



भारत में व्यापक बाढ़ प्रबंधन

COMPREHENSIVE FLOOD MANAGEMENT IN INDIA



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COMPREHENSIVE FLOOD MANAGEMENT IN INDIA

**INFORMATION SYSTEM ORGANISATION
WATER PLANNING & PROJECTS WING
CENTRAL WATER COMMISSION
NEW DELHI**

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FOREWORD



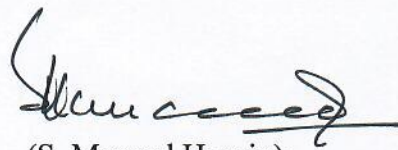
It gives me immense pleasure to present this report on “Comprehensive Flood Management in India”. Central and State Governments are making concerted efforts continuously since independence for execution of a large number of projects in the water sector to protect people and land from the adverse effects of flood, soil erosion and inadequate drainage system. The publication is intended to serve and provide documentation of available data on comprehensive flood management in India which is a revised version of the erstwhile publication “Financial Aspects of Flood Control, Anti Sea Erosion and Drainage Projects”. The basic source of data for publication is the Finance and Revenue Accounts of the Union Government and State Governments, brought out by the Comptroller and Auditor General of India and Accountant General of States respectively.

The Changing scenario has made it compulsory to think of presenting the publication in more comprehensive form. To accomplish this aim, a Committee was constituted in CWC to suggest improvements in the publication. I am happy to note that the current publication has improved substantially by including additional aspects like approaches towards flood management, constitutional provisions for flood management and institutional framework for flood management, outcome of flood management measures and efforts of the Central Government for Flood Management in the Country.

The contribution of Shri M.S. Dhillon, Chief Engineer (Flood Management Organisation) as the Chairman of the Committee for improvement of this publication and Shri D C Sharma, Advisor (ISO) as Member Secretary of the Committee and their team is highly appreciable.

I hope this publication would be useful for research scholars, planners, policy makers and various stakeholders at large. I look forward to suggestions and feedback for improvement in content and quality of this publication.

New Delhi
September, 2018


(S. Masood Husain)
Chairman, CWC

PREFACE



A number of projects relating to flood control, soil erosion and creating drainage system are being developed in the country with huge investments for maintaining food security and minimizing loss/damage caused by them. The Financial Performance from investments made in these projects is pertinent for assessment of economic viability vis-à-vis accrued benefits. Such an analysis is also worth for justification of huge public investments being made in the execution of these projects.

The Central Water Commission being the apex nodal agency in the water resources sector, with overall responsibility for its development, has been paying adequate attention to this aspect. The documentation of the available data is of utility for assessment of levels, trends and inter-state variability of expenditure component and correlating it with the physical achievement made over time.

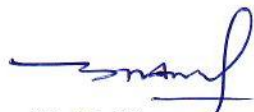
The basic source of data for publication is the Finance and Revenue Accounts of the Union and State Governments, and Central Water Commission. The publication is intended to provide documentation of available data in the form required by the researchers and analysts. The constitutional provisions and institutional framework related to the flood have also been added for the first time.

The publication also covers description of the head of accounts utilized for the analysis, yearly revenue and capital expenditure on flood control, anti-sea erosion and drainage projects, performance of States/UTs by revenue and capital expenditure, area and population affected by flood, state-wise area benefitted, length of embankment, town protected, raised platforms under Flood Management Programme. The quantum of damage due to Floods during 1953-2017 has also been presented.

I would like to place on record my deep appreciation to Shri M.S. Dhillon, Shri D.C. Sharma, Shri Sharad Chandra, Director (FFM), Shri Piyush Kumar, Director (FMP), Dr. Niyati Joshi, Joint Director (ISO) and their team for their commendable efforts in bringing out this publication.

I hope this publication will be useful for all interested in the subject. Suggestions, if any, are welcome for improvement of the publication.

New Delhi
September, 2018


(Y. K. Sharma)
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Contents

	Foreword	
	Preface	
	Composition of Committee for Improvement of the Publication	iv
	Team Associated with the Publication	v
	Executive Summary	vii-viii
		Page No.
Chapter 1	Introduction	1-4
Chapter 2	Constitutional Provisions for Flood Management	5-9
Chapter 3	Institutional Framework for Flood Management	10-15
Chapter 4	Approaches towards Flood Management	16-23
Chapter 5	Outcome of Flood Management Measures	24-50
Chapter 6	Efforts of Central Government for Flood Management in the Country	51-54
Appendix	Detailed Tables	
Table A1	Distribution of revenue expenditure by minor head of accounts and State	56-72
Table A2	Distribution of capital expenditure by minor head of accounts and State	73-89
Table A3	Distribution of total (revenue + capital) expenditure by minor head of accounts and State	90-106
Table A4	The Quantum of Damage due to Floods/Heavy Rains During 1953 to 2017	107-110

Executive Summary

Flood may cause innumerable problems like soil erosion. In order to protect the crops, agricultural land and human lives, a sound flood management measures and financial performance of investments in such projects are required which has been presented in the current publication of “Comprehensive Flood Management in India”.

The publication on “Comprehensive Flood Management in India” has six chapters, namely: Introduction, Constitutional Provisions for Flood Management, Institutional Framework for Flood Management, Approaches towards Flood Management, Outcome of Flood Management Measures and Efforts of Central Government for Flood Management in the Country.

