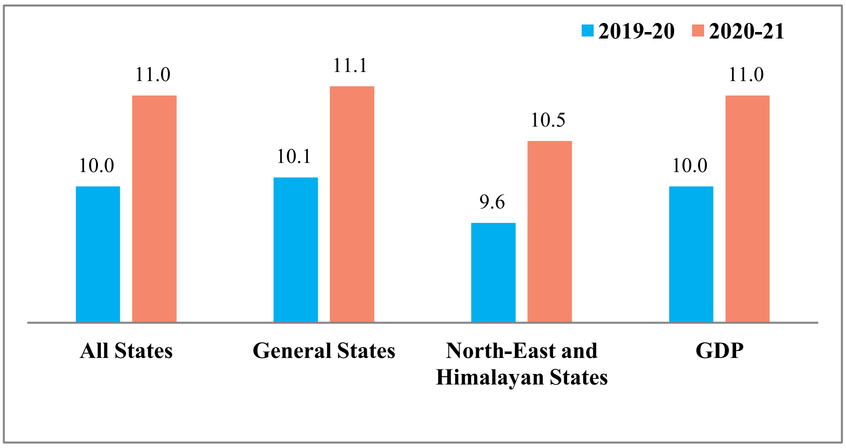
Gross State Domestic Product

2.37 Gross state domestic product (GSDP) forms the basis for analysing fiscal parameters of the States. Comparable estimates of GSDP of States for the period 2011-12 to 2017-18 have been provided by the National Statistical Office (NSO). These estimates ensure that the principles and methodology employed in estimation are uniform across the States. The base year for the projection of GSDP is 2017-18. The approach followed in the projection of GSDP has been to progressively reduce the variability in growth observed across the States in the previous years.

2.38 The aggregate GSDP growth has been anchored around the country's GDP growth during the 2018-19 to 2020-21 period in a manner as to reduce the vast variability in GSDP growth observed in the recent years. The North East and Himalayan States[3] (NE&H States) have been differentiated from the general States and the former have been projected to grow at a slightly lower growth rate than the latter (Figure 2.2 and Annex 2.3). We have noted that growth rates of GSDP for 2018-19 are available for many States from the State's own calculations. However, keeping in mind the difficulty involved in combining different series of GSDP and the need for ensuring comparability, growth rates have been normatively projected from 2018-19.

[3]North East and Himalayan states are Arunachal Pradesh, Assam, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Uttarakhand

Figure 2.2: Projected Rate of Growth in GSDP/GDP (in per cent)



Own Taxes of States

2.39 Until June 2022, States' GST revenues are protected by a scheme of guaranteed compensation by the Union Government under an assured annualised 14 per cent growth path of revenue from taxes subsumed under GST, with the base taken as 2015-16. The protection of GST revenues at the rate of 14 per cent, set against the growth in aggregate GSDP of 11 per cent in 2020-21, yields a buoyancy of 1.27.

2.40 Non-GST taxes of the States should show significant improvement in rate structure, compliance and collections because these taxes have shown lower buoyancy than the taxes subsumed under GST. However, considering that the recent slowdown in economic activity is affecting collections from non-GST taxes, the tax buoyancy of States (including of GST and non-GST taxes) is assessed at a uniform 1.16 with respect to GSDP during 2018-19 to 2020-21. This is consistent with the implied buoyancy of GST for these three years, combined with the assumption of a buoyancy marginally above 1 for non-GST taxes.

Own Non-tax Revenues

2.41 Own non-tax revenues of the States include interest receipts, dividends and profits, royalties, irrigation receipts, receipts from forestry and wildlife, receipts from elections, etc. These revenues grew at a trend rate of 9.9 per cent during 2011-12 to 2017-18. For 2020-21, we have taken a macro view on non-tax revenue and projected that, with focus on rationalising fees and user charges, these revenues should keep pace with the growth in GSDP of each State.

Revenue Expenditure

2.42 Adjusted revenue expenditure for 2017-18 (adjustments being those mentioned earlier at para 2.36) forms the basis for projection. Expenditure on interest payment, salaries, pensions, elections, disaster management and compensation and assignment to local bodies have been projected separately. This is because the factors that determine the growth in these items are different from those that determine the rest of the revenue expenditure. The aforesaid items have been added back to the revenue expenditure once the remaining projection is complete. The norms adopted for assessment of different items of expenditure are presented below.

Interest payments

2.43 A two-stage procedure has been adopted for the projection of interest payments for 2020-21. The budget estimates of 2019-20 have been adopted as the base for projection. The projected addition to the stock of outstanding liabilities during the year 2020-21 has been taken to be 3 per cent of the GSDP of each State for that year. We have further assumed that the interest rate on fresh borrowings of the State Governments will be a uniform 6.6 per cent. Standard calculations based on these assumptions yielded a growth rate of interest payments for each State for 2020-21 over the levels in 2019-20 – some above 10 per cent and some below 10 per cent. In the second stage of the projection, the projected growth rates in excess of 10 per cent have been brought down to 10 per cent, while the growth rates below 10 per cent have been kept unchanged.

Salaries

2.44 The consolidated expenditure on salaries in 2017-18 served as the base for projections. For the States that had not implemented the pay commission award in or before 2017-18, a one-time normative increase of 18 per cent in their salary expenditure has been provided for in 2018-19 or 2019-20 (depending on the expected/notified year of implementation), and a growth of 8 per cent per annum thereafter has been assumed till 2020-21. For those States that implemented the pay commission award in or before 2017-18, a growth of 8 per cent per annum has been projected for the period 2018-19 to 2020-21. Those general states that had per capita revenue expenditure below the average of all general states in 2017-18 have been provided a higher growth of 9 per cent per annum in salaries. These States are Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh and West Bengal.

Pensions

2.45 The budget estimates of pension payments for 2019-20 have been adopted as the base for projection. The pension payments of the States have been projected to grow at a uniform rate of 9 per cent in 2020-21, which will meet the needs of inflation indexation, growth in the number of pensioners and the States' commitments under the NPS.

Election

2.46 We have devised a methodology to take care of the different State election cycles. We considered the pattern of election-related expenditure of the previous five years and projected each year with a five-year inflation indexation at the rate of 4 per cent per annum from the base year (that is, five years before). Thus, the election expenditure in 2020-21 has been projected with a five-year inflation indexation at the rate of 4 per cent per annum upon the election expenditure in 2015-16.

Compensation and Assignments to Local Self-governments

2.47 The States assign taxes to local self-governments based on the recommendations of the State Finance Commissions. A uniform growth of 8 per cent has been applied to the budget estimates of 2019-20 of compensation and assignments to the local self-governments of all States to arrive at the projections for 2020-21.

Remaining Part of Revenue Expenditure

2.48 The remaining revenue expenditure of the States (apart from disaster/calamity related expenditure, which has been mentioned at para 2.36) contains the non-salary component of four major items: (a) the States' contribution to the schemes with Central assistance; (b) expenditure on schemes formulated and implemented by State Governments; (c) expenditure on maintenance of assets; and (d) establishment expenditure other than salaries. The Commission has decided to provide for a growth equal to the average GSDP growth of each year to this composite component of expenditure. It is expected that the States will provide adequately for developmental schemes and maintenance of assets created with great effort and cost. Those general states that had per capita revenue expenditure below the average of all general states have been provided a higher growth of 13.0 per cent per annum in this component of expenditure.

Aggregate Revenue Expenditure and Pre-Devolution Revenue Deficit

2.49 With the aforesaid methodology for projection, the aggregate revenue expenditure of all the States taken together shows growth of 9.4 per cent in 2020-21. The resulting estimation of the pre-devolution revenue deficit is also presented in Annex 2.4.

Conclusions

2.50 The Commission has calibrated the outlook for economic growth in 2019-20 and 2020-21 to the changed dynamics. Considering the trends in 2019-20 so far, the budget estimates of gross tax revenue of the Union Government have been reassessed considerably. We have broadly adopted the revenue expenditure of the Union Government for 2019-20, with a modest downward adjustment, and made projections for 2020-21 on a normative basis.

2.51 We have noted the proliferation of centrally sponsored schemes and central sector schemes and the tendency to continue with them without an evaluation of their outcomes. It is our expectation that the Union Government will utilise the year 2020-21 to complete the review of such schemes and thereafter prune and rationalise the list to focus on certain key sectors and interventions with nation-wide externalities. The objective in our view should be to ensure that there is a minimum level of expenditure on certain desired sectors to improve human development and infrastructure. This will also reduce pressure on the revenue account of the Union to enable higher capital expenditure within the available fiscal space. We are also of the view that such rationalisation will allow the Union Government to rein in its expenditure, including allocation for fresh initiatives, within our projections for 2020-21.

2.52 In the case of the States, the growth rates in GSDP have been aligned to the GDP growth in such a way that the observed variability in growth across States declines gradually. The tax buoyancy for the States have been projected uniformly for 2020-21, based on the assumption that the GST revenue will be protected at an annualised 14 per cent growth. Taking a disaggregated view on the committed and other revenue expenditure of the States, the Commission arrived at its expenditure projections for the States in 2020-21. The Commission's effort has been to balance the concerns of fiscal space for the States, the limitations of revenue base of both the Union and the States and the need to foster fiscal consolidation.

2.53 The Commission has noted the tendency of the Union and State Governments to borrow outside the Consolidated Fund, leading to accumulation of extra-budgetary liabilities. The debt calculations presented in Annex 2.1 include the stock of extra-budgetary resources of the Union Government to the extent disclosed in the Union Budget 2019-20. Such disclosures are not available for the States as a whole. We recommend that in the interest of transparency, both the Union and the States need to make full disclosure of extra-budgetary borrowings. Outstanding extra-budgetary liabilities need to be clearly identified and eliminated in a time-bound manner with transparent reporting of deficit and debt as provided in the amended FRBM Act of 2018.

Chapter 3

Towards Cooperative Federalism: Vertical and Horizontal Devolution

3.1 Para 4 (i) of this Commission's terms of reference (ToR) which flows from Article 280(3) of the Constitution mandates the Commission to make recommendations regarding, "the distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds."

3.2 Recommendations on the division of net proceeds of taxes[1] collected by the Union forms the core of our work. The distribution of these net proceeds, which constitute the divisible pool of taxes, between the Union and the States is called vertical devolution. The first part of this chapter covers, among other things, trends in vertical devolution, our views and approach on vertical devolution and our recommendations on vertical devolution.

3.3 The second part of the ToR mandates the Commission to recommend the inter se distribution of the aggregate taxes which are to be devolved amongst States or horizontal devolution. The second part of this chapter covers the Commission's views on the horizontal imbalance existing among States, historical perspective on horizontal sharing, approach of this Commission and its recommendations on inter se shares of States in devolution.

Vertical Devolution

3.4 Until the Tenth Finance Commission (FC-X), separate percentages had been recommended for devolution of income tax and Union excise duties. However, after the Eightieth amendment to the Constitution, net proceeds of taxes collected by the Union are shareable with the States. States' share in the divisible pool recommended by last four Finance Commissions since the Eightieth amendment is given in Table 3.1.

Table 3.1: States' Share in Divisible Pool (in per cent)

	FC-XI (2000-05)	FC-XII (2005-10)	FC-XIII (2010-15)	FC-XIV (2015-20)
States' share in divisible pool	29.5	30.5	32.0	42.0

[1]Article 270 and 279 read together defines 'Net proceeds of taxes' as all the taxes reduced by cost of collection and cess & surcharges

3.5 The FC-XIV expressed the view that tax devolution should be the primary route of transfer of resources to States, since it is formula based and thus conducive to sound fiscal federalism. Driven by this view and the inclusion of Plan revenue expenditure in its assessment, it recommended 42 per cent of the divisible pool for sharing with the States, against 32 per cent recommended by the FC-XIII. While recommending such a significant jump, the FC-XIV did not envisage significantly higher aggregate transfers out of the gross resources of the Union but a compositional shift in the overall transfers to States in favour of greater tax devolution as compared to grants.

3.6 After careful examination of the behaviour of inter-governmental transfers during the award period of the FC-XIV as well as the earlier period, we note that tax devolutions are a more objective form of transfer of resources as compared to other forms of transfers which are more discretionary and empirically found to be less progressive.

3.7 Stability and predictability of resources is an essential component of good long-term budgeting for both the Union and States. Flow of resources for both the core administrative functions and developmental initiatives are determined by policy. It is, therefore, our considered view that there should be broad continuity in the availability of resources.

3.8 More importantly, we note that a higher proportion of tax devolution vis-à-vis grants enables higher revenues to the States, especially when there is higher buoyancy of Union taxes. In the event of any decline in revenues, the burden is shared by both. However, the Union is best suited to take measures to impart macro-economic stability and should be left with sufficient fiscal cushion to take those steps.

3.9 For the year 2020-21, we are thus inclined to leave the vertical split of the divisible pool at the same level as recommended by the FC-XIV. However, we have to take into account recent changes due to the re-organisation of the erstwhile State of Jammu & Kashmir.

3.10 The State of Jammu & Kashmir was reorganised into the Union Territories (UT) of Ladakh and Jammu & Kashmir through the Jammu & Kashmir Reorganisation Act, 2019. Article 280 (a) and (b) of the Constitution, read along with Section 6 of the Jammu and Kashmir Reorganisation Act puts the newly-created UTs of Ladakh and Jammu and Kashmir outside the purview of the Finance Commission's award. Since UTs are the responsibilities of the Union, they are within the purview of the Union budget. We have notionally estimated that the share of the erstwhile State of Jammu & Kashmir would have come to around 0.85 per cent of the divisible pool. We believe that there is a strong case for enhancing this to 1 per cent of the divisible pool in order to meet the security and other special needs of the Union Territories of Jammu and Kashmir and Ladakh. Since this enhancement has to be met from the Union' Government's resources, we recommend that aggregate share of States may be reduced by 1 percentage point to 41 per cent of the divisible pool.

3.11 Therefore, we recommend an aggregate share of 41 per cent of the net proceeds of Union taxes (divisible pool) to be devolved to States in the year 2020-21.

Horizontal Devolution

3.12 After determining the States' aggregate share in the divisible pool, our next task is to recommend the horizontal devolution among the States. In the past, this has been mainly driven by considerations of fiscal need, equity and performance. Some Finance Commissions have also given due regard to the fiscal disabilities and fiscal discipline in the devolution formula. Table 3.2 summarises the criteria used and weights assigned by the last four Commissions.

Table 3.2: Criteria and Weights in Previous Finance Commissions

(in per cent)

Criteria	FC-XI (2000-05)	FC-XII (2005-10)	FC-XIII (2010-15)	FC-XIV (2015-20)
Population (1971)	10.0	25.0	25.0	17.5
Population (2011)				10.0
Area	7.5	10.0	10.0	15.0
Forest cover				7.5
Index of infrastructure	7.5			
Income distance	62.5	50.0		50.0
Fiscal capacity distance			47.5	
Tax effort	5.0	7.5		
Fiscal discipline	7.5	7.5	17.5	
	100.0	**100.0**	**100.0**	**100.0**

3.13 The basic objective of a horizontal devolution formula is to enable the States to provide basic public goods and services with equivalent tax effort. Achieving this may entail: (i) filling up the vertical fiscal gap of the States; (ii) providing horizontal equity (by providing higher share to poorer regions); (iii) equalising the fiscal capacities of States (revenue equalisation); (iv) providing for cost differentials in States for basic public service (expenditure equalisation); and (v) ensuring that the States have enough incentives to mobilise own revenue and spend them appropriately in an efficient manner.

3.14 A fiscal gap exists in all States due to the structural mismatch between States' own resources and their committed/development expenditure liabilities. To meet the first objective of filling the vertical gap of the States, any transfer of resources requires to be determined on need-based criteria. Per capita transfers based on population and cost disabilities need to be factored in for such purpose.

3.15 Given the large differences in the resource base available and status of development within the country, fiscal equalisation is an essential objective to be kept in mind while distributing resources among States.

3.16 We have also taken into account fiscal needs, equity and performance principles for determining the criteria for horizontal sharing. Need is the basic tenet of inter-governmental resource transfer. Each State has its own unique enablers as well as disabilities, irrespective of the policy choices made. We address such cost and economic differentials by applying the equity principle and equalising fiscal capacities. The efficiency principle has also been applied to reward and incentivise States to perform better, in terms of utilisation of resources available to them.

3.17 Another important principle followed is the broad need for stability and predictability in transfers. Hence, all three principles of need, equity and efficiency (performance) have been balanced by assigning appropriate weightages. Based on the above principles and considerations, this Commission finds it appropriate to use the following criteria in the devolution formula.

Need Based Criteria

Population

3.18 The population of a State represents the needs of the State to incur expenditure for providing services to its residents. It is also a simple and transparent indicator that has a significant equalising impact.

3.19 Many States in their memoranda have raised concerns over the use of population data of 2011 for the purpose of devolution. Their concern is that the States which have controlled their population would be at a disadvantage if the latest population data is used instead of population data from the1971 Census, which has been used by the last nine Finance Commissions since the FC-VI (1974-79) while making their recommendations. Nevertheless, all the States have suggested that population criteria be retained in the formula. Para 8 of this Commission's ToR specifies that “the Commission shall use the population data of 2011 while making recommendations.” Our immediate predecessor, the FC-XIV, had expressed the view that though the use of dated population data is unfair, it is bound by its ToR. This Commission is of the view that fiscal equalisation being recommended by it is for the present needs of the States and this is best represented by the latest census data. Given the specific ToR to use 2011 population data, there is no further choice for this Commission.

3.20 As some of the other criteria of the devolution formula will also be scaled by it, the population will also get reflected through the overall devolution formula. Hence, standalone population criterion has been assigned a weight of **15 per cent.** Annex 3.1 contains the method and calculation table for the inter se shares under this criterion.

Area

3.21 All Finance Commissions since the FC-X have used area as a criterion in the devolution formula on the grounds of need –larger the area greater is the expenditure requirement for providing comparable services. A majority of the States have suggested retaining area as a criterion. We agree with the argument that larger area incurs some additional administrative costs for the State. However, it may not lead to a proportional increase in cost of providing services. Hence, we have maintained a moderate weight of **15 per cent for the area** criterion in consonance with FC-XIV approach. It is also true that certain minimum costs are incurred by the States even if the area is very small. Hence, we have continued with the adjustments done by previous Finance Commissions while calculating the shares of geographical area of the States, by assigning a floor of 2 per cent share to those States with less than 2 per cent share in the actual area. Annex 3.2 gives the actual geographical area, area share and adjusted area shares of States as calculated by this Commission.

Forest and Ecology

3.22 Forest cover was used as a criterion in the devolution formula for the first time by the FC-XIV on the grounds that while the forest cover maintained by States provide ecological benefits, it also imposes opportunity costs that need to be compensated. The FC-XIV assigned 7.5 per cent weight to forest cover in the devolution formula.

3.23 Many States have suggested forest cover or some variation of it as a criterion in the devolution formula. Some have also suggested including tree cover outside the forest, mangrove forest, incremental change in forest etc. as criteria. Some others have suggested that forest cover may be dropped as a criterion. We have also commissioned studies by domain experts on the impact of including forest cover in the devolution formula. These studies have helped strengthen our view that given the importance of forests and environmental issues in present times, it is important to retain the forest criterion in the devolution formula. There are also cogent arguments that this criterion is needed as a reward for providing ecological services and to overcome the disabilities arising from areas dedicated to dense forests (areas covered by very dense and moderately dense forests).

3.24 The forest and ecology criterion is for the ecological services being provided by a State's forest cover to the country as a whole. This is arrived at by calculating the share of the dense forest of each State in the aggregate dense forest of all the States. We have assigned a higher weight of **10 per cent for the forest and ecology** criterion. The increase in weight is also a recognition of the forest, a global public good, as a resource that ought to be preserved and expanded through afforestation of degraded and open forests for national benefit as well as to meet our international commitments. Annex 3.3 gives the forest cover and shares of States in the criterion.

Equity-based Criterion

Income Distance

3.25 Distance of per capita income has been used by many previous Commissions as an equity criterion in the devolution formula, with weights assigned ranging from 33.5 per cent by the FC-

IX to 62.5 per cent by the FC-XI. This criterion is to make the devolution formula more equalising and progressive, and provides higher devolution to States with lower per capita income (and lower own tax capacity). Here, per capita gross state domestic product (GSDP) is used as a proxy for the distance between States in tax capacity. Poorer States with low per capita income also have higher expenditure needs to provide for comparable services. Hence, the income distance criterion helps in providing for two-sided equalisation.

3.26 Almost all the States have suggested retaining the income distance criterion in the horizontal devolution formula. Horizontal equity is thus an important redistributive aspect which can be achieved through this criterion. Hence, this Commission has **retained the income distance criterion with a weight of 45 per cent.**

3.27 Income distance has been calculated using methodology similar to what was adopted by the FC-XIV. A three-year average (2015-16 to 2017-18) per capita comparable GSDP has been taken for all the States. Income distance has been computed by taking the distance from the State having the highest per capita GSDP. In this case, Goa has the highest per capita GSDP followed by Sikkim. Since they are very small and atypical States, to avoid distortions, the State with the third highest per capita GSDP – Haryana – has been taken as the benchmark to avoid distortions. Distance of per capita GSDP of each State from Haryana's per capita GSDP has been calculated. Goa, Sikkim and Haryana have been assigned the income distance as calculated for the State with the fourth highest per capita GSDP – Himachal Pradesh. Such distance has been scaled by the population (Census 2011) of each State and then the share of each State has been computed. It is noted that the most of the lower per capita income States are also the more populous States. Therefore, use of population scaling of income distance becomes progressive. Annex 3.4 gives details of the methodology and the calculation table for the Income Distance criteria.