The chapter on Introduction briefly covers causes of flood, history of damage due to floods, various structural & non-structural flood management measures and list of accounting codes on flood and drainage.

The chapter on constitutional provisions for flood management mentions Statutory provisions of entry 56 of List I (Union list), entry 17 & 18 of List II (State list), entry 42 of List III (Concurrent List) and various Laws enacted by the Central Government i.e. Inter-state River Disputes Act 1956(As modified up to 6th August, 2002), Betwa River Board Act, 1976, Brahmaputra Board Act, 1980 and the Land Acquisition Act, 1894.

The chapter on Institutional Framework for Flood Management mentions Organisations dealing with flood management in various states. Also, it covers various Central Government Organizations like Central Flood Control Board, Central Water Commission, Ganga Flood Control Board, Ganga Flood Control Commission, Farakka Barrage Project, Brahmaputra Board, Damodar Valley Corporation and other organizations dealing with flood management.

The chapter on Approaches towards Flood Management covers details of the structural and non-structural measures for flood management.

The Chapter on Efforts of Central Government in Flood Management in the Country covers initiatives taken by Government of India in Flood Management and special structural measures for Flood Management like Flood Management Program (FMP), River Management Activities & Works related to Border Areas (RMBA) Component and Works by Brahmaputra Board (BB).

The Chapter on Outcome of Flood Management Measures analyses revenue and capital expenditure incurred on flood control, drainage and anti-sea erosion projects by States /UTs as well as over time and their Physical Performance. It also covers the extent of damage due to flood during 1953-2017 with respect to population affected, area affected, crop area

affected, number of houses damaged, quantum of loss of human lives & cattle and total cost of damages.

The Appendix covers tables, namely: Distribution of revenue expenditure by minor head of accounts and State, Distribution of capital expenditure by minor head of accounts and States, Distribution of total (revenue + capital) expenditure by minor head of accounts and States and the Quantum of Damage due to Floods/Heavy Rains during 1953 to 2017.

Chapter 1

Introduction

1.1 A flood may cause innumerable problems such as loss of agricultural produce, water logging, erosion of land, health hazards and loss of human lives. Heavy rain causes flood, inadequate rain causes drought. In other words, flood occurred when the water spills from the banks of river to the adjoining areas and does not join back into river, it causes flooding in that area, or when due to excessive rainfall, heavy flows received in the river are not passed smoothly due to inadequate capacity of channel, it may cause flooding inside river. Flooding may also occur in the localities having poor drainage systems. The main causes of floods are as under:

- (i) High intensity rainfall in short duration
- (ii) Poor or inadequate drainage/channel capacity
- (iii) Unplanned reservoir regulation
- (iv) Failure of flood management structures

1.2 As per constitutional provisions, the subject of Flood Management including erosion control falls within the purview of the States. The flood management & anti-erosion schemes are planned, investigated and implemented by the State Governments with their own resources as per priority within the State. The Union Government only renders assistance to States which is technical, advisory, catalytic and promotional in nature.

1.3 The Rashtriya Barh Ayog (RBA) had estimated in 1980, total area liable to floods in the country as 40 Mha. Subsequently, the extent of maximum area affected in a year by floods has been updated by XII Plan Working Group on Flood Management and Region specific issues as 49.815 Mha. The maximum population affected in a year was 70.45 million and it occurred in 1978. Similar trend was found for area affected by flood. Its yearly average was 7.17 Mha while the maximum 17.50 Mha was attained during the same reference period in 1978. As regards affected average crop area, it was 6.658 Mha in 2016 which reduced to 5.140 Mha in 2017. The average number of houses damaged in a year due to flood was 2.7 Lakh in 2016 which increased to 11.5 Lakh in 2017. Total damage for crops, houses and public utilities during 1953-2017 was estimated to be ₹ 368374.687 crore.

1.4 To meet the challenges posed by the flood, Government of India has taken up various Flood Management Measures viz- Structural and Non-structural Measures:

1.4.1 Structural Measures:

- (i) Reservoirs
- (ii) Detention basins
- (iii) Embankments
- (iv) Channelization of rivers
- (v) Channel improvement
- (vi) Drainage improvement
- (vii) Diversion of flood waters
- (viii) Watershed Management

1.4.2 Non-Structural Measures:

- (i) Flood forecasting
- (ii) Flood plain zoning

1.5 As mentioned in the constitutional provisions, flood management including erosion control, are planned, investigated and implemented by the state governments with their own resources with technical assistance by union government. Therefore, two-tier system of flood management exists in India as briefly described below:

1. State Government Mechanism
2. Central Government Mechanism
 - a) Central Water Commission
 - b) Brahmaputra Board
 - c) Ganga Flood Control Commission
 - d) National Disaster Management Authority

1.6 Floods affect life of the people in flood affected area in different ways. A number of projects have been initiated in the country and are in operation to achieve the objective of flood management involving huge investment. The financial and physical analysis assumes particular importance in this context. The chapter “Outcome of Flood Management Measures” concentrate on the economic and physical aspects of the flood which briefly describe the expenditure pattern on different heads of the flood control, anti-sea erosion & drainage projects and physical damage due to flood. The financial and physical analysis assumes particular importance in this context.