Performance-based Criteria

Demographic Performance

3.28 All the previous Finance Commissions since the FC-VI (1974-79) have been mandated to use the population data of the 1971 Census while recommending their awards. After almost four decades, we are mandated to use the population data of the most recent Census for making our recommendations. As mentioned earlier, some States had raised serious concerns about this. However, use of the latest census data and sudden change of underlying data after four decades should not unfairly put at a disadvantage some States which have performed well on the national objective of demographic management. Hence, we have decided to recommend a new performance-based criterion to reward States who have performed well on the demography front.

3.29 This Commission recommends a criterion of demographic performance by using a measure of the total fertility rate (TFR) data of all States. This criterion has been computed by using the reciprocal of TFR of each State, scaled by the population data of Census 1971. States which have achieved lower TFR will be scored higher on demographic performance whereas

States with higher TFR will be scored lower. Better performance in reduction of TFR also serves as an indirect indicator for better outcomes in health (especially maternal and child health) as well as education. Hence, this criterion also rewards States with better outcomes in those important sectors of human capital. Since this is an important performance criterion to reward efforts made by States in controlling their population and achieving better human capital outcomes in education and health, we have decided to assign a total weight of **12.5 per cent.** Annex 3.1 gives full details of the methodology and the calculations for this criterion.

Tax Effort

3.30 The FC-X, FC-XI and FC-XII have used tax efforts of States as a criterion in the devolution formula to reward State's own tax performance. Many States have suggested inclusion of tax performance criteria to incentivise States with higher efficiency of tax collection. This Commission is of the view that the inclusion of tax effort as a criterion will reward the States with higher tax collection efficiency and, at the same time, will also encourage all States to be more tax efficient.

3.31 The tax effort of States is computed by first calculating the average of per capita own tax revenue of a State over three years and its per capita GSDP over the same three years, and then taking the ratio thereof. This ratio has been scaled by the population of the State. Annex 3.5 gives the calculation table. A total weight of **2.5 per cent** has been assigned to this criterion.

3.32 The criteria and the weights attached to them for determining horizontal sharing of taxes along with weights assigned to each criterion is summarised in Table 3.3. The End Note to this chapter gives the methodology and mathematical expressions for computing inter se horizontal shares of all States.

Table 3.3: Criteria and Weights Assigned for Horizontal Devolution

Criteria	Weight (%)
Population	15.0
Area	15.0
Forest and Ecology	10.0
Income Distance	45.0
Demographic Performance	12.5
Tax Effort	2.5
	100.0

3.33 For the year 2020-21, inter se shares of States in the net proceeds of the taxes (divisible pool) as recommended by this Commission based on the methodology described above are given in Table 3.4.

Table 3.4 Inter se Shares of States

State	Share (per cent)
Andhra Pradesh	4.111
Arunachal Pradesh	1.760
Assam	3.131
Bihar	10.061
Chhattisgarh	3.418
Goa	0.386
Gujarat	3.398
Haryana	1.082
Himachal Pradesh	0.799
Jharkhand	3.313
Karnataka	3.646
Kerala	1.943
Madhya Pradesh	7.886
Maharashtra	6.135
Manipur	0.718
Meghalaya	0.765
Mizoram	0.506
Nagaland	0.573
Odisha	4.629
Punjab	1.788
Rajasthan	5.979
Sikkim	0.388
Tamil Nadu	4.189
Telangana	2.133
Tripura	0.709
Uttar Pradesh	17.931
Uttarakhand	1.104
West Bengal	7.519
All States	**100**

End Note

The inter se share of i^{th} state in the tax sharing formula, S_i, is determined as the weighted sum of state shares by six parameters or criteria – population, area, forest and ecology, income distance, tax effort and demographic performance:

$$S_i = \sum_{m=1}^{6} S_i^m \, \omega_m$$

where ω_m = weight of m^{th} parameter and S_i^m is the inter se share of the i^{th} State as per the m^{th} parameter.

Methods of calculating each criterion/parameter are as follows:

1. **Population**

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{POP_{i2011}}{\sum_{j=1}^{28} POP_{j2011}}$$

where POP_{jy} is population of the j^{th} State as per Census of year y.

2. **Area**

Area shares have been calculated in two-steps.

Step 1. $Inter\ se\ share\ of\ i^{th}\ state = \frac{Area_i}{\sum_{j=1}^{28} Area_j}$

where $Area_i$ = the actual geographic area of i^{th} state.

Step 2. For States with actual area share less than 2 per cent, floor share of 2 per cent is fixed. To arrive at the final shares, remaining State shares are adjusted for the total to add up to 100.

3. **Forest and Ecology**

- Forest Cover (F_i) = Very Dense Forest + Moderately Dense Forest

$$FC_i = Inter\ se\ share\ of\ i^{th}\ state = \frac{F_i}{\sum_{j=1}^{28} F_j}$$

4. **Income Distance**

- Three-year (2015-16 to 2017-18) average of per capita GSDP of i^{th} State ($GSDPPC_i$)
- d_i is distance (difference) of i^{th} state's $GSDPPC_i$ from third highest state's, namely Haryana's GSDPPC

- Top three GSDPPC States -- Goa, Sikkim and Haryana -- are assigned notional distance of the fourth highest state, namely Himachal Pradesh

$$D_i = d_i \times POP_{i2011}$$

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{D_i}{\sum_{j=1}^{28} D_j}$$

5. **Demographic Performance**

- From Census 2011, total fertility rate of i[th] State(TFR_i) calculated from Age-Specific Fertility Rates ($ASFR_{ik}$) where $ASFR_{i,k}$ is the k[th] age-specific fertility rate in the i[th] State.

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

The female population as registered in the age group by Census 2011 is taken as the mid-year female population.

Total Fertility Rate of i[th] State is,

$$TFR_i = 5 \times \sum_{k=15-19}^{45-49} ASFR_{i,k}$$

Where k = 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49.

- DP_i = demographic performance of the i[th] State is given by

$$DP_i = \frac{1}{TFR_i} \times POP_{i,1971}$$

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{DP_i}{\sum_{j=1}^{28} DP_j}$$

6. **Tax effort**

- Three-year (2014-15 to 2016-17) average is taken to attenuate the uncertainty and volatility in tax collection due to introduction of GST in 2017-18 and also in GSDP.
- T_i = three-year (2014-15 to 2016-17) average of per capita own tax revenue of the i[th] State.
- $\overline{GSDPPC_i}$ = three-year average (2014-15 to 2016-17) of $GSDPPC_i$.
- Tax ratio $t_i = \frac{T_i}{\overline{GSDPPC_i}}$
- Tax effort of i[th] State $TE_i = t_i \times POP_i$

$$Inter\ se\ share\ of\ i^{th}\ state = \frac{TE_i}{\sum_{j=1}^{28} TE_j}$$

Chapter 4

Grants-in-aid

4.1 Para 4 (ii) of the terms of reference (ToR) of this Commission requires us to make recommendations on "the principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article". Para 5 mentions, among other things, that "the Commission may also examine whether revenue deficit grants be provided at all".

4.2 The Commission has held discussions with the Ministry of Finance and other ministries of the Union Government as well as State Governments. We have come to the conclusion that the past framework and legacy of earlier Finance Commissions has served the country well. We, therefore, propose to continue this practice which will ensure that the growth of the States is not unduly compressed and their growth trajectory broadly remains aligned, as in the past, with the growth path of the Union Government. We believe that it would be appropriate, judicious, rational and consistent to continue with the approach pursued by successive Finance Commissions.

4.3 These grants have comprised, inter alia, the following:

i. revenue deficit grants

ii. grants to local bodies

iii. disaster management grants

iv. sector-specific grants

v. performance grants

vi. State-specific grants

4.4 Finance Commissions in the past have not had a uniform and consistent approach to grants except on revenue deficit grants, grants to local bodies and disaster management. The recommendations and approach in respect of sector- and State-specific grants has varied.

4.5 This Commission intends to adopt the following approach:

i. Make recommendations on revenue deficit grants, grants to local bodies and disaster management grants.

ii. Indicate the framework on sector-specific and performance based grants and enable preparatory work to be initiated for utilisation from the second year of the award.

iii. Consider the State-specific grants in our final report, depending upon available fiscal space.

Revenue Deficit Grants

4.6 On the basis of the assessment of revenues and expenditure done in Chapter 2, the pre-devolution revenue deficit has been worked out for all the States for 2020-21. We have used a normative approach to assess the revenue expenditure and revenue receipts of States for this year. Based upon the projected tax revenue of the Union Government and the shares derived from the horizontal devolution formula, the share of each State is derived in absolute numbers. This has been used to derive the post-devolution revenue deficit/surplus for States.

4.7 As per the detailed State-wise estimates given in Annex 2.4 of this Report, twenty-five out of twenty-eight States face a total pre-tax devolution revenue deficit of Rs. 6.43 lakh crore in 2020-21. After accounting for the projected tax devolution to the States of Rs.8.55 lakh crore, fourteen States garner post-tax devolution revenue surplus of Rs.3.08 lakh crore, while the remaining fourteen face a combined post tax devolution revenue deficit of Rs. 74,340 crore. Accordingly, these fourteen States are recommended revenue deficit grants as detailed in Table 4.1.

Table 4.1: State-wise Revenue Deficit Grant for 2020-21

(Rs. crore)

State	Pre-devolution revenue deficit (+) /surplus(-)	Tax devolution	Post devolution revenue surplus	Post devolution revenue deficit	Recommended revenue deficit grant
Andhra Pradesh	41054	35156	-	5897	5897
Arunachal Pradesh	9183	15051	5868	-	-
Assam	34355	26776	-	7579	7579
Bihar	67611	86039	18429	-	-
Chhattisgarh	10068	29230	19162	-	-
Goa	1668	3301	1633	-	-
Gujarat	-11186	29059	40245	-	-
Haryana	3300	9253	5953	-	-
Himachal Pradesh	18264	6833	-	11431	11431
Jharkhand	13491	28332	14841	-	-
Karnataka	8764	31180	22415	-	-
Kerala	31939	16616	-	15323	15323
Madhya Pradesh	38062	67439	29377	-	-
Maharashtra	-2746	52465	55211	-	-
Manipur	8964	6140	-	2824	2824
Meghalaya	7033	6542	-	491	491
Mizoram	5750	4327	-	1422	1422
Nagaland	8817	4900	-	3917	3917
Odisha	19726	39586	19860	-	-
Punjab	22950	15291	-	7659	7659
Rajasthan	39681	51131	11450	-	-
Sikkim	3766	3318	-	448	448
Tamil Nadu	39848	35823	-	4025	4025
Telangana	-7735	18241	25975	-	-
Tripura	9299	6063	-	3236	3236
Uttar Pradesh	115332	153342	38010	-	-
Uttarakhand	14517	9441	-	5076	5076
West Bengal	69314	64301	-	5013	5013
All States	**642753**	**855176**	**308429**	**74340**	**74340**
General States	**522806**	**765784**	**302561**	**37917**	**37917**
NE&H States	**119947**	**89392**	**5868**	**36423**	**36423**

Note: Respective figures of each State have been rounded off to the nearest whole number

4.8 We have also noted with concern the wide disparity in per capita revenue expenditure of the States. Committed expenditure in certain States has risen to extraordinary levels that cannot be sustained through their own resources. Previous Finance Commissions had also expressed serious concern regarding this. Though we have provided for such expenditures at current levels in 2020-21, we recognise the moral hazard of allowing it in some States when others have effectively reduced such liabilities. We, therefore, expect that the States with very high relative per capita expenditure on salaries, pension and interest payments will demonstrate, in 2020-21, steps to review and rationalise such expenditure and reduce their proportion to total revenue expenditure. Simultaneously, improvement in the ratio of own revenues to gross state domestic product (GSDP) is expected to enable such States to support the higher liabilities.

Special Grants

4.9 We believe that during 2020-21 no State should, as a result of our recommendation get, in absolute terms, less than the total amount of devolution and revenue deficit grants estimated to be received in 2019-20. It is believed that this is a sound principle and should be adhered to. We have noted that the sum of tax devolution and revenue deficit grant is projected to decline from 2019-20 to 2020-21 for three States, namely, Karnataka, Mizoram and Telangana. Hence, we have provided grants to these States aggregating to Rs. 6,764 crores in 2020-21. This grant will be adequate to make up the shortfall between untied transfers received by these States in the form of tax devolution plus revenue deficit grant in 2020-21 vis-a-vis the corresponding amount in 2019-20. The details are given in Table 4.2.

Table 4.2: Recommendation for Special Grants

(Rs. Crore)

States	Devolution plus revenue deficit grant		Recommendation for special grants
	2019-20 Reassessed (A)	2020-21 (B)	(A-B)
Karnataka	36675	31180	5495
Mizoram	6296	5750	546
Telangana	18964	18241	723
Total	**61935**	**55171**	**6764**

Sectoral Grants and Performance Based Incentives

4.10 Para 7 of the ToR mandates us to consider proposing measurable performance-based incentives for States in nine different areas. The memoranda submitted by the Union Government and some State Governments have also suggested such incentives and other grants.

4.11 We have identified several areas for sectoral initiatives and measurable performance criteria for making suitable recommendations in our final report. However, we propose to give our recommendations with regard to only 2020-21. We also believe that it would be prudent, reasonable and appropriate to allow the ministries and State Governments adequate time to take action in 2020-21 that will enable them to efficiently utilise the grants in the subsequent years of our award period.

4.12 Accordingly, we have discussed here the broad contours of important areas for sectoral grants and performance-based incentives during our award period. After making the final assessment of the divisible pool for the full award period, we will earmark specific sums in each of the areas identified.

Sectoral Grants

4.13 Both Union ministries and State Governments have proposed certain sector-specific grants. Some have recommended grants for State-specific schemes and projects. Commissions have, in the past, provided various forms of sector-specific grants in areas like education, health, environment, justice, roads, heritage conservation etc. Grants for upgradation of standards of administrative and social services too found a place in the total transfers of quite a few Finance Commissions. Besides, we believe that States with low fiscal capacity need to increase their expenditure on critical social and economic sectors in order to promote better, balanced and inclusive growth in the country. We are considering recommending, in the final report, sector-specific grants for nutrition, health, pre-primary education, judiciary, rural connectivity, railways, statistics and police training and housing. However, to augment the efforts of the States towards reducing and ultimately eliminating malnutrition, we specifically recommend grants for nutrition even in 2020-21.

Grants for Nutrition

4.14 Despite the Integrated Child Development Scheme (ICDS) being implemented for several decades, there has been no commensurate improvement in child nutrition levels. According to Global Hunger Index, India's rank has fallen from 93 in 2015 to 102 in 2019 out of 117 qualifying countries. Though the allocation of resources for this purpose has substantially increased in the recent past, the persisting levels of malnutrition among vulnerable children, pregnant women and lactating mothers in relatively less developed States continue to be a matter of concern. Apart from better management of funds and more efficient delivery of services, reduction of malnutrition among children requires higher allocation of resources. The impact of malnutrition on the development of the brain, and hence on early education, has prompted us to recommend additional grants of Rs 7,735 crores to the States for nutrition in 2020-21, in addition to the grants allocated by the Union Government under centrally sponsored schemes (CSS). A brief outline of the grants recommended is enclosed at Annex 4.1. These grants are not to be substituted for either the State share or Union share and are an additionality. These grants should be released in two installments. The first should be by May 2020 along with the Union share of the CSS related to nutrition. The second installment should be released after effective utilisation of the first installment of all grants on nutrition (including State share) received by a State.

Health

4.15 The health sector has been underfunded for decades. At the consolidated level of State and Union Governments, we spent only 0.95 per cent of GDP in 2017-18 against the 2.5 per cent that the National Policy on Health aspired for. Our low expenditure in this critical sector is much below international norms. Improving public health infrastructure and increasing the number, availability and capacity of healthcare professionals is a major challenge in realising our health goals.

4.16 Towards this objective, apart from extensive discussions with the Ministry of Health and Family Welfare and State Governments, we constituted a High Level Group on Health Sector under the chairmanship of Dr. R Guleria, Director, AIIMS, alongwith eminent experts in the sector, namely Dr V.K. Paul, Member NITI Aayog and the acting Chairman, Indian Medical Council, Dr. Devi Shetty, Chairman, Narayana Health City, Bengaluru, Dr. Govind Mhaisekar, Vice Chancellor, Maharashtra University of Health Science, Pune, Dr. Naresh Trehan, Medanta City, Gurugram, Dr. Bhabatosh Biswas, professor and head of department of Cardio Thoracic Surgery, R.G. Kar Medical College, Kolkata and Prof. K. Srinath Reddy, President of the Public Health Foundation of India.

4.17 Based on the recommendations of the High Level Group and interactions with other stakeholders, five important initiatives that need to be taken are:

i. Establishment of medical colleges in about 247 district hospitals with over 100 beds in districts where there is no medical college.

ii. All the public health facilities of private sector and corporate hospitals should be utilised for starting specialist Diplomate of National Board (DNB) courses, awarded by the National Board of Examination, Ministry of Health and Family Welfare (MoHFW). The hospitals providing DNB courses may be given outcome based tax incentives under Section 80 JJA of Income Tax. These hospitals shall undergo National Assessment and Accreditation Council (NAAC) like rating system.

iii. In public health facilities, it is important that the spare infrastructure and facilities be fully utilised. Towards this objective, a panel of specialists from the private sector may be drawn up for all district hospitals and be permitted to treat patients and undertake procedures, without crowding out the patients seeking direct treatment at such hospitals. The prescribed charges of the Central Government Health Scheme (CGHS) shall be made applicable, somewhat similar to an earlier practice.

iv. We need to have a system of auditing for all medical equipment and diagnostic facilities in public hospitals in order to ensure optimum use. The Heads of Department in hospitals should also be made accountable for effective utilisation of unused equipment and facilities.

v. Developing district hospitals as training sites for about 1.5 million allied health professionals, which can significantly enhance productivity at health centres, harness talent and enhance employment.

4.18 We believe that the above initiatives will have a positive multiplier effect on health services, and also effectively follow up the goals of the Ayushman Bharat programme and improve services in the Wellness Centres. However, these need adequate preparatory time, particularly the supply side responses to plan and augment the availability of faculty to teach and train at the proposed new medical colleges. Equally, the initiative for the allied health professionals would greatly depend on the enactment of the Allied and Healthcare Professions Bill, 2018 under consideration in Parliament.

4.19 We recommend that the Union Health Ministry and State Governments undertake preparatory work related to the establishment of medical colleges in district hospitals with over 100 beds. Work on developing district hospitals as training sites for allied health professionals should also be initiated so that suitable State-wise grants proposed to be included in our final report can be optimally utilised. Information on the adequacy of preparatory work and programme of implementation would enable the Commission to consider appropriate grants in its final report.

Grants for Police Training and Housing

4.20 The Ministry of Home Affairs submitted a detailed memorandum seeking support to States in the areas of police training, modernisation and police housing. We recognise that ensuring the safety of the citizens and protecting property is a basic public good that is necessary for the development of the country. We also note that additional funds for general administration and policing is required, as these sectors generally receive a low priority in budget allocations. Hence, we may consider providing grants for police training and housing in our final report. We recommend that in 2020-21, State Governments should identify the land and premises for creation of such additional facilities and undertake preparatory work for police training programmes.

Railways

4.21 Railways are the engine of economic growth and development of the country. Expansion and development of railways, particularly for efficient and cost-effective freight movement, has seriously lagged behind the economic progress of the country. The Government of India is planning to create infrastructure that would be capable of carrying twice the freight traffic over the next six to eight years and meet the passenger demands without undue crowding of passenger trains.

4.22 During our meeting with the Ministry of Railways, we were informed that certain on-going projects related to new lines, gauge conversion etc. are being taken up jointly with the States on a cost sharing basis. Some States are faced with paucity of resources for paying their share towards the implementation of such projects. We may consider this issue and make appropriate recommendations in our final report with respect to the expeditious and time-bound completion of such ongoing stranded projects, provided the States make demonstrable efforts in earmarking funds from their own untied resources towards such projects and remove bottlenecks of land acquisition, forest and environmental clearances and other state-level regulatory permissions.

Maintenance Grants for PMGSY roads

4.23 Rural roads are recognised as catalysts to rural development and a significant element of poverty alleviation initiatives. Under the Pradhan Mantri Gram Sadak Yojana (PMGSY), till date, 5,50,528 km road length has been constructed and 89 per cent of all eligible habitations have been connected. This huge asset demands a recurring and predictable stream of funds for maintenance. During our discussion with various stakeholders, including the Ministry of Rural Development, it has been brought to our notice that the maintenance of PMGSY roads, unfortunately, receives low priority in the total resources earmarked for development works.