1.7 Keeping in view the requirements of detailed data needs of planners, researchers and analysts interested in review and analysis of investment in the projects and further in order to present the related financial data for specific projects at one place, the Information System Organisation (ISO) continuously collects, compiles and presents the data on water and related activities in the form of different publications. This publication presents financial aspects of flood control, anti-sea erosion and drainage projects as available in the Finance Accounts of the Union and State Governments brought out by the Comptroller &

Auditor General and the Accountant Generals of respective States. The list of codes along with their description is given below:

Table A: List of accounting codes	
Code	Description
	Major Head
2711	Revenue Expenditure on Flood Control and Drainage
4711	Capital Expenditure on Flood Control and Drainage
	Sub-Major Head
01	Flood Control
02	Anti-Sea Erosion
03	Drainage
50	Land
80	General
99	Total
	Minor Head
001	Direction & Administration
002	Data Collection
003	Training
004	Research
005	Survey & Investigation
052	Machinery & Equipment
101	Maintenance & Repair
103	Civil Work
104	Drainage in Industrial Estates
106	Original Works
190	Investment in Public Sector & other Undertakings
191	Assistance to local bodies, Corporations, Urban Development Authorities, Town Improvement boards, etc
196	Assistance to Zilla Parishads
198	Assistance to Gram Panchayats
201	Drainage & Flood Control
202	Ujjain Diversion Drain Scheme
203	Anti-Water-Logging Scheme
204	Minor Irrigation Scheme
205	Jagadhari Tube Wells Projects
206	Installation of Tube Wells in Western Yamuna Canal Tract
207	Gurgaon Canal Project
208	Drainage Project
209	Investigation and Research Scheme
210	Massani Barrage Project
789	Special Component Plan for SC (Scheduled Caste)
792	Irrecoverable Loans Written off
796	Tribal Area Sub Plan
797	Transfer to Reserve Funds& Deposit Accounts
799	Suspense
800	Other Expenditure
901	Deduct Receipt & Revenue on Capital Account
902	Deduct Amount met from Reserve
911	Deduct Receipt & Revenue on Capital Account

These reports provide audited receipts and expenditure of various economic activities of the Central and State Governments. The figures are approved by Comptroller & Auditor General (CAG) of India. As per system of accounts maintained by Comptroller & Auditor General, the revenue and capital expenditure of all economic activities are classified into 4-digit codes. These codes are known as major head. For Flood Control and Drainage, these are 2711 and 4711 respectively. The former refers to revenue expenditure (2711) and the latter to capital expenditure (4711). Each major head is classified into sub-major head and in turn sub-major head into minor heads. Some of the above minor heads are names of projects/schemes. Any expenditure reported against these heads does not pertain to any specific activity under sub-major head of account.

1.8 The first issue of this publication containing data for the period 1974-75 to 1989-90 had been brought out in 1995, second issue of the publication containing data for the period 1990-91 to 1998-99 was brought out in 2002 and the third issue from 1998-1999 to 2010-11 was brought out in 2010. The present issue is the fourth in the series. It contains updated data for the period 2000-2016.

Chapter 2

Constitutional Provisions for Flood Management

2.1 Constitutional Provisions for Flood Management

As per constitutional provisions, the subject of Flood Management including erosion control falls within the purview of the States. The flood management & anti-erosion schemes are planned, investigated and implemented by the State Governments with their own resources as per priority within the State. The Union Government only renders assistance to States which is technical, advisory, catalytic and promotional in nature.

2.1.1 The subject of flood control, unlike irrigation, does not figure as such in any of the three legislative lists included in the Constitution of India. However, Drainage and Embankments are two of the measures specifically mentioned in entry 17 of List II (State List), reproduced below:

“Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provision of entry 56 of List I (Union List).”

Entry 56 of List I (Union List) reads as follows:-

“Regulation and development of inter-state rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.”

2.1.2 It may thus be seen that the primary responsibility for flood control lies with the States. A number of States have already enacted laws with provisions to deal with matters connected with flood control works. However, there exists a significant provision that the powers to be exercised are subject to entry 56 of Union List. It may be pointed out that entry 17 of List II (State List) quoted above does not cover land use involved in the administrative measures of dealing with reduction of flood losses viz. Flood Plain Zoning.

2.1.3 For the implementation of any flood control programme, it is necessary to acquire private land for execution of engineering measures. Since there is provision for “acquisition and requisitioning of property” in the Concurrent List under entry 42, both Centre and the States can enact laws for this purpose. The Land Acquisition Act of 1894 under which land could be acquired both by the Centre and the States is the basic Act in this regard. However, if legislation for reducing flood damages is to be resorted to by flood plain zoning, it involves restriction of land use and this power seems to be covered under entry 18 List II (State List) which provides “land that is to say, rights in and over land” Also, since local conditions differ from area to area and, therefore, flood plain

zoning being essentially a local problem, it needs to be dealt with by the State Government and the Centre does not come into the picture.

2.1.4 Notwithstanding the legislative power being enjoyed by the Centre and the States as explained above, the Union Government can legislate on matters in the State List in two special situations viz.,(1) under Article 249 the Council of States can declare by a Resolution supported by two-thirds of the Members present and voting that it is necessary or expedient in the National Interest that Parliament should legislate on matters in the State List and specify in the Resolution, then Parliament can enact laws for the whole of the country or any specific part of the country with respect to that matter as long as that Resolution stand. The Resolution lapses after a year and can be renewed as many times as necessary, but not exceeding one year at a time. It may be seen that for one thing, the provision enables only temporary legislation, and for the other, the Rajya Sabha has to be satisfied that the problem of flood control has assumed such a magnitude that a National effort on an all-India level has become necessary under Article 252. Two or more States can empower the Parliament to make laws on matters included in the State List if the State legislatures of those States pass a Resolution to that effect. Such laws will apply to the State whose legislatures have already consented or which subsequently adopt the law. Once the law comes into force, one of the States can amend or repeal the same.

2.2 Laws Enacted by the Central Government

2.2.1 Inter-state River Disputes Act 1956 (As modified up to 6th August, 2002)

For settling inter-state river disputes, provision was made under article 262 of the Union Constitution of 1950 for the Parliament to make laws for the adjudication of disputes. It reads as follows:-

“Parliament may, by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of or in any inter-State river or river valley.

Notwithstanding anything in this Constitution, Parliament may, by law, provide that neither the Supreme Court nor any other Court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in Clause 1.”

By virtue of these powers vested in Parliament by Article 262, it enacted the Inter State Water Dispute Act, 1956 for the adjudication of disputes relating to waters of Inter-State Rivers and River Valleys. The salient features of the Act as amended till 6th August, 2002 are as follows:

Clause 3: If it appears to the Government of any State that a water dispute with the Government of another State has arisen or is likely to arise by reason of the fact that the interests of the State, or of any of the inhabitants thereof, in the waters of an Inter-State River or River Valley have been, or are likely to be affected prejudicially by-

- (a) any executive action or legislation taken or passed, or proposed to be taken or passed, by the other State; or
- (b) the failure of the other State or any authority therein to exercise any of their powers with respect to the use, distribution or control of such waters; or
- (c) the failure of the other State to implement the terms of any agreement relating to the use, distribution or control of such waters, the State Government may, in such form and manner as may be prescribed, request the Central Government to refer the water dispute to a Tribunal for adjudication.

Clause 4: (1) When any request under Clause 3 is received from any State Government in respect of any water dispute and the Central Government is of opinion that the water dispute cannot be settled by negotiations, the Central Government shall, within a period not exceeding one year from the date of receipt of such request, by notification in the official Gazette, constitute a Water Disputes Tribunal for the adjudication of the water dispute;

(2) The Tribunal shall consist of a Chairman and two other members nominated in this behalf by the Chief Justice of India from among persons who at the time of such nomination are Judges of the Supreme Court or of a High Court.

Clause 5: (1) When a Tribunal has been constituted under Clause 4, the Central Government, subject to the prohibition contained in clause 8, refers the water dispute and any matter appearing to be connected with, or relevant to, the water dispute to the Tribunal for adjudication.

(2) The Tribunal shall investigate the matters referred to it and forward to the Central Government a report setting out the facts as found by it and giving its decision on the matters referred to it within a period of three years;

Clause 6: (1) The Central Government shall publish the decision of the Tribunal in the Official Gazette and the decision shall be final and binding on the parties to the dispute and shall be given effect to by them.

(2) The decision of the Tribunal, after its publication in the Official Gazette by the Central Government under Clause(1), shall have the same force as an order or decree of the Supreme Court.

Clause 9A: (1) The Central Government shall maintain a data bank and information system at the national level for each river basin which shall include data regarding water resources, land, agriculture, and matters relating thereto, as the Central Government may prescribe from time to time. The State Government shall supply the data to the Central Government or to an agency appointed by the Central Government for the purpose, as and when required.

(2) The Central Government shall have powers to verify the data supplied by the State Government, and appoint any person or persons for the

purpose and take such measures as it may consider necessary. The person or persons so appointed shall have the powers to summon such records and information from the concerned State Government as are considered necessary to discharge their functions under this section.

Clause 11: Notwithstanding anything contained in any other law, neither the Supreme Court nor any other court shall have or exercise jurisdiction in respect of any water dispute which may be referred to a Tribunal under Act.”

Though there have been many disputes on account of the ever increasing demands for water and power in different areas of the country, all the disputes have not been referred for adjudication and have been mostly settled through active participation of the Union Government. Tribunals have been set up so far to adjudicate water disputes relating Krishna, Godavari, Narmada and Cauvery rivers. There has been no Inter-State dispute specifically with regard to flood control & management issues.

2.2.2 The River Boards Act of 1956

Under entry 56 of List 1, Parliament has enacted the River Boards Act of 1956 which authorizes the Union Government to establish a River Board for advising the Governments interested in relation to such matters concerning the regulation or development of an inter-state river or river valley or any specific part thereof for performing such other functions as may be specified in the notification. As notification for the setting up of a River Board should be issued only after consultation with the interested State Governments, generally most of the States did not agree to the setting-up of the Boards and no Board under this Act has been established so far.

2.2.3 Damodar Valley Corporation Act, 1948

This Act was enacted by the Central Government in 1948. The Act provides for the establishment and regulation of a corporation for the development of the Damodar Valley in the States of Bihar (now Jharkhand) and West Bengal. The Damodar Valley Corporation was accordingly established in July 1948. Out of the 7 dams originally planned for the purpose of irrigation, flood control and power, only 4 have been constructed. Conflicts of the interests among the States have been largely responsible for such partial realization of the benefits envisaged in the Act.

2.2.4 Betwa River Board Act, 1976

The Act provides for the establishment of a Board for the creation of a reservoir at Rajghat by construction, on behalf of the Government of Madhya Pradesh and Uttar Pradesh, of a dam on the Betwa River at Rajghat and for the regulation of such reservoir.