4.24 Hence, in our view, it is extremely important to provide for maintenance of the PMGSY roads, following the completion of the five-year maintenance contract. This matter will be suitably addressed in our final report based upon overall resource availability and demonstrable efforts made by States in earmarking funds from their own untied resources towards maintenance of such assets.

Pre-primary education

4.25 There is compelling evidence that children who fall behind in basic literacy and numeracy skills in early grades tend to maintain an almost flat learning curve later because they are not able to catch up with the material being taught in class. Over 85 per cent of cumulative brain development occurs prior to the age of six. It is only around the age of eight that children adapt to more prescriptive learning. This highlights the need to provide pre-primary education which is flexible, multi-faceted, multi-level, play-based, activity-based and discovery-based. The concept is to be addressed in the National Education Policy, 2019. We may consider making appropriate recommendations based upon the implementation and outcome of the National Education Policy, the design of the proposed interventions and the measurable outcomes sought to be achieved.

Grants for Judiciary

4.26 We feel that an efficient justice delivery system is a central component in implementing the Sustainable Development Goal (SDG) Goal no. 16, that is peace, justice and strong institutions. During our consultations with the Department of Justice in the Ministry of Law and Justice, we were informed that State Governments did not provide sufficiently for strengthening of the judicial system even after the enhanced tax devolution following the FC-XIV recommendations. A large majority of prison inmates are 'under trial', awaiting speedy conclusion of the judicial process.

4.27 This Commission will consider recommending appropriate grants for strengthening of the judicial system during our award period. Mechanisms such as fast track courts, lawyers' halls, information centres, justice clocks, vulnerable witness deposition centres (especially in the backdrop of the renewed focus on crime against women), district-level and state-level Alternate Dispute Resolution (ADR) centres, village legal aid clinics, upgradation of District Legal Services Authorities (DLSA) front offices in districts and sub-divisions, legal literacy clubs in schools and pre-institution mediation centres have been mentioned as possible solutions to problems in the judicial system. While we make suitable recommendations, State Governments who are equal beneficiaries, will be expected to provide enhanced additional remaining resources.

4.28 During the year 2020-21, the Department of Justice and the State Governments should take preparatory action for starting more fast track courts to bring down the huge backlog of pending cases.

Grants for Statistics

4.29 Reliable and credible statistics are central to policy formulation as well as its implementation and subsequent monitoring. The Ministry of Statistics and Programme Implementation (MoSPI) submitted a detailed proposal to us to enhance the system of data collection and dissemination related to various statistics, which is under our consideration. Based upon the proposal, the Commission plans to provide for grants for statistics which will have a conditional component, to be released based upon achievement of certain milestones. These milestones are given below.

Milestone 1	• Compilation and annual release of district domestic product (DDP) • Compilation and monthly release of State index of industrial production (IIP) and consumer price index (CPI) • State monitoring framework for SDGs and dynamic updation with National SDG Dashboard • Publication of a monthly, quarterly and annual advance release calendar.
Milestone 2	• Participation in National Sample Surveys and release of estimates at the sub-state/district levels within one year of completion of the survey • Using technology for data capture through Computer Assisted Personal Interviewing (CAPI) mode, validation and processing
Milestone 3	• Implementing dynamic updation of the proposed National Business Register • Innovations for improvements in administrative statistics like establishment and household registries; land records, etc. • Dynamic updation with the national integrated information portal being developed by MoSPI

4.30 During the year 2020-21, the MoSPI and the State Governments shall work closely to develop guidelines, identify and train manpower and establish reporting systems in order to achieve the milestones for 2021-22 onwards.

Performance Based Incentives

4.31 Based upon ToR 7, which enjoin us to propose performance-based incentives in nine areas (Annex 1.1), we have chosen six different areas for these incentives. As mentioned earlier, States should take preparatory action by establishing a credible implementation and monitoring system in 2020-21, after developing robust, monitorable outcome indicators for releasing the grants to eligible States in subsequent years. They are also required to define the State-wise baseline indices/score/data using the indices to monitor annual incremental changes and issue guidelines before May/June 2020. These broad contours are given below.

Implementation of Agriculture Reforms

4.32 Notwithstanding significant reforms and liberalisation in recent years, the income of agricultural workers and farmers remained low and did not keep pace with the growth in the income of non-farm workers. Keeping in view the goal of doubling farmers' income and reducing agrarian distress, we have identified a set of reforms which are central to liberalising agricultural markets, provide for seamless trading, promote competition and catalyse organised investment from the private sector for better growth in agriculture sector.

4.33 The States will be eligible for financial incentives if they enact and implement all features of: (a) Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act issued by the Ministry of Agriculture, Cooperation and Farmers Welfare in 2017, (b) Model Agricultural Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act, issued by Ministry of Agriculture and Farmers Welfare in 2018, and (c) "Model Agricultural Land Leasing Act, 2016" prepared by the NITI Aayog.

4.34 We recommend that State Governments take preparatory action by securing the passage of these Bills in their respective legislatures in 2020-21 to become eligible to avail the grants awarded by us from 2021-22 onwards.

Development of Aspirational Districts and Aspirational Blocks

4.35 The Aspirational Districts Programme (ADP), piloted by NITI Aayog, is based on three principles of competition, convergence and collaboration. There has been improvement in the social and economic indicators of the targeted areas, but rigorous performance evaluation is required to establish the effectiveness of the ADP in bringing about or accelerating such improvement even without providing any additional funding. On the basis of the performance evaluation of the ADP, we would consider earmarking funds to incentivise the top performing districts to sustain these results and broaden their impact over our award period.

4.36 Further, there have been suggestions that the objectives would be better served if we can also target the blocks with poor developmental indicators on the same lines. This new programme may be called the Aspirational Blocks Programme. This would also necessitate earmarking funds as incentives for States in our award period. Based on the current experience and rigorous performance evaluation of ADP, NITI Aayog shall, in consultation with the Ministry of Finance and the State Governments, prepare the detailed proposals and guidelines, in 2020-21, for both the districts and blocks along with the key performance indicators to be achieved and rewarded.

Power Sector Reforms

4.37 Most States have reduced, to some extent, their aggregate technical and commercial (AT&C) losses and the difference between average cost of supply and average rate of return (ACS-ARR) after implementation of the Ujwal Discoms Assurance Yojana (UDAY) in 2016-17. However, this progress does not seem to be sustainable unless the systemic issues in the power sector are suitably addressed. In view of the above, robust and systemic reforms are required to improve the health of the power sector.

4.38 Accordingly, we may consider recommending annual financial incentives for top performing States which achieve the targets based on certain broad parameters such as: (i) achieving the reduction targets of AT&C losses, (ii) achieving the reduction targets of (ACS-ARR), (iii) open access to trade and industry to meet their power needs from sources other than the State utilities and (iv) to implement direct cash transfers for all consumers eligible for subsidy in a State. Further, in order to avail these incentives, the States should ensure that future supply of electricity from the generating companies should be against a firm irrevocable letter of credit in that particular year.

4.39 The Ministry of Power, in consultation with the States, should develop a monitorable performance index within 2020-21, with State-wise targets and clear roadmap.

Enhancing Trade including Exports

4.40 Our ToR enjoin us to recommend measurable performance-based incentives for promoting labour-intensive growth. Exports have played a major role in the rapid growth of income and employment in East Asian countries. Lack of data on State-wise exports, however, has proved to be a challenge and also precludes an evaluation of States on performance on exports in order to design incentives. In any case, vigour in intra- and inter-State trade is a precursor to vibrant international trade.

4.41 Robust logistics, user-friendly institutions and regulatory framework and adequate finance are essential ingredients of a conducive eco-system for promoting trade, including exports. States have a critical role to play in this. The World Bank has a Logistic Performance Index and an index for measuring Trading Across Borders. The Ministry of Commerce and Industry is preparing an Index of Logistics Ease Across Different States as well as a Trade Preparedness Index together with the NITI Aayog.

4.42 We propose to consult various stakeholders, particularly the States, and examine the feasibility and potential effectiveness of a performance based incentive related to exports, including its design. We would also like to support export-related employment generating initiatives given its significance in enhancing the growth potential of States in terms of GSDP.

Incentives for Education

4.43 Though education is the key area for harnessing the demographic dividend, the learning outcomes of school children remain abysmal, even after achieving about 100 per cent gross enrolment at primary levels. Another area that concerns us the most is the low ratio of girls transitioning from upper-primary to secondary level of education. Education of girls is a critical determinant of age of marriage, age of first pregnancy, total fertility and child health and nutrition.

4.44 Considering this, we may consider introducing financial incentives for best performing

States in terms of incremental change in a few focussed indicators listed in Annex 4.2 which form a subset of the Performance Grading Index of the MoHRD. During 2020-21, the Ministry and the State Governments should prepare State-wise targets based on these indicators and take action so that they can avail incentives from 2021-22 onwards.

Promotion of Domestic and International Tourism

4.45 The tourism sector is important for generation of employment and foreign exchange. The States need to be encouraged to attract tourists and the top performing States in this respect should be rewarded with attractive financial incentives. We may consider allocations for our award period for rewarding the States with highest percentage increase in aggregate number of nights spent by international tourists in that State as one of the criteria.

4.46 During 2020-21, the Ministry of Tourism, in consultation with NITI Aayog and the States, should develop a State-wise roadmap and action plan against the targets fixed in this regard for implementation from 2021-22 in order to become eligible to avail the grants during our award period.

Chapter 5

Empowering Local Bodies

5.1 All the previous Finance Commissions from the Tenth Finance Commission (FC-X) recommended grants to local bodies with certain variations from time to time. The FC-XIV, in the case of rural local bodies, had, unlike previous Commissions, recommended grants to only gram panchayats and not to the other tiers at the district and block levels. In the case of urban local bodies, no distinction was made among different sizes of municipalities. These grants were distributed between the rural and urban local bodies in the ratio of 70:30. Further, the FC-XIV did not recommend grants to Excluded Areas under the Fifth and Sixth Schedule of the Constitution and to Cantonment Boards in urban areas. The grants recommended by it were in two parts – a basic grant (unconditional) and a performance grant (conditional) in the proportion of 90:10 for duly constituted gram panchayats and of 80:20 for municipalities.

5.2 While considering the grants for local bodies for the year 2020-21, we have made significant departures from the FC-XIV in some of these aspects.

i. First, after considering the views of all stakeholders, we have decided to recommend grants to all tiers of the panchayati raj so as to enable pooling of resources across villages and blocks to create durable community assets and improve their functional viability.

ii. Second, we have decided to give grants to the Fifth and Sixth Schedule areas and Cantonment Boards.

iii. Third, we have provided for tied grants in the critical sectors of sanitation and drinking water in order to ensure additional funds to the local bodies over and above the funds allocated (both Union and State share) for these purposes under the centrally sponsored schemes (CSS), Swachh Bharat and Jal Jeevan Missions.

iv. Fourth, given the projection of 38 per cent urbanisation in India by 2025 and further acceleration of this trend with economic growth, the changing sectoral composition of gross domestic product (GDP) and rural-urban migration, we believe the share of urban local bodies in Finance Commission grants to local bodies should be gradually increased to 40 per cent over the medium term.

v. Lastly, we are convinced that larger cities will have a tendency to grow faster with the agglomeration effect. Hence, the fifty Million-Plus cities in the country need differentiated treatment, with special emphasis on meeting the challenges of bad ambient air quality, ground water depletion and sanitation. [1]

[1] There are fifty such Million-Plus cities in the country, excluding the Union Territory of Delhi, and Union Territory of Jammu and Kashmir (Srinagar). Such cities provide habitation to 38 per cent of the urban population.

5.3 Accordingly, we recommend the following for the year 2020-21:

i. **The total size of the grant for local bodies in twenty-eight States shall be Rs. 90,000 crore. This is equivalent to 4.31 per cent of the divisible pool estimated by the Commission for the first year of the award period. This compares with Rs. 87,352 crore (3.54 per cent of the divisible pool for the year 2019-20) recommended by the FC-XIV for 2019-20.**

ii. The inter se distribution of grants for local bodies among the States may be **based on population and area in the ratio of 90:10** (Annex 5.1). Because of the slower socio-economic progress of the scheduled castes and scheduled tribes relative to the rest of the population, we also recommend that State Governments, while allocating FC-XV funds among local bodies, should place special emphasis on areas with higher concentration of scheduled castes and scheduled tribes populations.

iii. **To begin with, for 2020-21, the proportion of grants between rural and urban local bodies recommended by us is in the ratio of 67.5:32.5.**

iv. **With this new sharing ratio, the recommended allocation for rural local bodies in 2020-21 is Rs. 60,750 crore, which is more or less unchanged from the Rs. 60,687 crore in 2019-20 recommended by FC-XIV.** (Annex 5.1)

v. All the tiers in the panchayats – village, block and district – shall receive the grants. The inter se distribution among the panchayati raj tiers by the States should be done on the basis of the accepted recommendations of the latest State Finance Commissions (SFC) and in conformity with the following bands of 70 per cent-85 per cent for village panchayats, 10 per cent-25 per cent for block panchayats and 5 per cent-15 per cent for district panchayats. In Goa, Sikkim, and Manipur, which have a two-tier system with only village and district panchayats, the allocation will be in the bands of 70 per cent-85 per cent and 15 per cent-30 per cent respectively. Furthermore, in the event of SFC recommendations not being available, the inter se distribution within the panchayati raj tiers should be decided by the State Government within the bands indicated above.

vi. Once the State-level grants are earmarked for each tier, the intra-tier distribution among the relevant entities across the State should be on the basis of population and area in the ratio of 90:10 or as per the accepted recommendations of the latest SFC.

vii. The States should also make allotment of grants for both Fifth and Sixth Schedule areas falling within the State, based on population and area in the ratio of 90:10. The concerned State Government should allot these grants for the year 2020-21 in the month of April 2020 and intimate the same to the ministries of Home Affairs and Finance.

viii. The grants for rural local bodies and for Fifth and Sixth Schedule areas shall be distributed as basic and tied grants in the ratio of 50:50. The basic grants are untied and can be used by the local bodies for location-specific felt needs, except for salary or other establishment expenditure. The tied grants, on the other hand, can be used for the basic services of (a) sanitation and maintenance of open-defecation free (ODF) status and (b) supply of drinking water, rain water harvesting and water recycling. The local bodies shall, as far as possible earmark one half of these tied grants each to these two critical services. However, if any local body has fully saturated the needs of one category, it can utilise the funds for the other category.

ix. **The total grants recommended for urban local bodies for 2020-21 are Rs 29,250 crore against Rs 26,665 crore recommended for the year 2019-20 by the FC-XIV. (Annex 5.2)**

x. For differential treatment of cities, we have divided the urban local bodies into two categories: (a) fifty Million-Plus urban agglomerations/cities, excluding Delhi and Srinagar, and (b) all other cities and towns with less than one million population. Within a State, the grants recommended across these two categories is on the basis of population. Thus, for urban local bodies, in 2020-21, we recommend Rs. 9,229 crore for the Million-Plus cities and Rs. 20,021 crore for the others. (Annex 5.2)

xi. For the Million-Plus cities/urban agglomerations, the recommended city-wise distribution of grants for 2020-21 is on population basis. In the case of urban agglomerations which contain more than one Million-Plus city, the concerned State Government, in consultation with all such entities within the urban agglomeration, shall entrust one urban local body as a nodal entity to receive the grants. This nodal entity will also have the responsibility of achieving the performance indicators for the entire urban agglomeration. (Annex 5.3)

xii. The States should also make allotment of grants on population basis for the Cantonment Boards within their territories. The list of fifty-nine Cantonment Boards in seventeen States along with the population is at Annex 5.4. For urban local bodies other than Million-Plus cities, the grants should be distributed to each urban local body on the basis of accepted recommendations of the latest SFC suitably modified to accommodate the Cantonment Boards. In case of non-availability of SFC recommendation for distribution within a particular category, the allocations should be on the basis of population and area in the ratio of 90:10.

xiii. For the Million-Plus cities, the Ministry of Environment, Forest and Climate Change (MoEF&CC) as the nodal ministry shall, in consultation with the State Governments, develop city-wise and year-wise targets on ambient air quality based on annual average concentrations of PM10 and PM2.5, monitor and evaluate the improvement and recommend disbursal of grants to such cities. The MoEF&CC shall publish the benchmarks in the beginning of April 2020. We recommend Rs. 4,400 crore in 2020-21 for the purpose of improving ambient air quality (Annex 5.3). This grant shall be released in two equal instalments. The first instalment may be used for air quality improvement measures, including capacity building of the local bodies within the

Million-Plus city/agglomeration, as well as meeting the additional needs of State Pollution Control Boards to appropriately assist the local bodies in monitoring the ambient air quality. MoEF&CC needs to expedite the establishment of an ambient air quality monitoring network, take up source apportionment studies and update the air-quality data for the fifty Million-Plus urban local bodies on the Ministry's website on a timely basis. To incentivise improvement in air quality in Million-Plus cities, the second instalment shall be disbursed against the stipulated performance-based outcomes in terms of year-on-year improvement in air quality in January 2021 (Annex 5.5).

xiv. In case of non-achievement of improvement targets by cities, the balance distributable fund would be divided equally in two parts. Fifty per cent will be distributed to cities in a manner so that top performers (>5 per cent improvement) get 40 per cent of the amount, second best performers (4-5 per cent improvement) get 35 per cent and third best performers (3-4 per cent improvement) get 25 per cent. The MoEF&CC, in consultation with State Governments, shall distribute the remaining 50 per cent of the funds amongst the non Million-Plus cities in proportion to their population. The eight Million-Plus agglomerations of Kannur, Kochi, Kollam, Kozhikode, Malappuram, Thiruvananthapuram and Thrissur in Kerala and Coimbatore in Tamil Nadu, where air quality is not a problem partly because of locational reasons, the full amount of FC-XV grants may be used for improving conservation, supply and management of water and efficient solid waste management.

xv. We are also deeply concerned with the issue of `ease of breathing' in the National Capital Region (NCR), especially the extremely hazardous levels of pollution in October-November of each year. One of the main reasons for this is the burning of crop residue in the surrounding States of Haryana, Punjab and Uttar Pradesh. We are unable to make an allocation to address this as Delhi is not a State. Besides, the pollution hazard in the NCR is very unique as the air-shed contributing to pollution extends to three neighbouring States. We, therefore, recommend that the Union Government constitute a high power committee, consisting of the ministries of Finance, Environment, Forest and Climate Change and Agriculture and Farmer Welfare, the Governments of Haryana, Punjab and Uttar Pradesh, to devise, implement and monitor a time-bound action plan for pollution mitigation under the National Clean Air Programme.

xvi. For the Million-Plus cities, Rs. 4,829 crore have been earmarked for improving conservation, supply and management of water and efficient solid waste management (Annex 5.3), which are critical for planned urbanisation. For water and solid waste management, the Ministry of Housing and Urban Affairs (MoHUA), as the nodal ministry, shall, in consultation with the State Governments, develop city-wise and year-wise targets for 2020-25 and recommend disbursal of grants to such cities. The targets will be improvements over the base year to provide incentives to make up for any slippage in performance during the years succeeding 2020-21. For 2020-21, while no conditions may be applied for release of the Rs. 4,829 crore recommended by us, the amount shall be spent exclusively for improving water and solid waste management and achieving of star ratings by the urban local bodies. In 2020-21, the States need to draw up a detailed project report for capacity development and address the infrastructural issues for meeting the service level benchmarks. (list detailed at Annex 5.6)

xvii. For urban local bodies other than in Million-Plus cities, we recommend an allocation of Rs. 20,021 crore consisting of two equal parts - 50 per cent basic grants and 50 per cent grants tied to (a) drinking water (including rainwater harvesting and recycling) and (b) solid waste management (Annex 5.6). These urban local bodies shall earmark one half of the tied grants each to these two critical services and this amount will be in addition to the funds received from relevant CSS like Swachh Bharat Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and other similar schemes being implemented by the States. These grants shall not be used as a substitute for either Union or State share of such schemes. However, if any local body has fully saturated the needs of one category, it can utilise the funds for the other category.

xviii. The summary of above recommendations is as follows:

Total Grant	Nature of Grant	Mode of Disbursement
Rural Local Bodies		
Rs 60,750 crore	50 per cent basic 50 per cent tied to: (a) sanitation and maintenance of ODF status (b) supply of drinking water, rain water harvesting and water recycling.	The inter se distribution amongst the panchayati tiers – village, block and district – by the States should be on the basis of the accepted recommendations of the latest SFCs and in conformity with the following bands of 70 per cent-85 per cent, 10 per cent-25 per cent, and 5 per cent-15 per cent for village, block and district panchayats, respectively. In Goa, Sikkim and Manipur, where a two-tier system with only village and district panchayats is in place, the allocation will be in the band of 70 per cent-to 85 per cent and 15 per cent-30 per cent. If the SFC recommendation is not available, the inter-se distribution within tiers should be decided by the State Government within the bands indicated above. Grants to Fifth and Sixth Schedule Areas within the State should be on the basis of the population and area in the ratio of 90:10.
Urban Local Bodies		
Million-Plus cities/agglomerations Ambient air quality Rs. 4,400 crore Service Level Benchmarks Rs. 4,829 crore	Ambient air quality - 50 per cent for air quality improvement measures, including institution building; 50 per cent based on performance in year-on-year improvement in air quality. Service Level Benchmarks: 100 per cent grants tied for improving water and solid waste management and achieving of star ratings by the urban local bodies	For Million-Plus cities/urban agglomerations, the city-wise distribution of grants for 2020-21 is on population basis (Annex 5.3)
Other than Million-Plus cities Rs. 20,021 crore	50 per cent basic 50 per cent tied to: (a) drinking water (including rainwater harvesting and recycling) and (b) solid waste management	On the basis of recommendations of the latest SFC. In case the SFC recommendation is not available for distribution within a particular category, allocations should be based on population and area in the ratio of 90:10. The States should also make allotment of grants on population basis for the Cantonment Boards within their territories.

xix. Grants to all rural and urban local bodies (other than Million-Plus category) shall be released in two equal instalments in June 2020 and October 2020. For Million-Plus cities/urban agglomerations, disbursement of the respective grants shall be done on the recommendations of the MoHUA and MoEF&CC.

xx. The States shall transfer grants-in-aid to the local bodies within ten working days of receipt from the Union Government. Any delay beyond ten working days will require the State Governments to release the same with interest as per the effective rate of interest on market borrowings/State Development Loans (SDLs) for the previous year.

xxi. The importance of mobilisation of own revenues by self-governing local bodies cannot be overemphasised. It leads to better ownership and accountability. Internationally, property tax is one of the most effective instruments for revenue mobilisation by local bodies. For historic reasons as well as because of vested interests, property tax yields remain negligible in India. We recommend that to qualify for any grants for urban local bodies in 2021-22, States will have to appropriately notify floor rates and thereafter show consistent improvement in collection in tandem with the growth rate of State's own GSDP.

xxii. The timely availability of audited accounts – separately at the local body level and jointly at the State and all-India level – continues to be a persistent problem despite the emphasis laid by previous Commissions. We consider such availability of accounts online, both before and after audit, of individual local bodies and at the State and all-India level a critical reform agenda. With the help of modern digital infrastructure, a receipt or expenditure can have the necessary characterisation at the input stage itself. This will enable appropriate processing of data to produce the various required reports.

xxiii. In this context, for rural local bodies, it is high time to transit to an upgraded accounting code structure of the Panchayati Raj Institutions Accounting Software (PRIAsoft) system from the current four levels to the six-level structure followed by the Union and State Governments. Further, such upgraded PRIAsoft needs to be integrated with Integrated Financial Management Information System (IFMIS) of the State Governments (wherever it exists) and the Public Financial Management System (PFMS) of the Controller General of Accounts (CGA) in order to generate online accounts by each rural local body, enable online auditing of such accounts and their consolidation at the State and all-India level.

xxiv. For urban local bodies, the National Municipal Accounts Manual (NMAM) developed by the MoHUA required all State Governments to draft State-specific municipal accounts manuals. Thus, at present urban local bodies are following NMAM or State-specific manuals based on NMAM. Each urban local body needs to generate online accounts by taking advantage of IFMIS/PFMS after it is duly integrated by using appropriate IT tools. The MoHUA shall put these online accounts on a common platform, thus having consolidated accounts, both before and after audit, at the State and all-India levels.

xxv. In view of above, this process shall be in two stages. First, the integration of the PRIASoft and NMAM systems with the State-level IFMIS and, subsequently, with PFMS to achieve complete integration. In 2020-21, under the guidance of the Comptroller and Auditor General (CAG), the concerned ministries and CGA shall develop an integrated account maintenance system as stated above on trial basis by the States before 31 March 2021, and ready for full roll-out from 1 April 2021.

Chapter 6
Disaster Risk Management

Current Mechanism of Disaster Risk Management

6.1 In India, the responsibility of disaster risk financing is shared between the States and the Union Government, with the former bearing the primary responsibility for responding to disasters – organising rescue, evacuation and relief and providing people with assistance – and the Union Government providing the secondary support in the form of additional financial and technical assistance whenever necessary. 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.

6.2 The present disaster management system lays too much emphasis on response rather than adopting a holistic approach by earmarking financial allocations for preparedness, response, mitigation, recovery and reconstruction. The Disaster Management Act, 2005 stipulates the constitution of mitigation funds in addition to disaster response funds at the States and Union level. However, even after the directions of the Supreme Court in 2016 to set up a National Disaster Mitigation Fund (NDMF), mitigation funds are yet to be established at the national level and in a majority of the States. Secondly, adequate importance has not been given to develop the capacity of institutions and human resources to handle disasters. While the Thirteenth Finance Commission (FC-XIII) provided grants for capacity building, the FC-XIV discontinued these grants. Thirdly, successive Finance Commissions have pursued an expenditure-based approach to determine the allocation of funds for disaster management to State Governments. The FC-XIV had recommended that a risk and vulnerability assessment be conducted for the entire country to support the process of allocation. We are of the view that the expenditure-based methodology would increase the divergence in the allocations between those States which have lower initial allocation and expenditure and those with higher base of this expenditure, creating a highly asymmetric situation.

6.3 The FC-XIV had recommended that the Union and State Governments would contribute to the SDRF corpus in the ratio of 90:10 for all states but this was not implemented as the Union Government decided to continue with the existing pattern of 75:25 for general states and 90:10 for North-East and Himalayan states (which had been recommended by the FC-XIII). It is important to note that the Union Government, in its Action Taken Note on the recommendations of the FC-XIV, had stated that with implementation of the goods and service tax (GST), the sharing pattern of 90:10 would be implemented for all States. But with a partial implementation of GST and the substantial reduction in the NDRF corpus following the discontinuation of a large number of cesses contributing to the National Calamity Contingent Duty (NCCD), the Union Government has continued with the 75:25 sharing pattern.

Recommendations

6.4 After extensive consultations with all stakeholders and based on experts' advice, this Commission has proposed comprehensive treatment of the entire gamut of functions of the disaster management cycle and our recommendations for the year 2020-21 are:

Mitigation Funds

(i) Mitigation funds shall be set up at both national and state levels in the form of a NDMF and State Disaster Mitigation Funds (SDMF), in accordance with the Disaster Management Act.

(ii) These mitigation funds shall be used for those local level and community-based interventions which reduce the risks and promote environment-friendly settlements and livelihood practices. However, large-scale mitigation interventions such as construction of coastal walls, flood embankments, support for drought resilience etc. should be pursued through regular development schemes and not from the mitigation fund.

(iii) The detailed guidelines for the constitution and utilisation of these funds shall be issued by the Ministry of Home Affairs, in consultation with National Disaster Management Authority (NDMA), before July 2020. These funds should be supervised by the NDMA at the national level and State Disaster Management Authorities (SDMAs) at the state level as per the Act.

Allocation of Funds for Disaster Risk Management

(iv) The coverage of the funds recommended by this Commission goes beyond the disaster response funds that already exist at the national (NDRF) and state (SDRF) levels. Hence, we have recommended the creation of funds for disaster mitigation along with disaster response, which will now together be called as National Disaster Risk Management Fund (NDRMF) and State Disaster Risk Management Funds (SDRMF).

(v) The significant reduction in collections under the NCCD following the implementation of GST, combined with the creation of a mitigation fund at the national level, puts a substantial constraint on the availability of Union finances for disaster risk financing. We have, therefore, decided to recommend the continuation of the existing cost sharing arrangement between the Union and State Governments in the ratio of 75:25 to fund the total corpus of SDRF and SDMF. However, the share of the North-East and

Himalayan States shall continue to be 10 per cent, with the remaining 90 per cent to be provided by the Union Government.

(vi) We have taken cognizance of the fact that after creating a mitigation fund, the total corpus available at the State level for both disaster response and mitigation shall increase substantially. We have, therefore, recommended that the total amount allocated to the States for SDRMF shall be Rs. 28,983 crore in 2020-21. Out of this, the Union share is Rs. 22,184 crore, which is 114 percent more than the Rs. 10,344 crore provided for SDRF in the 2019-20 budget estimates.

(vii) Out of this amount of Rs. 28,983 crore, we have recommended that the share of SDRF shall be 80 per cent and the share of SDMF 20 per cent. Within the SDRF allocation of 80 per cent, there would be three sub-allocations (Table 6.1). They are Response and Relief (40 per cent), Recovery and Reconstruction (30 per cent) and Preparedness and Capacity-building (10 per cent). While the funding windows of SDRF and SDMF are not inter-changeable, there could be flexibility for re-allocation within the three sub-windows of the respective Funds and such re-allocation shall not exceed 10 per cent of the allotted amount of that sub-window for 2020-21. The State-wise allocations are provided in Annex 6.1. We also recommend that the balance in individual SDRFs at the end of 2019-20 should be carried over to 2020-21.

(viii) In assessing the State-wise allocations, we have made a departure from the expenditure-based approach to a methodology which reflects the risk and vulnerability profile of each State. It is important to note that this methodology has been the outcome of the deliberations of the Commission with the main stakeholders like the Ministry of Home Affairs, NDMA, NITI Aayog and State Governments. We also consulted the United Nations Development Programme (UNDP) for a report on disaster risk financing. The new methodology for determining State-wise allocation for disaster management (detailed in Annex 6.2) is a combination of (a) capacity (as reflected through past expenditure), (b) risk exposure (area and population) and (c) proneness to hazard and vulnerability (disaster risk index).

(ix) The corpus size of NDRMF at the national level shall increase substantially in 2020-21 due to the constitution of proposed mitigation funds in addition to disaster response funds. Further, as the lower proceeds from the levy of NCCD would be inadequate to fund the corpus, we recommend that the Union Government shall make an annual budgetary provision for it from its own resources. Accordingly, we recommend the total national allocation for disaster management (NDRMF) at Rs. 12,390 crore in 2020-21 by using the expenditure-based methodology (detailed in Annex 6.3). If the NDRMF releases to the States exceed the total budget provision, the Union Government shall make additional provision for resources.

(x) The allocation for the NDRMF should also be subdivided into funding windows similar to that of the States' allocation for disaster management (Table 6.1). While there shall be no flexibility for interchanging the allocations between NDRF and NDMF, there could be flexibility for re-allocation within the three sub-windows of NDRF, subject to the condition that the reallocated amount shall not exceed 10 per cent of the amount earmarked for that sub-window.

Table 6.1: National and States Level Allocation for Disaster Risk Management for 2020-21

(Rs crore)

Funding windows/*sub-windows*	National Corpus	States' Corpus
Mitigation - 20 per cent	2478 (NDMF)	5797 (SDMF)
Response - 80 per cent	9912 (NDRF)	23186 (SDRF)
Total	**12390 (NDRMF)**	**28983 (SDRMF)**
Distribution of NDRF/SDRF		
i) Response and Relief – 40 per cent	4956	11593
ii) Recovery and Reconstruction – 30 per cent	3717	8695
iii) Capacity Building – 10 per cent	1239	2898

(xi) As regards assistance for recovery and reconstruction, each disaster should be followed by a Post-Disaster Needs Assessment (PDNA). This shall be undertaken by the State Governments for relatively small-scale disasters and jointly by the Union and the State Governments in case of disasters of rare severity. The PDNA should cover damage, loss, recovery and the reconstruction needs of different sectors such as housing, infrastructure, livelihood, etc. Such an assessment would indicate entire inter-sectoral needs and the annual requirements of each such sector. The governments contribute only a part of the requirements of each sector, with the rest to be contributed by the disaster-affected people. There should also be a provision of third party audit of funds released under this mechanism. Within this framework, the Ministry of Home Affairs shall, in consultation with the NDMA, issue a detailed set of guidelines by July 2020 for recovery and reconstruction assistance under NDRF/SDRF.

(xii) The State Governments need to have the necessary disaster preparedness to respond effectively to disasters. The preparedness and capacity-building grants are meant to support the SDMAs, State Institutes of Disaster Management (SIDM), training and capacity-building activities, purchase of emergency equipment and emergency response facilities. The State Governments shall not use these resources towards establishment expenditure such as salaries, office expenditure, etc. A similar window of preparedness and capacity-building shall be created within the NDRF, which could be used to support national agencies like National Institute of Disaster Management (NIDM), etc. It is recommended that a separate set of guidelines be issued for preparedness and capacity-building grants by July 2020.

(xiii) Several States have brought to our notice the constraints imposed by the Ministry of Home Affairs on the norms of assistance from the SDRF and NDRF for items such as gratuitous relief, etc. We are of the view that different States face varied challenges in terms of kinds of disasters, their intensity, the type and extent of loss and their impact on livelihoods. In order to ensure timely and adequate help as well as gainful deployment of resources, the Ministry of Home Affairs shall review these norms of assistance and the conditions associated with them by providing requisite flexibility to State Governments.

Earmarked Allocations

(xiv) We are of the view that some amount shall be earmarked within NDRF and NDMF for certain priorities related to preparedness, mitigation and recovery that need to be supported through special initiatives. These priorities such as fire incidents, coastal and river erosion, urban flooding, landslides and drought, have emerged based on the magnitude of risks they have posed and how they have impacted the people. These risks cut across States and have acquired national dimensions. Though the measures needed to address them should be implemented at the State level with higher allocations from normal budgetary sources, we felt that, for better focus, they should be supported and monitored at the national level also.

(xv) Accordingly, we recommend earmarking of Rs. 1,200 crore within the NDRF in 2020-21 for two priorities: (a) expanding and modernisation of fire services and (b) resettlement of displaced people affected by coastal and river erosion. Similarly, we recommend earmarking of Rs. 1,190 crore within NDMF in 2020-21 for four priorities: (a) catalytic assistance to twelve most drought-prone States for preparing district-level drought mitigation plans; (b) managing seismic and landslide risks in ten hill States; (c) reducing the risk of urban flooding in seven most populous cities; and (d) mitigation measures to prevent erosion. Since four of the six priorities, other than catalytic assistance to twelve most drought-prone States and managing seismic and landslide risks in ten hill States, are demand-driven, the State Governments shall contribute 10 per cent of the allocated resources. The Ministry of Home Affairs and/or NDMA shall frame the guidelines for these earmarked allocations by July 2020 and also supervise the utilisation of these resources. A brief description of these priorities are as follows:

(a) *Expanding and Modernisation of Fire Services:* Rs. 1,000 crore shall be allocated for strengthening fire services at the State level in 2020-21 through the preparedness and capacity-building component of the NDRF. The States need to submit specific proposals for these funds to the Ministry of Home Affairs. These resources should ideally provide a top-up to the existing programmes.

(b) *Catalytic Assistance to Twelve Most Drought-prone States for Preparing District-level Drought Mitigation Plans:* We recommend an allocation of Rs. 240 crore from the proposed NDMF for all twelve most drought affected States (Andhra Pradesh, Bihar, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, and Uttar Pradesh) in 2020-21 (Rs. 20 crore each) in order to develop long-term district-level drought mitigation plans to address the challenges posed by successive droughts.

(c) *Managing Seismic and Landslide Risks in Ten Hill States:* All the ten North-East and Himalayan States shall undertake a mitigation programme to address earthquake and landslide risks. We recommend an allocation of Rs. 150 crore from the proposed NDMF for seismic and landslide risk reduction programmes in 2020-21, with an allocation of Rs. 50 crore each to Himachal Pradesh and Uttarakhand and Rs. 50 crore for all the States in the North-East.

(d) *Reducing the Risk of Urban Flooding in Seven Most Populous Cities:* A targeted allocation of Rs. 500 crore shall be made in 2020-21 from the NDMF to enable these cities with a population of more than five million (Mumbai, Chennai, Kolkata, Bengaluru, Hyderabad, Ahmedabad and Pune) to prepare integrated solutions for flood management, in view of the regular incidence of flooding and heavy losses. We recommend an allocation of Rs. 100 crore be made in 2020-21 for each of the three metros (Mumbai, Chennai and Kolkata) and of Rs 50 crore each for the four other cities (Bengaluru, Hyderabad, Ahmedabad and Pune).

(e) *Mitigation Measures to Prevent Coastal and River Erosion:* In order to mitigate the risk of erosion, we recommend an allocation of Rs. 300 crore from the proposed NDMF in 2020-21. The States shall submit specific proposals for undertaking erosion mitigation works to the Ministry of Home Affairs.

(f) *Resettlement of Displaced People Affected by Coastal and River Erosion:* Given the magnitude of the problem, we recommend that both the Union and the State Governments develop a policy to deal with the extensive displacement of people caused by coastal and river erosion. To implement this policy, we allocate Rs. 200 crore for 2020-21 to address the issue of displacement at the States level. The State Governments shall submit specific proposals for the assistance to resettle displaced people. Such assistance should be made available through the resources available from the recovery and reconstruction window of the NDRF. Such resettlement should ensure safer sites for the people being resettled.

Chapter 7

Looking Ahead

7.1 This *Report for the Year 2020-21* outlines the broad features of public finances as well as opportunities and challenges that India faces over the short term. In the context of recent developments and the additional Terms of Reference (ToR) received, we have restricted our analysis and recommendations to the broad essentials of fiscal federalism – vertical and horizontal shares, revenue deficit grants, grants for local bodies and disaster risk management. We have also highlighted some of the areas of intervention that we will consider in greater detail in our final report as well as our expectations on fiscal reforms from the Union and State Governments.

7.2 While addressing its ToR, the Commission has, in this report, maintained continuity with the past in the overall division of resources between the Union and States and outlined briefly the broad policy parameters leading to its recommendations. Our assumptions on the macro variables have been kept realistic, in line with the current state of the economy and growth prospects in the short term. In determining the vertical share of taxes, we have noted the compositional shift in the overall transfers to states, and have continued with the previous approach of treating tax devolution as a more objective form of transfer of resources than other forms of transfer which are more discretionary. In determining the horizontal share of states we have taken into account the performance of individual States both in the national objective of demography management and also in the collection of taxes. We have provided grants-in-aid for local bodies, disaster relief and for States with post devolution revenue deficit. We have refrained from giving State-specific grants but have provided a road-map for sector-specific grants and performance-based incentives that we expect to address in greater detail in the final report. We acknowledge the criticality of the additional ToR asking us to examine whether a separate mechanism for funding defence and internal security is to be set up. There is merit in ensuring a predictable and stable flow of funds for defence and internal security and this will receive appropriate consideration in our final report.

7.3 We recognise that there are several policy issues which have not been fully addressed and need greater analysis:

(i) Apart from the measures already under way to restore the growth momentum of the economy, other initiatives need to be taken for completing the reform agenda and driving inclusive growth. The tax revenue of the Union and States, which stood at around 17.5 per cent of gross domestic product (GDP) in 2018-19, is not only far below India's estimated tax capacity but has also broadly remained unchanged since the early 1990s. Low tax buoyancy is a persistent concern that needs to be addressed by broadening the tax base and streamlining rates. In particular, there is need for rationalisation of rates both for GST and customs tariffs on industrial goods in line with best international practices.

(ii) With indirect taxes constituting almost half of the total tax revenues of the Union, GST is a critical component of the divisible pool and represents a fundamental shift in revenue federalism. The implementation of GST has thrown up multiple challenges: large shortfalls in collections vis-à-vis the original forecasts, high degree of volatility in collections, accumulation of large integrated GST (IGST) credit, continuing dependence of most States (twenty-one out of twenty-nine in 2018-19) on compensation from the Union Government to make up for the shortfall from the assured 14 per cent growth in GST revenues, glitches in the operations of GSTN in general and invoice and input tax matching, delays in refunds and serious cases of fraud in particular. The implementation of GST continues to be work in progress, and it still needs many systemic and structural improvements to expand its scope, stabilise its operations and finally deliver its stated objectives. We need also to consider the structural implications for low consumption states.

(iii) There is also need to move towards the implementation of the Direct Tax Code by bringing all the direct taxes under a single code, removing exemptions, broad-basing the slabs, streamlining the rates and unifying compliance procedures. Parallel steps to increase the capacity and expertise of the tax administration at all tiers of government are long overdue.

(iv) The issue of improving expenditure outcomes and prioritising public outlays has been flagged by several Finance Commissions in the past. But progress has been slow. Committed expenditure (salaries, pension and interest payment) and subsidies continue to crowd out the much needed funding for social and physical infrastructure. In particular, the power sector continues to be a major drain on state exchequers; reforms in this sector are critical for improving the finances of states. The Ujwal DISCOM Assurance Yojana (UDAY) for the financial and operational improvement and revival of power distribution companies in the states, has had mixed outcomes and most States are behind in meeting operational targets such as reduction in average technical and commercial (AT&C) losses and elimination of the gap between average cost of supply and average revenue realised (ACS-ARR gap).