The Board shall carry out the survey and investigation in the Betwa Inter-State River Valley and prepare a comprehensive project report for the construction of Rajghat Dam and appurtenant works including the construction of Power House & Construct Rajghat Dam and Power House and the common carrier from the dam to irrigate areas in Madhya Pradesh and Uttar Pradesh.

2.2.5 Brahmaputra Board Act, 1980

The Act provides for an establishment of a Board for the planning and integrated implementation of measures for the control of floods and bank erosion in the Brahmaputra valley and for matters connected therewith.

2.2.6 The Land Acquisition Act, 1894

This is a central legislation empowering the Central and State Governments to acquire land for any purpose. There are special powers in case of urgency for land uses e.g. Railways but not for flood control works. There are provisions in the Act for the award of compensation. This law has been operative for all these years but still a major problem in the execution of flood control programme has been the delay in land acquisition. Bihar State enacted land acquisition (Bihar) Amendment Act providing for acquisition of land under emergent situation in case of flood control works also.

Chapter 3

Institutional Framework for Flood Management

The Existing Organizational Set Up

3.1 State Governments Organizations.

Flood being a State subject, flood management schemes are planned and executed by the State Government. The role of Central Government is advisory, catalytic and promotional in nature. The States have to investigate, plan, construct, maintain and operate all flood works. In line with the Central Government Organizations, Flood Control Boards were concurrently set up in some of the States, later followed by some others. The functions of the State Flood Control Boards are to assess the flood problems in the States, deal with questions of policy and over-see the planning and implementation of flood schemes. In the discharge of their functions, the Boards are assisted by Technical Advisory Committees.

3.1.1 The operating organization is the Department, mainly the Irrigation Department, which may or may not have a separate wing dealing with flood control. The Ministers' Committee on Flood Control, 1964, had stated that "at least in the States with serious flood problems, proper flood control departments should be organized under a Chief Engineer with appropriate number of regular field circles and divisions to look after investigations, construction and maintenance of flood control works as distinct from the regular Department."

3.1.2 Organisations dealing with Flood Management in the States of Assam & neighbouring States e.g. West Bengal, Bihar and UP are as under:

- **West Bengal-** Irrigation & Waterways (I&W) Department under which there is I&W Directorate, which deals with irrigation, waterways and flood management in the State of West Bengal. Flood Management aspects are looked after by two Chief Engineers. One Chief Engineer designated as Chairman, North Bengal Flood Control Commission for the districts of Cooch Behar , Darjeeling and Jalpaiguri & another Chief Engineer designated as Chief Engineer-II for the rest of West Bengal excepting jurisdiction of FBP (Farakka Barrage Project).
- **Assam-** Water Resources Department
- **Tripura-** Public Works Department (Water Resources)
- **Bihar-** Water Resources Department
- **Manipur-** Irrigation & Flood Control Department

- **Uttar Pradesh-** Irrigation Department
- **Arunachal Pradesh-** Irrigation & Flood Control Department
- **Sikkim-** Irrigation & Flood Control Department
- **Nagaland-** Department of Irrigation and Flood Control.
- **Mizoram-** Agricultural and Minor Irrigation.

3.2 Central Government Organisations

3.2.1 Central Flood Control Board

In 1954, when for the first time the flood programme in the country attracted serious attention of the Government of India, a Central Flood Control Board was constituted to draw up a comprehensive plan of flood control with the following functions:-

- (i) To lay down general principles and policies in connection with flood control measures;
- (ii) To consider and approve Master Plans for flood control submitted by the States/River Commission; and
- (iii) To arrange for necessary assistance in connection with planning and execution of flood control works.

As a decision of the Central Flood Control Board in 1954, a Flood Wing was added to the then Central Water and Power Commission; the Flood Wing served as the Secretariat of the Central Flood Control Board.

In 1977, it was decided to merge the Central Flood Control Board with the Conference of State Ministers of Irrigation. This Conference comprises the Union Minister in charge of Irrigation as Chairman with Ministers of Irrigation and/or Flood Control in the States as Members; the flood control work in most of the States is handled by the Irrigation Departments. The first meeting after the amalgamation of the Central Flood Control Board with Ministers' conference was held in February, 1979.

3.2.2 Under the apex body of the then Central Flood Control Board, four River Commissions, namely, the Ganga, the Brahmaputra, the North-western and the Central India River Commissions were set-up during the fifties, mainly, with the purpose of preparation of integrated plans of the river basins and ancillary matters. These Commissions have become non-functioning bodies now.

3.2.3 The Ministers' Committee on Flood Control, 1964, suggested that the River Commissions should be substituted by Regional Flood Commissions and suggested four Commissions, namely, the Ganga, the Brahmaputra, the North-west and the Central India and Deccan Rivers Commissions. The proposal of the Ministers' Committee was not, however, accepted by Government.

3.2.4 Central Water Commission

The Central Water Commission is an apex Organization for flood management schemes of India. There have, however, been some dilutions in its all India role. Works related to Ganga Basin States have gone out of its purview and is done by Ganga Flood Control Commission (GFCC). It has a full-fledged Wing under Member (RM), ex-Officio Additional Secretary to the Government of India to perform the functions assigned to Central Water Commission in respect of flood management. The functions of the R.M. Wing are:-

- (i) to provide guidance in the preparation and scrutiny of :-
 - (a) Flood control schemes prepared by State Governments for consideration and approval by Technical Advisory Committees;
 - (b) Draft Master Plans;
 - (c) Irrigation and multi-purpose schemes with regard to adequacy of flood control, drainage, anti-water logging and anti-sea-erosion.
- (ii) planning, establishment, operation & maintenance of hydrological observation stations and flood forecasting systems in entire country,
- (iii) to coordinate and act in liaison with various authorities in processing and execution of flood control, irrigation, drainage and hydro-electric schemes in the Union Territories.
- (iv) to guide the Damodar Valley Corporation in discharging its function in relation to the releases of water from the DVC dams.