(v) Gross fixed capital formation, that is, gross investment in plant, equipment, machinery and buildings, declined by about 5 percentage points of GDP between 2011-12 and 2018-19, thereby inhibiting economic growth. Capital formation by the public sector, relative to GDP, has more or less maintained its levels, though they are very low;

and the current moderation in growth calls for a sizeable step-up in public investment in physical and social infrastructure, especially roads, power, irrigation, health, education and nutrition. However, the scope for comprehensively providing for these requirements in 2019-20 and 2020-21 is constrained by the limitations of revenue flows to the general government and needs a much better prioritising of expenditures and outcomes. These issues will be dealt with in greater detail in our final report.

7.4 Some States have requested the grant of special category status. This does not constitute part of the mandate of the FC-XV and remains entirely in the domain of the Union Government, which can take an appropriate decision after due consideration. However, the issue of balanced and inclusive development of all States requires a more detailed assessment and will be fully addressed in our final report.

7.5 Government expenditure should legitimately be covered within the respective budgets. Financing expenditures through off-budget borrowings and through para-statal entities, both by the Union and State Governments, raises public debt and detracts from compliance with the letter and spirit of the provisions of the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 (as amended in 2018). Such outstanding extra-budgetary liabilities need to be clearly identified and eliminated in a time-bound manner, with transparent reporting of deficit and debt as provided in the Act.

7.6 Our ToR specifically mandates the Commission to address issues related to the future fiscal architecture for the country, guided by the principles of equity, efficiency and transparency. India needs specific institutional reforms to anchor the implementation of the fiscal rules that have been adopted. Such reforms will also enhance reporting standards and raise the quality of spending in the Union and the States. The country needs an overarching legal fiscal framework that would mirror the revised FRBM Act, define the roles and responsibilities of key stakeholders, as well as the budgeting, accounting, internal control and audit standards to be followed at all levels of government.

7.7 We recommend the constitution of an expert group to draft such a legislation which will be an important first step in establishing a statutory framework to implement the essential features of a sound Public Financial Management System that is consistent with international best practices. The group should also clearly identify those aspects of the legislation that will require consistent legislation at the level of the states.

7.8 Finally, we do believe that many of the initiatives currently underway and those in the offing will have beneficial effects on the overall growth momentum of the economy. The Commission believes that any credible medium term fiscal projection must be built around India achieving its growth potential. The strengthening of the Union-State federal partnership will be an important driving force for enabling the country to realise its growth potential. There is no escape from the quest to seek double digit inclusive growth with continued macro-economic stability. We look forward to examining the key macro variables of the next few quarters and undertaking a more robust assessment and credible forecast for a medium term horizon.

N.K. Singh
Chairman

Ajay Narayan Jha
Member

Anoop Singh
Member

Ashok Lahiri
Member

Ramesh Chand
Member (Part-time)

New Delhi
27 November, 2019

I wish to express my deep appreciation to all Members of the Commission and others who have given the benefit of their valuable advice and their unstinted commitment to the furtherance of its deliberations.

This Report, which relates to the financial year 2020-21, has also benefited from inputs received from multiple stakeholders, including research organisations and international institutions.

The leadership of Shri Arvind Mehta, Secretary of the Commission, has been of immeasurable value in multiple ways. Given his analytical calibre, understanding of complex financial issues and federal finances, he provided exemplary leadership to the Secretariat throughout the Commission's work. The Commission is deeply in his debt.

In this endeavour, he was greatly assisted by Shri Mukhmeet Singh Bhatia, Additional Secretary, who brought a broad based experience from the past Commission, and Dr. Ravi Kota, Joint Secretary, whose field experience of state finances and intricate legal issues was of great support. The Economic Advisor, Shri Antony Cyriac, gave commendable support in macro-economic modelling and in enhancing the Commission's understanding of key macro parameters while finalising its recommendations. Ms Maushumi Chakravarty, the Media Advisor, lent valuable support, along with her team, in generating awareness of the Commission's work. The secretariat was staffed by a dedicated team (Annex 7.1), many of whom came on deputation and gave their unstinted support to the Commission's work.

The Commission is also deeply indebted to the Members of the Advisory Council of the Fifteenth Finance Commission and the High Level Group on the Health Sector for their continuous and timely support.

N. K. Singh

N.K. Singh
Chairman

New Delhi
27 November, 2019

Annex 1.1
(Para 1.1, 4.31)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE
(Department of Economic Affairs)

NOTIFICATION
New Delhi, the 27th November, 2017

S.O. 3755(E).—The following order made by the President is to be published for general information:—

ORDER

In pursuance of clause (1) of article 280 of the Constitution, read with the provisions of the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to constitute a Finance Commission consisting of Shri N.K. Singh, Member of Parliament and former Secretary to the Government of India, as the Chairman and the following four other members, namely:—

1	Shri Shaktikanta Das, Former Secretary to the Government of India	Member
2	Dr. Anoop Singh, Adjunct Professor, Georgetown University	Member
3	Dr. Ashok Lahiri, Chairman (Non-executive, part time) Bandhan Bank	Member (Part time)
4	Dr. Ramesh Chand, Member, NITI Aayog	Member (Part time)

2. Shri Arvind Mehta shall be the Secretary to the Commission.

3. The Chairman and the other members of the Commission shall hold office from the date on which they respectively assume office up to the date of submission of Report or 30th day of October, 2019, whichever is earlier.

4. The Commission shall make recommendations as to the following matters, namely:—

(i) The distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under Chapter I, Part XII of the Constitution and the allocation between the States of the respective shares of such proceeds;

(ii) The principles which should govern the grants-in-aid of the revenues of the States out of the Consolidated Fund of India and the sums to be paid to the States by way of grants-in-aid of their revenues under Article 275 of the Constitution for purposes other than those specified in the provisos to clause (1) of that article; and

(iii) The measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State.

5. The Commission shall review the current status of the finance, deficit, debt levels, cash balances and fiscal discipline efforts of the Union and the States, and recommend a fiscal consolidation roadmap for sound fiscal management, taking into account the responsibility of the Central Government and State Governments to adhere to appropriate levels of general and consolidated government debt and deficit levels, while fostering higher inclusive growth in the country, guided by the principles of equity, efficiency and transparency. The Commission may also examine whether revenue deficit grants be provided at all.

6. While making its recommendations, the Commission shall have regard, among other considerations, to:

(i) The resources of the Central Government and the State Governments for the five years commencing on 1stApril 2020 on the basis of the levels of tax and the non-tax revenues likely to be reached by 2024-25. In the context of both tax and non-tax revenues, the Commission will also take into consideration their potential and fiscal capacity;

(ii) The demand on the resources of the Central Government particularly on account of defence, internal security, infrastructure, railways, climate change, commitments towards administration of UTs without legislature, and other committed expenditure and liabilities;

(iii) The demand on the resources of the State Governments, particularly on account of financing socioeconomic development and critical infrastructure, assets maintenance expenditure, balanced regional development and impact of the debt and liabilities of their public utilities;

(iv) The impact on the fiscal situation of the Union Government of substantially enhanced tax devolution to States following recommendations of the 14th Finance Commission, coupled with the continuing imperative of the national development programme including New India – 2022;

(v) The impact of the GST, including payment of compensation for possible loss of revenues for 5 years, and abolition of a number of cesses, earmarking thereof for compensation and other structural reforms programme, on the finances of Centre and States; and

(vi) The conditions that GoI may impose on the States while providing consent under Article 293(3) of the Constitution.

7. The Commission may consider proposing measurable performance-based incentives for States, at the appropriate level of government, in following areas:

(i) Efforts made by the States in expansion and deepening of tax net under GST;
(ii) Efforts and Progress made in moving towards replacement rate of population growth ;
(iii) Achievements in implementation of flagship schemes of Government of India, disaster resilient infrastructure, sustainable development goals, and quality of expenditure;
(iv) Progress made in increasing capital expenditure, eliminating losses of power sector, and improving the quality of such expenditure in generating future income streams;
(v) Progress made in increasing tax/non-tax revenues, promoting savings by adoption of Direct Benefit Transfers and Public Finance Management System, promoting digital economy and removing layers between the government and the beneficiaries;
(vi) Progress made in promoting ease of doing business by effecting related policy and regulatory changes and promoting labour intensive growth;
(vii) 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;
(viii) Control or lack of it in incurring expenditure on populist measures; and
(ix) Progress made in sanitation, solid waste management and bringing in behavioural change to end open defecation.

8. The Commission shall use the population data of 2011 while making its recommendations.

9. The Commission may review the present arrangements on financing Disaster Management initiatives, with reference to the funds constituted under the Disaster Management Act, 2005 (53 of 2005), and make appropriate recommendations thereon.

10. The Commission shall indicate the basis on which it has arrived at its findings and make available the State wise estimates of receipts and expenditure.

11. The Commission shall make its report available by 30th October, 2019, covering a period of five years commencing 1st April, 2020.

Sd/-
RAM NATH KOVIND
President of India

New Delhi
Dated the 27th November, 2017

[No. 10(1)-B(S)/2016]
PRASHANT GOYAL, Jt. Secy. (Budget)

Annex 1.2
(Para 1.1)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE
(Department of Economic Affairs)

CORRIGENDUM

New Delhi, the 4th December, 2017

S.O. 3802(E).—In the notification of the Government of India in the Ministry of Finance (Department of Economic Affairs) number S.O.3755(E), dated the 27th November, 2017 published in the Gazette of India, Extraordinary, dated the 27th November, 2017 in line 3, paragraph 1, for "Member of Parliament" read "former Member of Parliament" .

[F. No.10(1)-B(S)/2016]
PRASHANT GOYAL, Jt. Secy.

Annex 1.3
(Para 1.1)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE
(Department of Economic Affairs)

NOTIFICATION
New Delhi, the 17th May, 2018

S.O. 1964(E).—The following order made by the President to be published for general information:—

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President by an Order published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide notification of the Government of India in the Ministry of Finance, (Department of Economic Affairs) number S.O. 3755 (E), dated the 27th November, 2017, and Dr. Ashok Lahiri was appointed as a Member (Part time) of the said Commission;

And, whereas, Dr. Ashok Lahiri has resigned as Chairman (Non-executive, part time) Bandhan Bank; And, whereas, the President is pleased to appoint Dr. Ashok Lahiri as Member of the Finance Commission and for that purpose makes the following amendment in the Order aforesaid, namely: -

In the said Order, in paragraph 1, for serial number 3 and the entries relating thereto, the following serial number and entries shall be substituted, namely: -

"3. Dr.Ashok Lahiri - Member"
Former Chief Economic Adviser,
Ministry of Finance
and
Former Chairman (Non-executive, part time)
Bandhan Bank

Sd/-
RAM NATH KOVIND
President of India

[F. No. 10(3)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note : The principal notification for constitution of the Finance Commission was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 3755 (E), dated the 27th November, 2017.

Annex 1.4
(Para 1.1)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE
(Department of Economic Affairs)

NOTIFICATION
New Delhi, the 12th December, 2018

S.O. 6142(E).—The following Order made by the President to be published for general information:-

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President with the Notification of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii), vide S.O. 3755(E), dated the 27th November, 2017 and Shri Shaktikanta Das was appointed as Member of the said Commission.

And, whereas, Shri Shaktikanta Das has resigned as Member from the said Commission and the President has been pleased to accept the said resignation with effect from the 11th December 2018.

Sd/-
(RAM NATH KOVIND)
President of India

New Delhi
Dated the 12th December, 2018

[F. No. 10(1)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note: The Principal notification for constitution of the Finance Commission was published in the Gazette of India, Extraordinary vide number S.O. 3755 (E), dated the 27th November, 2017

Annex 1.5
(Para 1.1)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]

MINISTRY OF FINANCE
(Department of Economic Affairs)

NOTIFICATION
New Delhi, the 27th February, 2019

S.O. 1040(E).—The following Order made by the President to be published for general information:-

ORDER

Whereas, the Fifteenth Finance Commission has been constituted by the President by an order of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide S.O. 3755(E), dated the 27th November, 2017 and Shri Shaktikanta Das was appointed as one of the Member of the said Commission.

And whereas, Shri Shaktikanta Das had resigned as Member from the said Commission and the President had pleased to accept the said resignation with effect from the 11th December 2018 by an order of the Government of India, in the Ministry of Finance (Department of Economic Affairs) published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide S.O. 6142(E), dated the 12th December, 2018;

Now, therefore, in pursuance of clause (1) of article 280 of the Constitution, read with sections 3, 4 and 6 of the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to appoint Shri Ajay Narayan Jha as Member of the Finance Commission with effect from the 1st March, 2019 and for that purpose makes the following amendment in the aforesaid Order dated the 27th November, 2017, namely:-

In the said Order, in paragraph 1, for serial number 1 and the entries relating thereto, the following serial number and entries shall be substituted, namely:-

"1. Shri Ajay Narayan Jha, - Member"
Finance Secretary,
Government of India

Sd/-
RAM NATH KOVIND
President of India

New Delhi
Dated the 27th February, 2019

[F. No. 10(1)-B(S)/2016]
ARVIND SHRIVASTAVA, Jt. Secy. (Budget)

Note: The Principal order for constitution of the Finance Commission was published in the Gazette of India, Extraordinary , Part II, Section 3, Sub-section (ii), vide number S.O. 3755(E), dated the 27th November, 2017.

Annex 1.6
(Para 1.1)

THE GAZETTE OF INDIA: EXTRAORDINARY
[Part II- Section 3- Sub-section(ii)]
MINISTRY OF FINANCE
(Department of Economic Affairs)

NOTIFICATION
New Delhi, the 29th July, 2019

S.O. 2691(E). —The following order made by the President is published for general information:-

ORDER

In pursuance of clause (1) of article 280 of the Constitution, read with the provisions contained in the Finance Commission (Miscellaneous Provisions) Act, 1951 (33 of 1951), the President is pleased to further amend the order number S.O.3755 (E), dated the 27th November, 2017, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), dated the 27th November, 2017, namely:-

In the said order,-

(a) in paragraph 3, for the words, figures and letters "the 30th day of October, 2019", the words, figures and letters "the 30th day of November, 2019" shall be substituted;

(b) after paragraph 9, the following paragraph shall be inserted, namely:- "9A. The Commission shall also examine whether a separate mechanism for funding of defence and internal security ought to be set up, and if so, how such a mechanism could be operationalised.";

(c) in paragraph 11, for the words, figures and letters "the 30th day of October, 2019", the words, figures and letters "the 30th day of November, 2019" shall be substituted.

Sd./-
(RAM NATH KOVIND)
President of India

New Delhi
Dated the 29th July, 2019

[F. No. 10 (1)-B(S)/2016/vol.III]
ARVIND SRIVASTAVA, Jt. Secy. (Budget)

Note: The Principal order was published in the Gazette of India, Extraordinary , Part II, Section 3, Sub-section (ii), vide number S.O. 3755(E), dated the 27th November, 2017 and subsequently amended vide the following notifications, namely:-

(i) S.O. 3802(E), dated the 4th December, 2017;
(ii) S.O. 1964(E), dated the 17th May, 2018;
(iii) S.O. 6142(E), dated the 12th December, 2018;
(iv) S.O. 1040(E), dated the 27th February, 2019.

Annex 2.1

(Para 2.8, 2.10, 2.26, 2.30, 2.53)

Projection of Union Government Finances for 2020-21

(Rs. Crore)

	2019-20 BE	2019-20 reassessed	2020-21
Gross Revenue Receipts	**2774374**	**2610188**	**2931856**
Gross Tax Revenue	**2461195**	**2255000**	**2537670**
Corporation Tax	766000	631000	714040
Income Tax	569000	559000	651011
Customs Duties	155904	150500	173075
Union Excise Duties	300000	280000	295400
Goods and Services Tax	663343	628000	696929
Other Taxes	6948	6500	7215
Non-Tax Revenues	**313179**	**355188**	**394186**
Interest Receipts	13711	13711	11379
Dividends and Profits	57487	57487	63810
Dividend/Surplus from RBI	106042	148051	164337
Petroleum	16930	16930	18793
Telecommunication	50520	50520	56077
Other Non Tax Revenues	68489	68489	79790
Tax Share to States	**809133**	**778166**	**855176**
NCCD Transfer to NCCF/NDRF	**2480**	**2480**	**2791**
Net Revenues to the Centre	**1962761**	**1829542**	**2073889**
Revenue Expenditure	**2447779**	**2398824**	**2658046**
General services	**1167899**	**1165183**	**1263806**
Interest Payments	660471	660471	709600
Defence revenue expenditure	201902	201902	224111
Pensions	174300	174300	189987
Police	85115	84264	91510
Fiscal services	17336	17163	18850
External affairs	8717	8630	9479
Other general services	20058	18453	20269
Social services	**114503**	**108778**	**119801**
Total Economic services	**201263**	**160749**	**177043**
Transport and communication	21172	20537	22715
Science, technology and environment	28806	27942	30905
Export promotion	1948	1890	2097
Power	12728	12346	13655
Other economic services	136609	98034	107671
Subsidy	**338949**	**338949**	**343648**
Food	184220	184220	184220
Others	154729	154729	159428
Grants-in-Aid to State Governments Recommended by Finance Commission	**120467**	**120467**	**201023**
Revenue Deficit Grants	34206	34206	74340
Disaster Relief Grants to States	10344	10344	22184
Grants to Local Bodies to States	75917	75917	90000
Special grants			6764
Sector-specific grant			7735
Provision for other transfers (expected) to States, of which **	**465968**	**465968**	**479268**
GST compensation to States	96000	96000	105600
Grants-in-Aid to Union Territories #	**9728**	**9728**	**41555**
Other revenue expenditure	**29002**	**29002**	**31902**
Capital Expenditure	**338569**	**334506**	**348067**
Non-Debt Capital Receipts	**119828**	**119828**	**119828**
Revenue Deficit/Surplus(-)	**485018**	**569282**	**584157**
Fiscal Deficit/Surplus(-)	**703759**	**783960**	**812396**
Adjusted Outstanding Debt*	**9711763**	**9791964**	**10604360**
GDP	**21100607**	**20911180**	**23211410**

Note: (*) The adjusted outstanding liabilities presented in the table are equal to the outstanding liabilities shown in the Union budget, minus the state borrowing from NSSF, minus cash balances plus extra budgetary resources, as disclosed in the Union Budget 2019-20, and finally adjusted for external debt at current exchange rate.

***: Includes transfers made through functional heads also. The functional heads have been adjusted to this extent.*

(#) Calculations have been done keeping in view of the requirements of UT of Jammu and Kashmir.

Annex 2.2
(Para 2.30)

Projection of Union Government Finances for 2020-21

(per cent of GDP)

	2019-20 BE	2019-20 reassessed	2020-21
Gross Revenue Receipts	**13.15**	**12.48**	**12.63**
Gross Tax Revenue	**11.66**	**10.78**	**10.93**
Corporation Tax	3.63	3.02	3.08
Income Tax	2.70	2.67	2.80
Customs Duties	0.74	0.72	0.75
Union Excise Duties	1.42	1.34	1.27
Goods and Services Tax	3.14	3.00	3.00
Other Taxes	0.03	0.03	0.03
Non-Tax Revenues	**1.48**	**1.70**	**1.70**
Interest Receipts	0.06	0.07	0.05
Dividends and Profits	0.27	0.27	0.27
Dividend/Surplus from RBI	0.50	0.71	0.71
Petroleum	0.08	0.08	0.08
Telecommunication	0.24	0.24	0.24
Other Non Tax Revenues	0.32	0.33	0.34
Tax Share to States	**3.83**	**3.72**	**3.68**
NCCD Transfer to NCCF/NDRF	**0.01**	**0.01**	**0.01**
Net Revenues to the Centre	**9.30**	**8.75**	**8.93**
Revenue Expenditure	**11.60**	**11.47**	**11.45**
General services	**5.53**	**5.57**	**5.44**
Interest Payments	3.13	3.16	3.06
Defence revenue expenditure	0.96	0.97	0.97
Pensions	0.83	0.83	0.82
Police	0.40	0.40	0.39
Fiscal services	0.08	0.08	0.08
External affairs	0.04	0.04	0.04
Other general services	0.10	0.09	0.09
Social services	**0.54**	**0.52**	**0.52**
Total Economic services	**0.95**	**0.77**	**0.76**
Transport and communication	**0.10**	0.10	0.10
Science, technology and environment	**0.14**	0.13	0.13
Export promotion	**0.01**	0.01	0.01
Power	**0.06**	**0.06**	**0.06**
Other economic services	0.65	0.47	0.46
Subsidy	**1.61**	**1.62**	**1.48**
Food	0.87	0.88	0.79
Others	0.73	0.74	0.69
Grants-in-Aid to State Governments Recommended by Finance Commission	**0.57**	**0.58**	**0.87**
Revenue Deficit Grants	0.16	0.16	0.32
Disaster Relief Grants to States	0.05	0.05	0.10
Grants to Local Bodies to States	0.36	0.36	0.39
Special grants			0.03
Sector -specific grant			0.03
Provision for other transfers (expected) to States, of which **	**2.21**	**2.23**	**2.06**
GST compensation to States	0.45	0.46	0.45
Grants-in-Aid to Union Territories #	**0.05**	**0.05**	**0.18**
Other revenue expenditure	**0.14**	**0.14**	**0.14**
Capital Expenditure	**1.60**	**1.60**	**1.50**
Non-Debt Capital Receipts	**0.57**	**0.57**	**0.52**
Revenue Deficit/Surplus(-)	**2.30**	**2.72**	**2.52**
Fiscal Deficit/Surplus(-)	**3.34**	**3.75**	**3.50**
Adjusted Outstanding Debt*	**46.03**	**46.83**	**45.69**

Note: (*) The adjusted outstanding liabilities presented in the table are equal to the outstanding liabilities shown in the Union budget, minus the state borrowing from NSSF, minus cash balances plus extra budgetary resources, as disclosed in the Union Budget 2019-20, and finally adjusted for external debt at current exchange rate.
***: Includes transfers made through functional heads also. The functional heads have been adjusted to this extent. (#) Calculations have been done keeping in view of the requirements of UT of Jammu and Kashmir.*

Annex: 2.3
(Para 2.38)

Projected Annual Growth Rate of Comparable GSDP

(Per cent)

States	2019-20	2020-21
Andhra Pradesh	10.6	11.5
Arunachal Pradesh	10.0	10.9
Assam	9.8	10.7
Bihar	10.0	11.0
Chhattisgarh	9.5	10.6
Goa	9.9	10.9
Gujarat	10.0	11.0
Haryana	10.5	11.5
Himachal Pradesh	9.3	10.3
Jharkhand	9.4	10.5
Karnataka	10.8	11.7
Kerala	9.9	10.9
Madhya Pradesh	10.7	11.6
Maharashtra	9.7	10.7
Manipur	9.5	10.5
Meghalaya	8.4	9.5
Mizoram	11.2	12.0
Nagaland	9.6	10.5
Odisha	9.7	10.7
Punjab	9.6	10.6
Rajasthan	10.0	11.0
Sikkim	10.2	11.1
Tamil Nadu	9.9	10.9
Telangana	10.3	11.3
Tripura	11.0	11.8
Uttar Pradesh	10.2	11.2
Uttarakhand	9.2	10.2
West Bengal	9.7	10.7
All States	**10.0**	**11.0**

Annex 2.4
(Para 2.49)

Projected Own Revenue Receipts and Revenue Expenditure for 2019-20

(Rs Crore)

States	GSDP	ORR	OTR	ONTR	TRE	IP	Pension	PDR Deficit (+)/ Surplus(-)
Andhra Pradesh	971888	73012	68288	4723	113241	17244	14384	40230
Arunachal Pradesh	27028	1382	1120	262	10010	635	945	8628
Assam	344542	23818	18851	4967	55964	4793	8982	32146
Bihar	584285	39236	34946	4289	100738	10723	18458	61502
Chhattisgarh	347968	35969	28304	7665	45881	4699	4930	9912
Goa	85703	8454	6792	1662	10255	1512	1376	1802
Gujarat	1471581	119298	100862	18436	112052	21509	15423	-7246
Haryana	791349	66477	57601	8876	71707	16633	9000	5230
Himachal Pradesh	176383	12089	10069	2020	29265	4550	6660	17176
Jharkhand	332876	27244	17791	9453	39781	5187	5762	12537
Karnataka	1683109	135624	127763	7860	148371	19060	19236	12748
Kerala	852800	68554	64509	4045	100062	17201	18912	31508
Madhya Pradesh	864970	75779	64738	11042	112098	14432	14017	36319
Maharashtra	2888579	244910	225587	19323	251040	35207	27832	6130
Manipur	31299	1294	1083	211	9597	655	1658	8303
Meghalaya	35063	2448	2016	432	8956	746	855	6508
Mizoram	23853	982	762	219	6305	359	1064	5324
Nagaland	29767	1154	850	304	9305	881	2008	8151
Odisha	529943	49946	39752	10195	68575	6500	13330	18628
Punjab	579653	48791	45433	3358	72077	17669	10875	23286
Raja sthan	1016378	88734	71322	17412	128082	23133	22580	39348
Sikkim	30239	1417	933	484	4941	537	1186	3524
Tamil Nadu	1791985	139726	126583	13143	181063	32461	32395	41337
Telangana	922685	86670	77032	9638	82322	14575	10333	-4348
Tripura	54882	2762	2142	621	11486	990	2290	8724
Uttar Pradesh	1785171	152322	134471	17851	261558	35374	53134	109236
Uttarakhand	267029	16764	14988	1775	30600	5332	5943	13837
West Bengal	1166691	76149	72420	3729	139924	31151	15907	63775
All States	**19687699**	**1601004**	**1417008**	**183995**	**2215257**	**343750**	**339475**	**625848#**
General States	**18667614**	**1536895**	**1364194**	**172701**	**2038828**	**324271**	**307884**	**513527#**
NE & HS	**1020085**	**64109**	**52814**	**11295**	**176429**	**19479**	**31591**	**112320#**

Annex 2.4 (Cont.)
(Para 2.49, 4.7)

Projected Own Revenue Receipts and Revenue Expenditure for 2020-21

(Rs Crore)

States	GSDP	ORR	OTR	ONTR	TRE	IP	Pension	PDR Deficit (+)/ Surplus(-)
Andhra Pradesh	1083655	82664	77398	5267	123718	18968	15679	41054
Arunachal Pradesh	29974	1552	1262	291	10735	691	1030	9183
Assam	381408	26689	21190	5499	61044	5272	9790	34355
Bihar	648556	44167	39406	4761	111777	11796	20119	67611
Chhattisgarh	384853	40262	31784	8477	50330	5169	5374	10068
Goa	95044	9494	7651	1843	11162	1664	1500	1668
Gujarat	1633455	134196	113732	20464	123010	23660	16811	-11186
Haryana	882354	75182	65285	9897	78482	18290	9810	3300
Himachal Pradesh	194550	13500	11272	2228	31764	4917	7260	18264
Jharkhand	367828	30403	19958	10446	43894	5706	6280	13491
Karnataka	1880033	153883	145103	8780	162648	20966	20967	8764
Kerala	945755	77152	72665	4486	109091	18921	20614	31939
Madhya Pradesh	965307	85771	73449	12322	123833	15875	15279	38062
Maharashtra	3197657	274977	253587	21391	272231	38728	30337	-2746
Manipur	34585	1448	1214	233	10411	721	1807	8964
Meghalaya	38394	2711	2238	473	9744	819	932	7033
Mizoram	26716	1114	868	246	6864	395	1160	5750
Nagaland	32892	1290	954	336	10107	943	2189	8817
Odisha	586647	55971	44686	11286	75697	7150	14530	19726
Punjab	641096	54734	51020	3714	77684	18878	11854	22950
Rajasthan	1128180	99750	80422	19327	139430	25256	24612	39681
Sikkim	33596	1591	1053	537	5356	591	1293	3766
Tamil Nadu	1987311	157163	142588	14575	197012	35707	35311	39848
Telangana	1026948	97856	87129	10728	90122	16032	11263	-7735
Tripura	61358	3129	2435	694	12428	1089	2497	9299
Uttar Pradesh	1985110	171792	151941	19851	287124	38911	57916	115332
Uttarakhand	294266	18718	16762	1956	33235	5865	6478	14517
West Bengal	1291527	85537	81409	4128	154850	33585	17338	69314
All States	**21859056**	**1802696**	**1598462**	**204234**	**2423783**	**376566**	**370028**	**642753#**
General States	**20731317**	**1730955**	**1539213**	**191742**	**2232095**	**355262**	**335593**	**522806#**
NE & HS	**1127740**	**71741**	**59249**	**12492**	**191688**	**21304**	**34434**	**119947#**
Growth (%) in 2020-21 over 2019-20								
All States	11.0	12.6	12.8	11.0	9.4	9.5	9.0	2.7
General States	11.1	12.6	12.8	11.0	9.5	9.6	9.0	1.8
NE & HS	10.6	11.9	12.2	10.6	8.6	9.4	9.0	6.8

Note:
(i) GSDP: Gross State Domestic Product
(ii) ORR: Own Revenue Receipts
(iii)OTR: Own Tax Revenue
(iv) ONTR: Own Non Tax Revenue
(v) TRE: Total Revenue Expenditure
(vi) IP: Interest Payment
(vii) PDR: Pre -Devolution Revenue Deficit (+)/Surplus (-)
#: Summation takes into account only deficits and not surpluses
Totals may not add up due to rounding off.

Annex 3.1

(Para 3.20, 3.29)

Population and Demographic Performance

State	Population			Demographic Performance			
	Population (Census 2011) in Million	Inter se share - Population 2011 (%)	Population (Census 1971) in Million	TFR (Census-2011)	Reciprocal of TFR (f)	f *Pop1971	Inter se Share %
Andhra Pradesh	49.577103	4.208	27.685000	1.60	0.63	17.303	6.635
Arunachal Pradesh	1.383727	0.117	0.467511	2.24	0.45	0.209	0.080
Assam	31.205576	2.649	14.625152	2.16	0.46	6.770	2.596
Bihar	104.099452	8.836	42.126236	2.93	0.34	14.358	5.513
Chhattisgarh	25.545198	2.168	11.637494	2.43	0.41	4.785	1.836
Goa	1.458545	0.124	0.795120	1.56	0.64	0.510	0.195
Gujarat	60.439692	5.130	26.697475	2.03	0.49	13.182	5.043
Haryana	25.351462	2.152	10.036431	2.32	0.43	4.331	1.659
Himachal Pradesh	6.864602	0.583	3.460434	1.74	0.57	1.989	0.763
Jharkhand	32.988134	2.800	14.227133	2.61	0.38	5.443	2.090
Karnataka	61.095297	5.186	29.299014	1.81	0.55	16.195	6.207
Kerala	33.406061	2.835	21.347375	1.79	0.56	11.957	4.573
Madhya Pradesh	72.626809	6.164	30.016625	2.63	0.38	11.432	4.376
Maharashtra	112.374333	9.538	50.412235	1.91	0.52	26.388	10.120
Manipur	2.85 5794	0.242	1.072753	1.86	0.54	0.577	0.221
Meghalaya	2.966889	0.252	1.011699	3.63	0.28	0.279	0.107
Mizoram	1.097206	0.093	0.332390	2.56	0.39	0.130	0.050
Nagaland	1.978502	0.168	0.516449	2.08	0.48	0.248	0.095
Odisha	41.974218	3.563	21.944615	1.98	0.51	11.102	4.250
Punjab	27.743338	2.355	13.551060	1.86	0.54	7.280	2.793
Rajasthan	68.548437	5.818	25.765806	2.80	0.36	9.192	3.528
Sikkim	0.610577	0.052	0.209843	1.44	0.69	0.146	0.056
Tamil Nadu	72.147030	6.124	41.199168	1.58	0.63	26.003	9.998
Telangana	35.003674	2.971	15.818000	1.67	0.60	9.472	3.632
Tripura	3.673917	0.312	1.556342	1.73	0.58	0.898	0.345
Uttar Pradesh	199.812341	16.959	83.848797	2.61	0.38	32.157	12.318
Uttarakhand	10.086292	0.856	4.492724	2.13	0.47	2.114	0.809
West Bengal	91.276115	7.747	44.312011	1.68	0.60	26.412	10.113
All States	**1178.192467**	**100**	**538.464892**	**2.17**		**260.861**	**100**

Source: Census 2011, Registrar General of India

Note: numbers shown in the Annex are displayed at certain decimal digits for the ease of reading. However, entire number has been used for calculation purposes.

Annex 3.2
(para 3.21)

Area

State	Category	Area ('000 Sq Km)	Area- Inter se shares (%)	Adjusted Area- Inter se shares (%)
Andhra Pradesh		162.923	5.334	4.572
Arunachal Pradesh		83.743	2.742	2.350
Assam		78.438	2.568	2.201
Bihar		94.163	3.083	2.643
Chhattisgarh		135.192	4.426	3.794
Goa	Small	3.702	0.121	2.000
Gujarat		196.244	6.425	5.508
Haryana	Small	44.212	1.448	2.000
Himachal Pradesh	Small	55.673	1.823	2.000
Jharkhand		79.716	2.610	2.237
Karnataka		191.791	6.279	5.383
Kerala	Small	38.852	1.272	2.000
Madhya Pradesh		308.252	10.093	8.651
Maharashtra		307.713	10.075	8.636
Manipur	Small	22.327	0.731	2.000
Meghalaya	Small	22.429	0.734	2.000
Mizoram	Small	21.081	0.690	2.000
Nagaland	Small	16.579	0.543	2.000
Odisha		155.707	5.098	4.370
Punjab	Small	50.362	1.649	2.000
Rajasthan		342.239	11.205	9.605
Sikkim	Small	7.096	0.232	2.000
Tamil Nadu		130.060	4.258	3.650
Telangana		112.122	3.671	3.147
Tripura	Small	10.486	0.343	2.000
Uttar Pradesh		240.928	7.888	6.762
Uttarakhand	Small	53.483	1.751	2.000
West Bengal		88.752	2.906	2.491
All States		**3054.265**	**100**	**100**

Source: Survey of India

Annex 3.3
(para 3.24)

Forest and Ecology

State	Geographic Area (Sq. km)	Very Dense Forest (VD)	Moderately Dense Forest (MD)	Open Forest (OF)	Dense Forest (VD+MD)	Forest and ecology Inter se share (FC_i) (%)
Andhra Pradesh	162923	1957	14051	12139	16008	4.134
Arunachal Pradesh	83743	20721	30955	15288	51676	13.344
Assam	78438	2797	10192	15116	12989	3.354
Bihar	94163	332	3260	3707	3592	0.928
Chhattisgarh	135192	7064	32215	16268	39279	10.143
Goa	3702	538	576	1115	1114	0.288
Gujarat	196244	378	5200	9179	5578	1.440
Haryana	44212	28	452	1108	480	0.124
Himachal Pradesh	55673	3110	6705	5285	9815	2.534
Jharkhand	79716	2598	9686	11269	12284	3.172
Karnataka	191791	4502	20444	12604	24946	6.442
Kerala	38852	1663	9407	9251	11070	2.859
Madhya Pradesh	308252	6563	34571	36280	41134	10.622
Maharashtra	307713	8736	20652	21294	29388	7.589
Manipur	22327	908	6510	9928	7418	1.916
Meghalaya	22429	453	9386	7307	9839	2.541
Mizoram	21081	131	5861	12194	5992	1.547
Nagaland	16579	1279	4587	6623	5866	1.515
Odisha	155707	6967	21370	23008	28337	7.317
Punjab	50362	8	806	1023	814	0.210
Rajasthan	342239	78	4340	12154	4418	1.141
Sikkim	7096	1081	1575	688	2656	0.686
Tamil Nadu	130060	3672	10979	11630	14651	3.783
Telangana	112122	1596	8738	10085	10334	2.668
Tripura	10486	656	5246	1824	5902	1.524
Uttar Pradesh	240928	2617	4069	7993	6686	1.726
Uttarakhand	53483	4969	12884	6442	17853	4.610
West Bengal	88752	2994	4147	9706	7141	1.844
All States	**3054265**	**88396**	**298864**	**290508**	**387260**	**100**

Source: State of Forest Report (2017), Forest Survey of India

Annex 3.4
(para 3.27)

Income Distance

State	Comparable GSDP (Rs. Crore)			Estimated Population			Per Capita GSDP (Rs.)				Rank	Adjusted Distance (d)	d_i* POP_{i2011}	Inter Se Share (%)
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18	Average				
Andhra Pradesh	591670	686562	783192	50446000	50743000	51041000	117288	135302	153444	135344	14	68871	3414439	3.203
Arunachal Pradesh	18506	19625	22017	1516000	1547000	1579000	122074	126859	139437	129457	15	74759	103446	0.097
Assam	228508	248959	282440	33101000	33529000	33905000	69034	74252	83303	75530	24	128686	4015725	3.767
Bihar	369771	417155	477669	111867000	113638000	115437037	33055	36709	41379	37048	28	167168	17402112	16.324
Chhattisgarh	217172	261006	287843	27490000	27933000	28384000	79000	93440	101410	91284	19	112932	2884874	2.706
Goa	55050	64418	70254	1505000	1516000	1526000	365784	424922	460383	417030	1	17543	25587	0.024
Gujarat	1003904	1089874	1203058	64199000	65049000	65911000	156374	167547	182528	168816	11	35400	2139550	2.007
Haryana	489991	553192	638852	27040000	27423000	27811000	181210	201725	229712	204216	3	17543	444738	0.417
Himachal Pradesh	125823	131803	146305	7147000	7210000	7273000	176050	182806	201162	186673	4	17543	120425	0.113
Jharkhand	206613	236250	276111	35538000	36121000	36712000	58139	65405	75210	66251	26	137965	4551193	4.269
Karnataka	1045183	1209146	1350268	64201000	64900000	65606000	162798	186309	205815	184974	5	19242	1175574	1.103
Kerala	561491	634571	699079	34152500	34322100	34493200	164407	184887	202672	183989	6	20227	675710	0.634
Madhya Pradesh	533921	612729	694546	77641000	78780000	79936000	68768	77777	86888	77811	23	126405	9180378	8.612
Maharashtra	1943041	2163633	2380798	118642000	120055000	121485000	163773	180220	195975	179989	8	24226	2722419	2.554
Manipur	20646	22824	25821	3154900	3223900	3294300	65442	70795	78380	71539	25	132677	378925	0.355
Meghalaya	24340	26473	29785	3271000	3341000	3413000	74411	79235	87269	80305	22	123911	367630	0.345
Mizoram	15197	16595	18866	1192000	1214000	1236000	127493	136697	152638	138943	13	65273	71618	0.067
Nagaland	19500	21708	24534	2077000	2077000	2099000	93883	104518	116886	105096	16	99120	196109	0.184
Odisha	325595	389249	436390	43963000	44410000	44861000	74061	87649	97276	86329	21	117887	4948216	4.642
Punjab	390568	422157	479058	29447900	29833500	30224100	132630	141504	158502	144212	12	60004	1664701	1.562
Rajasthan	680727	751027	831665	73204000	74260000	75333000	92990	101135	110399	101508	17	102708	7040461	6.604
Sikkim	18128	20840	24544	640000	647000	653000	283250	322100	375868	327073	2	17543	10711	0.01
Tamil Nadu	1183220	1308573	1467650	75269000	75968000	76673000	157199	172253	191417	173623	10	30593	2207180	2.07
Telangana	584993	651651	748232	37134000	37505000	37881000	157536	173751	197522	176269	9	27947	978230	0.918
Tripura	35319	38754	43639	3881000	3927000	3975000	91006	98687	109785	99826	18	104390	383519	0.36
Uttar Pradesh	1147695	1290777	1451557	214225000	217505000	220836000	53574	59345	65730	59550	27	144666	28906065	27.116
Uttarakhand	176809	194173	222100	10724000	10869000	11016000	164872	178648	201616	181712	7	22504	226980	0.213
West Bengal	795450	869110	960730	95535000	96491000	97456000	83263	90072	98581	90638	20	113577	10366897	9.725
All States	**12808830**	**14352836**	**16077006**	**1248203300**	**1264037500**	**1280049637**	**102618**	**113548**	**125597**	**113921**			**106603413**	**100**

Source: Comparable GSDP and estimated population from National Statistical Office, Ministry of Statistics & Program Implementation

Annex 3.5
(para 3.31)

Tax Effort

State	Per Capita Own Tax Revenue (Rs.) 2014-15	2015-16	2016-17	Average	Per Capita GSDP(Rs.) 2014-15	2015-16	2016-17	Average	Tax/GSDP (t) (%)	Pop 2011 (P) (in million)	t*P	Inter se share (%)
Andhra Pradesh	7416	7911	8707	8011	103293	117288	135302	118628	6.75	49.58	3.348	4.393
Arunachal Pradesh	3108	3529	4581	3740	120098	122074	126859	123010	3.04	1.38	0.042	0.055
Assam	2892	3053	3603	3183	58388	69034	74252	67225	4.73	31.21	1.477	1.938
Bihar	1884	2275	2089	2083	30802	33055	36709	33522	6.21	104.1	6.468	8.486
Chhattisgarh	5806	6211	6782	6267	81661	79000	93440	84700	7.4	25.55	1.89	2.480
Goa	26060	26414	28108	26861	319755	365784	424922	370154	7.26	1.46	0.106	0.139
Gujarat	9681	9759	9907	9782	141485	156374	167547	155135	6.31	60.44	3.811	5.000
Haryana	10365	11438	12408	11404	162373	181210	201725	181770	6.27	25.35	1.59	2.087
Himachal Pradesh	8385	9369	9763	9172	165363	176050	182806	174740	5.25	6.86	0.36	0.473
Jharkhand	2960	3230	3682	3291	62494	58139	65405	62013	5.31	32.99	1.75	2.297
Karnataka	11050	11768	12782	11867	143630	162798	186309	164246	7.22	61.1	4.414	5.792
Kerala	10367	11418	12288	11358	150465	164407	184887	166586	6.82	33.41	2.278	2.988
Madhya Pradesh	4779	5179	5610	5189	60884	68768	77777	69143	7.51	72.63	5.451	7.152
Maharashtra	9814	10671	11379	10622	152930	163773	180220	165641	6.41	112.37	7.206	9.455
Manipur	1674	1745	1820	1746	60734	65442	70795	65657	2.66	2.86	0.076	0.100
Meghalaya	2933	3231	3550	3238	71106	74411	79235	74917	4.32	2.97	0.128	0.168
Mizoram	2276	3007	3639	2974	114759	127493	136697	126316	2.35	1.1	0.026	0.034
Nagaland	1891	2056	2459	2135	89872	93883	104518	96091	2.21	1.98	0.044	0.058
Odisha	4556	5124	5146	4942	71000	74061	87649	77570	6.37	41.97	2.674	3.509
Punjab	8797	9064	9301	9054	122075	132630	141504	132070	6.86	27.74	1.902	2.495
Rajasthan	5359	5835	5975	5723	85188	92990	101135	93104	6.15	68.55	4.214	5.529
Sikkim	8334	8856	10086	9092	244016	283250	322100	283122	3.21	0.61	0.02	0.026
Tamil Nadu	10547	10692	11313	10851	143690	157199	172253	157714	6.88	72.15	4.964	6.513
Telangana	9429	10765	12907	11034	136455	157536	173751	155914	7.08	35	2.477	3.250
Tripura	3062	3433	3621	3372	71421	91006	98687	87038	3.87	3.67	0.142	0.187
Uttar Pradesh	3515	3786	3952	3751	47981	53574	59345	53633	6.99	199.81	13.975	18.337
Uttarakhand	7880	8745	10026	8884	152290	164872	178648	165270	5.38	10.09	0.542	0.711
West Bengal	4167	4448	4712	4442	77977	83263	90072	83770	5.3	91.28	4.84	6.351
All States										**1178**	**76**	**100**

Source: For Own Tax Revenue- Finance Accounts of States for the concerned year, Estimated population from National Statistical Office, MoSPI

Annex 4.1

(Para 4.14)

Sector-specific grants recommended for nutrition in 2020-21 by FC-XV

In the course of deliberations of the FC-XV with the Union and State Governments and various other stake-holders, it was evident that malnutrition among the children is one of the most challenging tasks in the country. Even in the recently announced 2019 Global Hunger Index, India ranks 102 out of 117 qualifying countries. The problem of malnutrition is inter-generational and is dependent on multiple factors which include optimal infant and young child feeding practices, immunization, institutional delivery, early childhood development, food fortification, deworming, access to safe drinking water and proper sanitation and dietary diversification. Adequate nutrition, beginning in the early stages of life, is crucial to ensure good physical and mental development and long-term health. Nutrition is both a maker and a marker of development. Improved nutrition is the new building block for progress in health, education, employment, empowerment of women and the reduction of poverty and inequality.