The Member (RM), Central Water Commission is in-charge of the entire flood forecasting network of the Government of India as well the hydrological observations network of the Nation.

The River Management Wing has two Organisations at the Headquarters namely Flood Management Organisation and Planning & Development Organisation. In the field there are 13 Organisations working under R.M.Wing. These are: Indus Basin (Chandigarh), Brahmaputra Barak Basin (Shillong), Lower Ganga Basin (Patna), Upper Ganga Basin (Lucknow), Teesta Basin (Siliguri), Narmada & Tapi Basin (Vadodara), Monitoring (S) (Bangalore), Monitoring (C) (Nagpur), Cauvery & Southern Rivers (Coimbatore), Krishna & Godavari Basin (Hyderabad), Mahanadi & Eastern Rivers (Bhubaneswar), Narmada Basin (Bhopal) & Yamuna Basin (Delhi).

3.2.5 Ganga Flood Control Board

Following the floods of 1971, the Ganga Flood Control Board was set up in 1972 to deal with the problems of the States in the Ganga Basin with Union Minister of Water Resources as its Chairman. The Minister of State for Water Resources, Union Minister or his representative of finance, Railways, Surface Transport, agriculture and Member

(Planning Commission) as its Members along with Chief Minister or his representatives of Bihar, West Bengal, Uttar Pradesh, Haryana, Rajasthan, Madhya Pradesh, Himachal Pradesh, Jharkhand, Uttaranchal, Chhattisgarh, NCT of Delhi as Members and Chairman, GFCC as the Member-Secretary. It was set up by Government of India to lay down broad policies and decide priorities in the implementation of various schemes. It also formulates comprehensive plan of Flood Control in Ganga Basin and accord approval to schemes and recommend outlays.

3.2.6 Ganga Flood Control Commission

The Ganga Flood Control Commission (GFCC) was set up by Government of India in 1972 for preparation of comprehensive plan of flood control for Ganga Basin and to draw out a phased & coordinated programme of implementation of works and monitoring & appraisal of flood management schemes of Ganga basin States. It is headed by a Chairman (in the rank of Additional Secretary) and two members, Member (Planning) and Member (Co-ordination) in the rank of Joint Secretary with supporting staff. All technical posts are encadred in CWES.

3.2.7 Farakka Barrage Project (FBP)

Farakka Barrage Project organization looks after Farakka Barrage and various other related works. The Farakka Barrage Project also maintains the Bhagirathi river for a length of 16.3 kms. from Jangipur Barrage upto Moya.

3.2.8 Brahmaputra Board

Floods and erosion in the Brahmaputra and Barak basins are regional problems. Both Brahmaputra & Barak and most of their major tributaries are Inter-State rivers. The former is an international river. It was, therefore, considered appropriate to establish an autonomous body titled as Brahmaputra Board, under the Brahmaputra Board Act, 1980. The Board was to perform such functions and exercise such powers as the Central Government may specify from time to time by notification in the official Gazette. It is given the task of carrying out surveys and investigations in the Brahmaputra valley and prepares a Master Plan for control of floods and bank erosion and improvement of drainage in the Brahmaputra valley. It is also responsible for planning and integrated implementation of measures for control of floods and bank erosion in the Brahmaputra valley. The Board is assigned the task to construct, with the approval of the Central Government, multipurpose dams and works connected therewith proposed in the Master Plan as approved by the Central Government and operate such dams and works. The Board is constituted with a Member each from the State Governments in the North East, viz. Assam, Meghalaya, Nagaland, Mizoram, Manipur, Tripura and Arunachal Pradesh and a representative of the North Eastern Council. Originally, the Chairman was of the rank of Secretary to the Government of India, but subsequently it was downgraded to that of Additional Secretary to Government of India. It has a Vice-Chairman and a General Manager each of Joint Secretary to Government of India rank and a Financial Advisor.

3.2.8.1 High Power Review Board

A High Power Review Board was appointed by Government of India in 1982 to oversee the work of Brahmaputra Board with Union Minister of Water Resources as its Chairman and 14 members who are Chief Ministers or Cabinet Minister/Minister of State for Finance, Energy, Agriculture, Surface Transport, Minister of State for Water Resources, Secretary (Water Resources), Chairman (CWC). Chairman, Brahmaputra Board, is the Member-Secretary.

3.2.9 Damodar Valley Corporation

The Damodar Valley Project was conceived at the close of the Second World War amidst famine, flood and frustration. As noted earlier, the Damodar Valley Corporation was set up under an Act of Parliament in 1948 for the development of the Damodar Valley. The project drew inspiration from the Tennessee Valley Authority in the United States of America. According to the Act, the functions of the Corporation were:-

- (a) the promotion and operation of schemes for irrigation, water supply and drainage;
- (b) the promotion and operation of schemes for the generation, transmission and distribution of electrical energy, both hydro and thermal;
- (c) the promotion and operation of schemes for flood control in the Damodar River and its tributaries and the channels, if any, excavated by the Corporation in connection with the scheme and for improvement of flow conditions in the Hooghly River;
- (d) the promotion and control of navigation in the Damodar River and its tributaries and channels, if any;
- (e) the promotion and afforestation and control of soil erosion in the Damodar Valley; and
- (f) the promotion of public health and the agricultural, industrial, economic and general well-being in the Damodar Valley and its area of operation.