FC-XV is of the opinion that this issue needs to be addressed and a delay of even one year could adversely impact the future human capital of the country. The Commission has recommended a grant for addressing the problem of malnutrition for the year 2020-21 for which it has adopted the following approach.

The Ministry of Women and Child Development (MoWCD) has provided the Commission with data about the prevalence of malnutrition in states based on the NFHS–IV survey (2015-16). This state-wise data covers the key parameters of underweight (weight-for-age), stunting (height-for-age) and wasting (weight-for-height) for children under five years. The Ministry has also provided the Commission with state-wise data on the number of children (six to seventy-two months) and the number of pregnant women and lactating mothers registered in anganwadi centres as on 31 March 2019. The total registered beneficiaries in each of these above categories is 6.90 crore and 1.69 crore respectively. The Commission is of the view that any additionality to the Supplementary Nutrition Programme (SNP) should also cover the pregnant women and lactating mothers, which gives a total figure of 8.59 crore beneficiaries.

At present under the SNP, the cost norm for children in the six to seventy-two months' age bracket is Rs. 8 per day per child, for severely affected malnutrition children it is Rs. 12 per day per child and for pregnant women and lactating mothers it is Rs. 9.50 per day per woman. The MoWCD has informed the Commission that these cost norms were fixed in 2017, after the approval of the

Cabinet Committee on Economic Affairs (CCEA), but were less than the norms recommended by the Ministry. After taking into account cost indexation and the need for fortification, the Ministry has requested the Commission to provide an additional 50 per cent over the 2017 norms. The Commission has accordingly allocated an additional amount of Rs. 3 per day for all the children and pregnant women and lactating mothers registered in the anganwadi centres in all the States. This works out to a total grant of Rs. 7,735 crores to the States for the year 2020-21, which will supplement the existing expenditure of the States. The States will ensure that this grant will not be used as a substitute for the existing contribution of the States to the SNP. While making this recommendation, the FC-XV also expects the States to further supplement some additional amount per beneficiary so that the complete nutritional requirements of this very vulnerable group are more appropriately met. The State-wise allocation is given below. The MoWCD will issue detailed guidelines by February 2020 for the usage of this additional allocation by the States. The regular monitoring of outcomes should be clearly spelt out in these guidelines. Based upon feedback on implementation, this Commission shall suitably calibrate this grant for the balance period of our award period.

Grant for nutrition – financial year 2020-21

States	Beneficiaries of Supplementary Nutrition under the Anganwadi Services Scheme as on 31 March 2019			Grant Amount (Rs. Crore)
	Children (6 months - 6 years)	Pregnant Women & Lactating Mothers	Total Beneficiaries	
Andhra Pradesh	2264402	654975	2919377	263
Arunachal Pradesh	189060	24517	213577	19
Assam	3030677	594296	3624973	326
Bihar	5969856	1404672	7374528	664
Chhattisgarh	2216000	493800	2709800	244
Goa	52996	14637	67633	6
Gujarat	3104693	744902	3849595	346
Haryana	839339	263553	1102892	99
Himachal Pradesh	398112	96365	494477	45
Jharkhand	2744555	718337	3462892	312
Karnataka	3948737	895465	4844202	436
Kerala	815494	304349	1119843	101
Madhya Pradesh	6571443	1426266	7997709	720
Maharashtra	5196154	961743	6157897	554
Manipur	340984	67208	408192	37
Meghalaya	454119	73879	527998	48
Mizoram	155222	28150	183372	17
Nagaland	278810	34366	313176	28
Odisha	3918422	725129	4643551	418
Punjab	671496	186289	857785	77
Rajasthan	2667157	875613	3542770	319
Sikkim	24500	5800	30300	3
Tamil Nadu	2440152	732488	3172640	286
Telangana	1500000	400000	1900000	171
Tripura	332353	69304	401657	36
Uttar Pradesh	12392606	3548330	15940936	1435
Uttarakhand	597062	177003	774065	70
West Bengal	5911318	1366355	7277673	655
All States	**69025719**	**16887791**	**85913510**	**7735**

Source: Beneficiary data provided by Ministry of Women and Child Development

Annex 4.2
(Para 4.44)

Quality outcome parameters for performance monitoring in education for the award period of FC-XV

S. No.	Indicator	Weight (%)
1	Average language score in Class 3 - Government and aided schools	10
2	Average mathematics score in Class 3 - Government and aided schools	10
3	Average language score in Class 5 - Government and aided schools	10
4	Average mathematics score in Class 5 - Government and aided schools	10
5	Average language score in Class 8 - Government and aided schools	10
6	Average mathematics score in Class 8 - Government and aided schools	10
7	Difference between transition rate of boys and girls rate from upper primary to secondary level	40

Annex 5.1
(Para 5.3: ii, iv)

Aggregate Grants to Local Bodies for 2020-21

(Rs. crore)

States	Population 2011 (millilons)	Area ('000 Sq Km)	Population share	Area share	State Wise Share (RLB)	State Wise Share (ULB)	Grants RLB (Rs. crore)	Grants ULB (Rs. crore)
Andhra Pradesh	49.58	162.92	4.21	5.33	4.32	4.32	2625	1264
Arunachal Pradesh	1.38	83.74	0.12	2.74	0.38	0.38	231	111
Assam	31.21	78.44	2.65	2.57	2.64	2.64	1604	772
Bihar	104.10	94.16	8.84	3.08	8.26	8.26	5018	2416
Chhattisgarh	25.55	135.19	2.17	4.43	2.39	2.39	1454	700
Goa	1.46	3.70	0.12	0.12	0.12	0.12	75	36
Gujarat	60.44	196.24	5.13	6.43	5.26	5.26	3195	1538
Haryana	25.35	44.21	2.15	1.45	2.08	2.08	1264	609
Himachal Pradesh	6.86	55.67	0.58	1.82	0.71	0.71	429	207
Jharkhand	32.99	79.72	2.80	2.61	2.78	2.78	1689	813
Karnataka	61.10	191.79	5.19	6.28	5.29	5.29	3217	1549
Kerala	33.41	38.85	2.84	1.27	2.68	2.68	1628	784
Madhya Pradesh	72.63	308.25	6.16	10.09	6.56	6.56	3984	1918
Maharashtra	112.37	307.71	9.54	10.07	9.59	9.59	5827	2806
Manipur	2.86	22.33	0.24	0.73	0.29	0.29	177	85
Meghalaya	2.97	22.43	0.25	0.73	0.30	0.30	182	88
Mizoram	1.10	21.08	0.09	0.69	0.15	0.15	93	45
Nagaland	1.98	16.58	0.17	0.54	0.21	0.21	125	60
Odisha	41.97	155.71	3.56	5.10	3.72	3.72	2258	1087
Punjab	27.74	50.36	2.35	1.66	2.29	2.29	1388	668
Rajasthan	68.55	342.24	5.82	11.21	6.36	6.36	3862	1859
Sikkim	0.61	7.10	0.05	0.23	0.07	0.07	42	20
Tamil Nadu	72.15	130.06	6.12	4.26	5.94	5.94	3607	1737
Telangana	35.00	112.12	2.97	3.67	3.04	3.04	1847	889
Tripura	3.67	10.49	0.31	0.34	0.31	0.31	191	92
Uttar Pradesh	199.81	240.93	16.96	7.89	16.05	16.05	9752	4695
Uttarakhand	10.09	53.48	0.86	1.75	0.95	0.95	574	278
West Bengal	91.28	88.75	7.75	2.91	7.26	7.26	4412	2124
All States	**1178.19**	**3054.27**	**100.00**	**100.00**	**100.00**	**100.00**	**60750**	**29250**

RLB: rural local bodies; ULB: urban local bodies

Annex 5.2
(Para 5.3: ix, x)

Aggregate Grants to Urban Local Bodies for 2020-21

(Rs. Crore)

States	Million -Plus Cities	Non- Million -Plus Cities	Total Grants
Andhra Pradesh	270	994	1264
Arunachal Pradesh	0	111	111
Assam	0	772	772
Bihar	408	2008	2416
Chhattisgarh	214	486	700
Goa	0	36	36
Gujarat	810	728	1538
Haryana	96	513	609
Himachal Pradesh	0	207	207
Jharkhand	318	495	813
Karnataka	558	991	1549
Kerala	339	445	784
Madhya Pradesh	598	1320	1918
Maharashtra	1586	1220	2806
Manipur	0	85	85
Meghalaya	0	88	88
Mizoram	0	45	45
Nagaland	0	60	60
Odisha	0	1087	1087
Punjab	180	488	668
Rajasthan	562	1297	1859
Sikkim	0	20	20
Tamil Nadu	556	1181	1737
Telangana	468	421	889
Tripura	0	92	92
Uttar Pradesh	1428	3267	4695
Uttarakhand	0	278	278
West Bengal	838	1286	2124
All States	**9229**	**20021**	**29250**

Annex 5.3
(Para 5.3: xi, xiii, xvi, xviii)

Grants to Million Plus Cities for 2020-21

(Rs. crore)

States/ U.A	Population in millions	Air Quality[2]	Solid Waste Management /Sanitation	Total Grants
Andhra Pradesh	3.21	135	135	270
Vijayawada U.A	1.48	62	62	124
Visakhapatnam	1.73	73	73	146
Bihar	2.05	204	204	408
Patna U.A.	2.05	204	204	408
Chhattisgarh	2.19	107	107	214
Durg Bhilainagar U.A.	1.06	52	52	104
Raipur U.A.	1.12	55	55	110
Gujarat	14.16	405	405	810
Ahmadabad U.A.	6.36	182	182	364
Rajkot U.A.	1.39	40	40	80
Surat U.A.	4.59	131	131	262
Vadodara U.A.	1.82	52	52	104
Haryana	1.41	48	48	96
Faridabad	1.41	48	48	96
Jharkhand	3.66	159	159	318
Dhanbad U.A.	1.2	52	52	104
Jamshedpur U.A.	1.34	58	58	116
Ranchi U.A.	1.13	49	49	98
Karnataka	8.52	279	279	558
Bruhat Bangalore U.A.	8.52	279	279	558
Madhya Pradesh	6.43	299	299	598
Bhopal U.A.	1.89	88	88	176
Gwalior U.A.	1.10	51	51	102
Indore U.A.	2.17	101	101	202
Jabalpur U.A.	1.27	59	59	118
Maharashtra	29.93	793	793	1586
Aurangabad U.A.	1.19	32	32	64
Greater Mumbai U.A.	18.39	488	488	976
Nagpur U.A.	2.50	66	66	132

[2] According to the MoEF&CC, ambient air quality is not a major problem in eight urban agglomerations with a million plus population, namely, Kannur, Kochi, Kollam, Kozhikode, Malappuram, Thiruvananthapuram, and Thrissur in Kerala and Coimbatore in Tamil Nadu. With these cities way below the NAMP threshold for breaching pollution by particulate matter, their total grants will be linked to service-level benchmarks on solid waste management-star rating, drinking water, water recycling and rainwater harvesting.

Annex 5.3
(Para 5.3: xi, xiii, xvi, xviii)

Grants to Million Plus Cities for 2020-21

(Rs. crore)

States/ U.A	Population in millions	Air Quality	Solid Waste Management /Sanitation	Total Grants
Nashik U.A.	1.56	41	41	82
Pune U.A.	5.06	134	134	268
Vasai-Virar City	1.22	32	32	64
Punjab	2.80	90	90	180
Amritsar U.A.	1.18	38	38	76
Ludhiana	1.62	52	52	104
Rajasthan	5.19	281	281	562
Jodhpur U.A.	1.14	62	62	124
Jaipur	3.05	165	165	330
Kota	1.00	54	54	108
Tamil Nadu	13.27	233	323	556
Chennai U.A.	8.65	181	181	362
Coimbatore U.A.	2.13		90	90
Madurai U.A.	1.47	31	31	62
Tiruchirappalli U.A.	1.02	21	21	42
Telangana	7.68	234	234	468
Hyderabad U.A.	7.68	234	234	468
Uttar Pradesh	14.03	714	714	1428
Agra U.A.	1.76	90	90	180
Allahabad U.A.	1.21	62	62	124
Ghaziabad U.A.	2.38	121	121	242
Kanpur U.A.	2.92	148	148	296
Lucknow U.A.	2.90	148	148	296
Meerut U.A.	1.42	72	72	144
Varanasi U.A.	1.43	73	73	146
West Bengal	15.3	419	419	838
Asansol U.A.	1.24	34	34	68
Kolkata U.A.	14.06	385	385	770
Kerala	12.14	-	339	339
Kannur U.A.	1.64	-	46	46
Kochi U.A.	2.12	-	59	59
Kollam U.A.	1.11	-	31	31
Kozhikode U.A.	2.03	-	57	57
Malappuram U.A.	1.70	-	47	47
Thiruvananthapuram U.A.	1.68	-	47	47
Thrissur U.A.	1.86	-	52	52
Total	**141.97**	**4400**	**4829**	**9229**

Annex 5.4
(Para 5.3: xii)

State Wise Cantonment Boards

Sl. No.	Name of State	Name of Cantonment	Population figure as per census 2011
1	Bihar	Danapur	28149
2	Gujarat	Ahmedabad	14345
3	Haryana	Ambala	55370
4	Himachal Pradesh	Bakloh	1805
		Dagshai	2904
		Dalhousie	3549
		Jutogh	2062
		Kasauli	3885
		Khasyol	12028
		Subathu	3685
5	Jharkhand	Ramgarh	88781
6	Karnataka	Belgaum	19411
7	Kerala	Cannanore	4798
8	Madhya Pradesh	Jabalpur	72257
		Mhow	69281
		Morar	48464
		Pachmarhi	12062
		Saugor	32475
9	Maharashtra	Ahmednagar	28986
		Aurangabad	18051
		Dehu Road	48961
		Deolali	54027
		Kamptee	12457
		Kirkee	70399
		Pune	71831
10	Meghalaya	Shillong	11919
11	Punjab	Amritsar	10410
		Ferozepur	53199
		Jalandhar	47845

Annex 5.4 (Cont.)

State Wise Cantonment Boards

Sl. No.	Name of State	Name of Cantonment	Population figure as per census 2011
12	Rajasthan	Ajmer	3530
		Nasirabad	50804
13	Tamilnadu	St Thomas Mount	43795
		Wellington	19462
14	Telangana	Secunderabad	217910
15	Uttar Pradesh	Agra	53137
		Allahabad	39684
		Babina	27852
		Bareilly	30005
		Faizabad	12391
		Fatehgarh	14786
		Jhansi	28343
		Kanpur	108534
		Lucknow	63003
		Mathura	25603
		Meerut	93684
		Shahjahanpur	18116
		Varanasi	14119
16	Uttarakhand	Almora	2231
		Chakrata	5117
		Clement town	22577
		Dehradun	52716
		Landour	3543
		Lansdowne	5667
		Nainital	1398
		Ranikhet	18886
		Roorkee	14356
17	West Bengal	Barrackpore	17322
		Jalapahar	1711
		Lebong	1397
	TOTAL		**1915075**

Annex 5.5
(Para 5.3: xiii)

Year-on-year improvement in air quality in January 2021, to incentivise improvement in air quality in the Million-Plus cities

Year	Year-on-year improvement in air quality in January 2021 (in %)	Share of its allocated fund (in %)
2020-21	> 5	100
	4-5	80
	3-4	60
	2-3	40
	1-2	20
	<1	0

Annex 5.6
(Para 5.3: xvi, xvii)

Service Level Benchmarks

Water Supply
Households covered with piped water supply
Water supplied in litre per capita per day
Reduction in non-revenue water

Water Conservation Measures
Rainwater harvesting
Reuse/ recycling of water
Rejuvenation of water bodies

Solid Waste Management and Sustaining outcomes of Swachh Bharat Mission
Garbage free star rating of the cities
Coverage of water supply for public/community toilet

Star Rating of Cities [3]

Garbage free star rating certification for cities is done for 1,3,5 and 7 star only. Cities are required to fill all data on the online MIS and City profile, which is then used for all verification including ODF/ODF+/ODF++ certifications, and Swachh Survekshan. The cities are mandated to self-declare against any of the stars based on certain given parameters and marking procedure. Upon getting a formal request from the State mission directorate, a third party certification is carried out by an agency engaged by MoHUA for this purpose. On receipt of the formal request, the first level of evaluation comprises a desktop assessment of the city's claims, along with the supporting documents. A time window is given before rejecting any document/data given in support of a city's claim and the physical verification of city's claim is done on sample basis. All photos of physical verification with geo tagging are uploaded on the portal. Only after the desktop assessment is cleared, does the third party agency go for direct observation and field validation to the city, and conducts randomly sampled checks for every parameter, complemented by feedback from citizens, before certifying a city as a particular star.

There are some mandatory pre-conditions for declaring city a particular star:

- 1-Star: Valid ODF certified
- 3-Star: Valid ODF+ certified (that is cleanliness and sustainability of community and public toilets to be ensured)
- 5-Star: Valid ODF++ certified (that is, cleanliness and sustainability of community and public toilets, along with safe containment, processing and disposal of faecal sludge and septage to be ensured)
- 7-Star: Valid ODF-SS certified

All the above ODF certifications are again based on rigorous protocols developed by MoHUA to cover all aspects of sanitation in a holistic manner, and certified after verification through independent third party.

The detailed scoring matrix against various components/indicators are shown in the table below. Under each component the marking is done against level 1,2,3 and 4 based on the compliance level under various parameters and a suitable weightage is assigned to work out overall marking by a city. The total marks for mandatory, essential and desirable is 1000,1000 and 500 respectively. A suitable weightage is given against each component/indicator. The mark scored against a particular component under a certain level of compliance will be suitably weighted and the qualification of city under mandatory, essential and desirable will be judged as mentioned in the table. The indicators for each of the above are given below.