3.2.10 Other Organisations dealing with Flood Management

In addition to the organisations mentioned above, other organisations are also dealing with flood management / erosion control as one of their activities in the country including the states covered by the Task Force. Some of these organisation are enlisted below:

- (i) Central Water & Power Research Station (CWPRS), Pune under MOWR.
- (ii) Central Soil & Material Research Stations (CSMRS), New Delhi under MOWR.
- (iii) National Remote Sensing Agency (NRSA), Hyderabad under Department of Space.
- (iv) National Institute of Hydrology (NIH), Roorkee and its regional centers at Patna and Guwahati under MOWR.
- (v) Regional Remote Sensing Service Centres (RRSSC), Kharagpur (West Bengal) under ISRO.

- (vi) State Remote Sensing Application Centres.
- (vii) North-Eastern Hydraulic & Allied Research Institute (NEHARI), Guwahati under Brahmaputra Board.
- (viii) North-Eastern Regional Institute of Water and Land Management (NERIWALM), Tezpur (Assam) under North-East Council (NEC).
- (ix) North-East Electric Power Corporation (NEEPCO), Shillong, Meghalaya under Ministry of Power.
- (x) National Hydro-electric Power Corporation (NHPC), Faridabad, Haryana under Ministry of Power.

Chapter 4

Approaches towards Flood Management

4.1 Introduction

Different measures have been adopted to reduce the flood losses and protect the flood plains. Depending upon manner in which the work is required for flood protection, flood management measures may be broadly classified as under:

- (a) Engineering / Structural Measures
- (b) Administrative / Non-Structural Measures

Engineering /Structural Measures :

The engineering measures for flood control which bring relief to the flood prone areas by reducing flood flows and thereby the flood levels are –

- (a) an artificially created reservoir behind a dam across a river
- (b) a natural depression suitably improved and regulated, if necessary or
- (c) by diversion of a part of the peak flow to another river or basin, where such diversion would not cause appreciable damage.
- (d) by constructing a parallel channel by-passing a particular town/reach of the river prone to flooding.

The engineering methods of flood protection, which do not reduce the flood flow but reduce spilling, are:

- (i) embankments which artificially raise the effective river bank and thereby prevent spilling and
- (ii) channel and drainage improvement works, which artificially reduce the flood water level so as to keep the same, confined within the river banks and thus prevent spilling.

Administrative Methods :

The administrative methods endeavour to mitigate the flood damages by;

- (a) Facilitating timely evacuation of the people and shifting of their movable property to safer grounds by having advance warning of incoming flood i.e. flood forecasting, flood warning in case of threatened inundation
- (b) discouraging creation of valuable assets/settlement of the people in the areas subject to frequent flooding i.e. enforcing flood plain zoning regulation.

Providing absolute protection to all flood prone areas against all magnitude of floods is neither practically possible nor economically viable. Such an attempt would involve stupendously high cost for construction and for maintenance. Hence, a pragmatic approach in flood management is to provide a reasonable degree of protection against flood damages at economic cost through a combination of structural and non-structural measures.

Different aspects of some of the important measures for flood management are enumerated below:

4.2 Structural Measures

4.2.1 Reservoirs

Reservoirs can moderate the intensity and timing of the incoming flood. They store the water during periods of high discharges in the river and release it after the critical high flow condition is over, so as to be ready to receive the next wave. Their effectiveness in moderating floods would depend on the reservoir capacity available at that time for absorbing the flood runoff and their proximity to the likely damage centre. They are operated with a carefully planned regulation schedule which takes into account both the safety of the dam and related structures and the safe carrying capacity of the lower reaches of the river in their present condition.

Reservoirs are more effective for flood management if, apart from the incidental moderation available for any type of storage on a river, specific flood space is earmarked, as in the case of DVC dams across the Damodar and its tributaries. The operation schedule or rule curve being followed should be reviewed and a suitable operation schedule/rule curve prescribed for the monsoon filling to ensure space for flood moderation but which can be filled for conservation at a later stage when high flows end.

In order to improve the efficiency of the reservoirs and improve the operation schedules for providing either incidental or specific flood moderation effects, arrangement for inflow forecasts should be made.

4.2.2 Detention Basins

Detention basins are usually formed by utilizing natural depressions/ swamps and lakes by improving their capacity by constructing encircling embankments and providing suitable devices for regulating the release of stored water. Since, the land under the marshes or low depression may hardly require much compensation and rehabilitation measures, this method is relatively expensive. The Ghaggar detention basin in Rajasthan is a good example. Depressions available upstream of Srinagar City, on the left bank of river Jhelum, the Mokama Tal area in Bihar and Ottu, Bhindawas, Kotla lakes in Haryana and various beels/haors of Barak basin are some examples of a few natural basins.

4.2.3 Embankments

Embankments (including ring bunds and town protection works) confine the flood flows and prevent spilling, thereby reducing the damage. These are generally cheap, quick

and most popular method of flood protection and have been constructed extensively in the past. These are reported to have given considerable protection at comparatively low costs, particularly in the lower reaches of large rivers. In many places, embankments may be the only feasible method of preventing inundation. Embankments are designed and constructed to afford a degree of protection against floods of a certain frequency and intensity or against the maximum recorded floods till the time of their planning only (in the absence of detailed hydrological data for longer periods) depending upon the location protected and their economic justification. The raising and strengthening of existing embankments have also been taken up in many of the flood prone States. In order that this work is done adequately, it is necessary to adopt the flood frequency approach in their redesign, taking into account the data of historical floods, which is now available.