[3]Inputs from Ministry of Housing and Urban Affairs

Component/Condition		
MANDATORY		
WARD LEVEL	M1	Door to door collection
	M2	Segregation at Ward level
	M3	Sweeping
	M4	Litter Bins
	M5	Storage Bins
CITY LEVEL	M6	Waste Processing- Wet Waste
	M7	Waste processing Capacity-Wet Waste
	M8	Waste Processing Capacity- Wet Waste
	M9	Waste Processing Capacity – Dry Waste
	M10	Grievance Redressal
ESSENTIAL		
WARD LEVEL	E1	Bulk Waste Generator
	E2	Penalty/Spot Fines
CITY LEVEL	E3	Segregation at City Level
	E4	User Charges
	E5	Plastic Ban
	E6	Construction and Demolition (C&D) Waste-Collection
	E7	Scientific Landfill- Availability & Use
	E8	Scientific Landfill-Waste disposed
	E9 (A)	No visible solid waste in water bodies and storm water drains
	E9 (B)	Screening of Nallahs
DESIRABLE		
WARD LEVEL	D1	Sustainability
CITY LEVEL	D2	On-site wet waste processing
	D3	C&D waste-Storage, Segregation, processing, Recycling
	D4	C&D Waste-Use of materials
	D5	Dumpsite Remediation

Matrix- Star Rating Protocol for Garbage Free Cities

Indicator	1 Star	3 Star	5 Star	7 Star
Mandatory	At least 40% score	At least 60% score	At least 85% score	At least 95% score
Essential	At least 30% score	At least 50% score	At least 80% score	At least 90% score
Desirable	-Not applicable	At least 30% score	At least 60% score	At least 80% score

Annex 6.1

(Para 6.4: vii)

State-wise Allocation of SDRMF (2020-21)

(Rs. crore)

States	Total Allocation	Union's Share	States' Share
Andhra Pradesh	1491	1119	372
Arunachal Pradesh	278	250	28
Assam	858	772	86
Bihar	1888	1416	472
Chhattisgarh	576	432	144
Goa	15	12	3
Gujarat	1765	1324	441
Haryana	655	491	164
Himachal Pradesh	454	409	45
Jharkhand	757	568	189
Karnataka	1054	791	263
Kerala	419	314	105
Madhya Pradesh	2427	1820	607
Maharashtra	4296	3222	1074
Manipur	47	42	5
Meghalaya	73	66	7
Mizoram	52	47	5
Nagaland	46	41	5
Odisha	2139	1604	535
Punjab	660	495	165
Rajasthan	1975	1481	494
Sikkim	56	50	6
Tamil Nadu	1360	1020	340
Telangana	599	449	150
Tripura	76	68	8
Uttar Pradesh	2578	1933	645
Uttarakhand	1041	937	104
West Bengal	1348	1011	337
All States	**28983**	**22184**	**6799**

Annex 6.2
(Para 6.4: viii)

Methodology for Determination of State Level Allocations of Disaster Management

1. We have adopted a methodology for allocating resources to States for disaster management, which could be considered as change with continuity with respect to the methodology adopted by previous Finance Commissions. The revised methodology retains the importance assigned to the **expenditures** incurred by States on disaster management. In addition, it introduces weightages for **area, population** and **risk profile** of individual States to arrive at the final allocation for each State.

2. For calculating the figures related to expenditure on disaster relief, the States' expenditure booked under major head (MH) 2245 for the past seven years (2011-12 to 2017-18) has been considered. Some states debit a part of the expenditure on disasters directly from the SDRF maintained in the Public Account. We have added this expenditure to MH-2245. The NDRF releases for each year have, then, been subtracted from these values. The resultant expenditure data has, thereafter, been adjusted for inflation and an average expenditure has been determined for each state. We have assigned 70 per cent weightage to expenditure, that is, 70 per cent of average expenditure for each state (AE_{70}) has been taken for further calculation.

3. For apportioning expenditure between the reorganised States of Andhra Pradesh and Telangana for the period 2011-12 to 2014-15 (up to June 1, the date of bifurcation), we have adopted the methodology similar to the one suggested by the FC-XIV. The expenditure of erstwhile undivided Andhra Pradesh, along with district-wise expenditure has been obtained for the period 2011-12 to 2014-15 (up to June 1) from the Accountant General, Andhra Pradesh. From the district-wise expenditure, the share of expenditure for the reorganised States of Andhra Pradesh and Telangana has been calculated for each of these years, which has then been used to apportion common expenditure booked through transfer entries and under the Pay and Accounts Officer, Hyderabad in the same ratio between these two States. The NDRF releases to erstwhile united Andhra Pradesh during the same period have been apportioned in the same ratio between the reorganised States of Andhra Pradesh and Telangana.

4. The State of Maharashtra has been taken as a reference State for arriving at the figures related to the weightage given to population and area of States on the basis of several considerations. First, Maharashtra has the highest SDRF allocation in 2019-20 (last year of FC-XIV allocations). Second, as Maharashtra is neither the largest State of India nor the most populous, it provides a good statistical fit for working out the unit value. Third, Maharashtra is exposed to multiple hazards in different geographical settings. It has the largest urban sprawl in the country, which is exposed to various hazards. Many of its districts are in rain shadow areas, making them highly drought-prone. Floods, landslides and earthquakes affect the State on a regular basis. The State, known for better governance, has responded to these risk events with considerable efficiency and

resources. Given the State's SDRF allocation, its area, population, and capacity and efficiency, it provides the most appropriate reference.

5. Area and population have been given weightage of 15 per cent each. Using the SDRF allocation of Maharashtra in 2019-20, we have calculated (i) a per-capita allocation based on the reference State's total allocation and (ii) a per-square kilometre allocation based on the reference State's total allocation. The unit value has then been applied to the respective population and area of each of the States, and 15 per cent of both the values has further been calculated to assign a total of 30 per cent weightage to area and population ($A_{15} + P_{15}$).

6. The resulting values in step-2 and step-5 have been added for each State ($W = AE_{70} + A_{15} + P_{15}$). Thereafter, this value (W) has been multiplied by the Disaster Risk Index (DRI) scores (detailed in Annex 6.2A) for each corresponding State ($Y = W * DRI$). Finally, the product of these two values (Y) has been added to the sum total of values obtained in step-2 and step-5 ($Z = Y + W = W * DRI + W$) to arrive at the base value for each of the states. From the base value, the allocation for 2020-21 has been calculated after considering the standard 5 per cent annual inflation.

7. An additional allocation of 11 per cent has been provided for ten North-Eastern and Himalayan States to pay greater attention to infrastructure resilience in these States in view of the continuous disruption of their transport network by flash floods, landslides and other mountain hazards.

Annex 6.2A
(Annex 6.2, point 6)

Disaster Risk Index (DRI) for States

1. The DRI has been developed through a quantitative exercise assigning scores to the *probability of hazards* striking States and the *extent of vulnerability*. Based on these two parameters, a composite score has been developed for each State, leading to an index which ranks States based on the risk scores.

2. *Hazards* refer to physical events - earthquake, cyclone, floods, drought and other risks events. Hazards, by themselves, do not lead to disasters. When hazards interact with people, their communities and economic activities, it results in a disaster event. The interaction of hazards and society is influenced by the people's socio-economic vulnerability. *Vulnerability* refers to the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. *Vulnerability* includes both income and non-income dimensions, and could encompass conditions such as poor housing, informal jobs, social isolation and remote terrains in which the people live. Vulnerability is, therefore, a key factor explaining the severity and impact of a disaster.

3. DRI could also be developed based on actual occurrences of disasters and their socio-economic impacts. However, *due to an absence of a disaster database at the national level,* developing a risk index of greater complexity and accuracy has been found to be difficult. The national hazard zonation and risk exposure maps have been used to assign scores to the probability of hazards at the State level. Such a categorisation provides a State-level hazard score which could be easily understood.

4. As hazards and vulnerability come together to constitute a disaster, a score of 70, out of a total of 100, has been assigned to hazards, since these are the main drivers of disasters. In addition, any hazard event is likely to have a serious impact, given the population density, the level of infrastructure and economic activities in India. Vulnerability, captured also through area and population, has, thus, been assigned a lower score of 30.

5. There are four major hazards which affect different parts of the country - floods, drought, cyclone and earthquake. The DRI assigns a maximum score of 15 to each of these four hazards, constituting a total of 60. Depending upon the level of probability of a hazard, States have been assigned the scores of 0, 5, 10 and 15 in an increasing order. In addition, all States have their share of smaller hazards, which affect communities on a local basis. In view of their continuous impacts, all States have been assigned an equal score of 10 for these smaller hazards, bringing the maximum score to 70.

6. The scores for different hazards have been assigned on the basis of the following analysis:

Flood Score

i) The data on floods has been compiled based on the flood-prone areas estimated by Rashtriya Barh Ayog (RBA) and the extent of flood-prone areas reported by States to the Eleventh Five-Year Plan Working Group. After presenting the data on flood-prone areas in lakh hectares in absolute numbers, this area has also been estimated in relation to the total area of the State. States where floods affect more than 20 per cent of the total area are assigned a score of 15, while States where between 10 and 20 per cent of the total area is affected are assigned a score of 10. The remaining States with less than 10 per cent of the area affected have been assigned a score of 5[1].

ii) Arunachal Pradesh has been included as a high score flood-prone State, even though the flood-affected areas remain less than 10 per cent of the total land. This exception is made as the river Brahmaputra (which is known as river Siang in Arunachal Pradesh) flows through the State upon its entry into India. When the Brahmaputra is flooded, which happens almost every year, it inundates Arunachal Pradesh before it enters Assam. The other exception is Tamil Nadu, which has experienced heavy floods in the recent past and has been assigned a score of 10.

iii) Among the bifurcated States, we could not get data on flood-affected areas in Uttarakhand, Jharkhand and Chhattisgarh. However, Uttarakhand is flooded due to a large network of rivers in the Himalayas. The state experienced massive floods in 2014. Further, when the adjacent country of Nepal is flooded, these floods inundate and affect Uttarakhand as well. Uttarakhand has, therefore, been assigned a high score of 15 for being a flood-prone state. On the other hand, Jharkhand and Chhattisgarh are not known for incidence of heavy floods. These two States have been assigned a lower score of 5.

iv) All the hill States experience incidence of floods, but these are mostly flash floods which affect these States for a small duration of time. Due to the terrain, the runoff is fast and these States are not exposed to the risk of riverine flooding to which the States situated in major river basins are exposed. However, the flash floods cause a lot of damage to infrastructure.

Drought Score

v) According to the Manual for Drought Management, 2016 produced by Ministry of Agriculture and Farmers Welfare (*http://agricoop.nic.in/sites/default/files/Manual%20Drought%202016.pdf*), about 68 per cent of cropped area is vulnerable to drought, of which 33 per cent receives less than 750 mm of mean annual rainfall and is classified as "chronically drought-prone", while 35 per cent of the cropped area which receives mean annual rainfall of 750-1125 mm is classified as "drought-prone". The

[1]https://ndma.gov.in/images/guidelines/flood.pdf

drought-prone areas of the country are confined primarily to the arid, semi-arid and sub-humid regions of peninsular and western India.

vi) 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. The data on drought has been taken from the Ministry of Agriculture.[2]

vii) Some states such as Andhra Pradesh, Gujarat, Bihar, Odisha and Uttar Pradesh are in high risk category for both floods and drought. Such a risk assessment should not be construed as contradictory, and the presence of both the risks can be easily explained. These States are large in geographical area, and while some areas receive good rainfall and have dense river network, other areas are in arid and semi-arid regions.

viii) The critical factor of climate change and variability needs to be considered. Some States which are in the arid and semi-arid regions experience heavy rainfall within a short period of time and face flooding. Rajasthan has experienced heavy flooding in certain areas in recent times. On the other hand, northern Bihar has been experiencing drought in recent years. Intra-seasonal variation in rainfall has brought a huge change. Bihar has experienced deficient rainfall during eight out of the last ten years and this has brought immense rural distress to the State. Similarly, the Bundelkhand region in Uttar Pradesh has been reeling under drought for years together.

ix) The simultaneous incidence of floods and drought represent a highly dynamic situation, and it should be perceived as part of changing patterns of rainfall within the country. It is important that climate hazard risks be assessed on a continuous basis due to the impact of climate change.

Cyclone Score

x) Cyclone as a hazard is limited to coastal States. The higher score of 15 is assigned to Andhra Pradesh, Odisha and West Bengal, which include very high cyclone-prone districts. The States of Tamil Nadu, Kerala and Gujarat, which include high cyclone-prone districts are assigned a score of 10. Though Kerala does not include any high cyclone prone districts, all its fourteen districts are exposed to cyclone risk. Therefore, Kerala has also been assigned a score of 10. The remaining states of Karnataka, Goa and Maharashtra have a moderate score of 5. The data has been taken from the cyclone risk map used by the NDMA.[3] [4]

[2]http://agricoop.nic.in/sites/default/files/Manual%20Drought%202016.pdf
[3]http://www.rsmcnewdelhi.imd.gov.in/images/pdf/climatalogy/frequency-cyclone/hazard.pdf
[4]https://ncrmp.gov.in/cyclones-their-impact-in-india/

xi) The cyclones on the east and west coast are becoming more frequent due to the impact of climate change, which is changing the risk profile of these States. These scores, therefore, need to be reviewed on a periodic basis.

Earthquakes Score

xii) The Bureau of Indian Standards has developed a seismic map of India. According to this map, the Seismic Zones V and IV are high risk areas while Zones III and II are low seismic risk areas. The seismic map has been prepared based on the plate tectonics as well as the history of seismic events in India. According to this map, all the North-East and Himalayan States and some of the other states such as Bihar, Gujarat and Maharashtra are highly prone to earthquake risks. These States are assigned the highest score of 15. West Bengal and Uttar Pradesh are exposed to moderate seismic risks, and hence they are assigned the score of 10. The remaining States have been assigned low risk score of 5.[5]

xiii) In addition to these four hazards, there is a residual category of other hazards. This category includes State-specific hazards such as landslides, windstorms, hailstorm, cloudbursts, lightning, etc. As all the States have their share of minor hazards which have considerable local impacts, all of them have been assigned a uniform score of 10.

7. The vulnerability score has been assigned based on the below poverty line population of each State in 2011-12 (Tendulkar Methodology). States with a poverty rate of 26 per cent and above have been assigned the highest score of 30, and those having poverty rate below 13 per cent are given a score of 10. The rest of the States having poverty rates between 13 per cent and 26 per cent have been assigned the intermediate score of 20. The reorganised States of Andhra Pradesh and Telangana have been assigned scores by assuming their poverty rate as that of undivided Andhra Pradesh in 2011-12.

A Summary of this scoring scheme is as follows:

Scoring Scheme (Disasters)

Disasters	High	Medium	Low
Floods	15.00	10.00	5.00
Drought	15.00	10.00	5.00
Cyclone	15.00	10.00	5.00
Earthquake	15.00	10.00	5.00
Others		10.00	

Scoring System	Poverty
Low - 10.00	Below 13%
Medium - 20.00	Between 13% and 26%
High - 30.00	Between 26% and 40%

[5] http://pib.nic.in/newsite/mbErel.aspx?relid=168661

8. The scores for hazards and vulnerability have been added to assign the risk score for each State to arrive at final DRI for each state. It is the first attempt to include State-level disaster risk scores in resource allocation and address a serious deficiency in the previous State-level allocations for disaster management. As more experience is gained, the disaster risk index may be refined further. A detailed statement of DRI score prepared for each state is provided below.

Disaster Risk Index Scores

Sl No	States	Floods	Drought	Cyclone	Earthquake	Others	Total Score (out of 70)	Poverty Points (out of 30)	Total Score (out of 100)	Points
A	B	C	D	E	F	G	H	I	(H+I)	(H+I)/100
1	Andhra Pradesh	10.00	15.00	15.00	5.00	10.00	55.00	10	65.00	0.650
2	Arunachal Pradesh	15.00			15.00	10.00	40.00	30	70.00	0.700
3	Assam	15.00			15.00	10.00	40.00	30	70.00	0.700
4	Bihar	15.00	10.00		15.00	10.00	50.00	30	80.00	0.800
5	Chhattisgarh	5.00	5.00		5.00	10.00	25.00	30	55.00	0.550
6	Goa	5.00		5.00	5.00	10.00	25.00	10	35.00	0.350
7	Gujarat	10.00	15.00	10.00	15.00	10.00	60.00	20	80.00	0.800
8	Haryana	15.00	5.00		5.00	10.00	35.00	10	45.00	0.450
9	Himachal Pradesh	5.00	5.00		15.00	10.00	35.00	10	45.00	0.450
10	Jharkhand	5.00	10.00		5.00	10.00	30.00	30	60.00	0.600
11	Karnataka	5.00	15.00	5.00	5.00	10.00	40.00	20	60.00	0.600
12	Kerala	15.00	5.00	10.00	5.00	10.00	45.00	10	55.00	0.550
13	Madhya Pradesh	5.00	10.00		5.00	10.00	30.00	30	60.00	0.600
14	Maharashtra	5.00	15.00	5.00	15.00	10.00	50.00	20	70.00	0.700
15	Manipur	5.00			15.00	10.00	30.00	30	60.00	0.600
16	Meghalaya	5.00			15.00	10.00	30.00	10	40.00	0.400
17	Mizoram	5.00			15.00	10.00	30.00	20	50.00	0.500
18	Nagaland	5.00			15.00	10.00	30.00	20	50.00	0.500
19	Odisha	15.00	15.00	15.00	5.00	10.00	60.00	30	90.00	0.900
20	Punjab	15.00	5.00		5.00	10.00	35.00	10	45.00	0.450
21	Rajasthan	5.00	15.00		5.00	10.00	35.00	20	55.00	0.550
22	Sikkim	5.00			15.00	10.00	30.00	10	40.00	0.400
23	Tamil Nadu	10.00	10.00	10.00	5.00	10.00	45.00	10	55.00	0.550
24	Telangana	5.00	15.00		5.00	10.00	35.00	10	45.00	0.450
25	Tripura	15.00			15.00	10.00	40.00	20	60.00	0.600
26	Uttar Pradesh	15.00	10.00		10.00	10.00	45.00	30	75.00	0.750
27	Uttarakhand	15.00			15.00	10.00	40.00	10	50.00	0.50
28	West Bengal	15.00	5.00	15.00	10.00	10.00	55.00	20	75.00	0.750

Annex 6.3
(Para 6.4: ix)

Methodology for Determination of National Level Allocations of Disaster Management

1. As the provision for the NDRF is linked directly to expenditure, we recommend the total national allocation for disaster management, that is, the NDRMF be determined using the expenditure-based methodology.

2. We have calculated the total national allocation for disaster management based on the actual expenditure (from 2015-16 to 2017-18) and budgeted expenditure (for 2018-19 and 2019-20) from NDRF for five years (2015-16 to 2019-20) and adjusted it for inflation.

3. The average of inflation-adjusted expenditure of the five years is then increased by 10 per cent to arrive at the base figure.

4. Taking this base amount, the national allocation for disaster management for 2020-21 is estimated with an annual inflation of 5 per cent.

5. This methodology has determined the size of funds for NDRMF to be Rs. 12,390 crore for 2020-21.

Annex 7.1

List of Functionaries

Chairman	Shri N. K. Singh
Members	Shri Shaktikanta Das (up to 11.12.2018)
	Shri Ajay Narayan Jha (vice Shri Shaktikanta Das)
	Dr. Anoop Singh
	Dr. Ashok Lahiri
	Dr. Ramesh Chand
Secretary	Shri Arvind Mehta
Addl. Secretary	Shri Mukhmeet S. Bhatia
Joint Secretary	Dr. Ravi Kota
Economic Adviser	Shri Antony Cyriac
Media Adviser	Ms. Maushumi Chakravarty
Director and OSD to Chairman	Shri Bharat Bhushan Garg
Directors	Shri Gopal Prasad
	Shri Jasvinder Singh
Joint Directors	Shri Anand Singh Parmar
	Shri Kandarp V. Patel
	Shri Manish Dev
	Ms. Sweta Satya
Deputy Directors	Ms. Aditi Pathak
	Shri Anshuman Mishra (up to November, 2018)
	Shri Dalip Singh (up to August, 2018)
	Shri Nitish Saini
	Shri Ritesh Kumar
	Shri Sandeep Kumar
	Ms. Shikha Dahiya
	Shri Vijay Kumar Mann
Library & Information Officer	Shri D. K. Sharma

Principal Private Secretary	Smt Geetha Govind (up to December, 2018)
	Shri J. K. Wadhwa
	Shri P. Venkat Swamy
	Shri R. Thyagarajan
	Shri S. Puttanna
	Shri Sansar Chand Birdi
	Shri Sudarshan
Assistant Directors	Shri Mahesh Kumar
	Shri Pankaj Gera
	Shri Parveen Jain
	Shri Salam Shyamsunder Singh
	Shri Sushant Kumar Bajaj
	Shri Vikas Ahlawat
Private Secretary	Shri Permod Kumar (up to December, 2018)
Assistant Accounts Officer	Shri Mukesh Kumar Singh
Sr. Translation Officer	Shri Sanjeev Nayan Saha
Personal Assistants	Shri R. Suresh
Assistant Section Officer	Shri Sunil Dubey
Junior Sectt. Assistant	Shri Hari Dutt
Consultants	Shri A. C. Mehta
	Shri Ashok Kumar Verma
	Shri Balbir Singh
	Shri Bhola Ram
	Shri Eugene Francis
	Shri J. K. Ahuja
	Shri N. Dwarkanathan
	Shri Prakash A
	Shri Ravinder Kumar
	Shri S. Gopalkrishnan
	Shri Seetha Parthasarathy
	Ms. Shatakshi Garg
	Ms. Bidisha Bhattacharya (up to December, 2018)
Young Professional	Ms. Himani Verma
	Ms. Shivangi Shubham (Up to November, 2018)
Junior Consultant	Shri Aniket

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