Apart from the raising and strengthening works, erosion along the embankments and natural banks of the river systems has been a serious problem on which considerable expenditure has been incurred in the past. Particular mention could be made of the erosion problem of the embankment systems in Assam, Bihar, U.P, Punjab and West Bengal. The embankments, under serious attack by the major rivers and their tributaries, have to be suitably protected by spurs, pitching and other suitable anti-erosion measures. On many embankment systems like the Kosi embankment and Piprasi-Pipraghat embankment on the Gandak in Bihar, the river attack is so severe that the protection measures required to be taken are large and cannot be covered under the normal maintenance works.

A number of Committees constituted in various countries as well as in India have deliberated upon the utility of embankments as a means for flood protection. Extreme views have emerged out of these. Many NGOs have voiced serious criticism about existing embankments. One is that problems of flood can be solved by removal of all the existing embankments and the other diametrically opposite being that construction of more and more lengths of the embankments and their raising and strengthening is the only practicable medium/short term solution for the flood problems. The reason for such wide divergence in opinion is obviously due to the inadequacy of sufficient number of performance evaluation studies of existing embankments and the divergent views on their performance. As experienced, some embankments have provided positive benefits by ensuring sustained protection against floods and river spills while on the other hand, some embankments have, in certain reaches of the river, aggravated the flood problem by rising river bed levels, decreasing their carrying capacity, causing drainage congestion in the countryside and distorting the levels/gradient of the outfall points.

Construction of embankment with proper roads has been perceived as providing useful communication linkages and reliable surface network for areas that are liable to stand completely cut off during floods and thereafter. They could provide quick communication for facilitating better supervision and maintenance of the flood protection works and provide all weather communication facilities to the adjoining habitats. As such, they are often deemed as the life line during floods.

It is also recognised that embankments are not an unmixed blessing. They have adverse effects such as interference with drainage, inability to stand erosion, etc. which should be considered before planning this measure for flood management.

As such, this method of flood management may be undertaken only after carrying out detailed hydrological and other studies regarding their favourable and adverse effects.

4.2.4 Channelisation of Rivers

Some of the states are proposing channelisation of rivers, at least in certain reaches, in the context of tackling the extensive meandering problems of the rivers, activating navigational channels and training these rivers into their original courses. While venturing to channelise rivers, thought must be given in allowing the river certain freedom to flow and right of way to pass its flood waters and silt load within its natural waterway. The dynamic nature of the rivers should be appreciated and preventive measures planned accordingly instead of pinning down the river by channelising.

4.2.5 Channel Improvement

The method of improving the channel by improving the hydraulic conditions of the river channels by desilting, dredging, lining etc., to enable the river to carry its discharges at lower levels or within its banks has been often advocated but adopted on a very limited extent because of its high cost and other problems.

Dredging operations of the Brahmaputra, which were undertaken in the early seventies on an experimental basis, were discontinued because of their prohibitive cost and limited benefits. Dredging in selected locations may perhaps be considered as a component of a package of measures for channel improvement to check the river bank erosion subject to techno-economic justification. It may be economically justifiable as a method for channel improvement where navigation is involved. Dredging is sometimes advocated for clearing river mouth or narrow constrictions.

4.2.6 Drainage Improvement

Surface water drainage congestion due to inadequacy of natural or artificial drainage channels to carry the storm water discharge within a reasonable period causes damages. It is often difficult to distinguish between flood and drainage congestion situations. This problem is rather acute in Andhra Pradesh, Bihar, Haryana, Punjab, Orissa, Uttar Pradesh, Assam and West Bengal. Therefore, improvement of drainage by construction of new channels or improvement in the discharge capacity of the existing drainage system is recommended as an integral part of the flood management programme in the country.

Stress has to be laid on improving the existing natural drainage system in the flood plains so that what should essentially be flooding of a few days should not get prolonged for months. In this context, the importance of the system 'dhars' or 'old channels', which efficiently served the function of draining away the spillage and surface flows generated by local rains, must be recognised. The blocking of these natural drainage channels, which

is normally done in the name of “reclamation for development” because of paucity of land or vested interest, must be firmly discouraged. This applies also to all natural depressions, which are targeted for reclamation.

The adequacy of existing sluices and drainage channels should be reviewed in areas suffering from drainage congestion. If the capacities of existing sluices in embankments and drainage channels are inadequate, this should be improved by increasing the vents and improving outfall conditions.

4.2.7 Diversion of Flood Waters

Diversion of flood waters takes a part of the flood discharge to another basin or to the same basin downstream of the problem area or to a depression where it could be stored for subsequent release. This measure can be used to manage unusual floods around cities as in the case of flood spill channel near Srinagar and also in the lower reaches of a river near the sea as in the case of Krishna Godavari drainage scheme. Important schemes under execution or under planning are the supplementary drain in Delhi, the outfall channel in Jammu and Kashmir, the Damodar in the lower reaches in West Bengal, the Thottapally Spillway diversion in Kerala, the Kolleru lake diversion into the sea in Andhra Pradesh, the Kama-Pahari drain in Rajasthan and the Hulwaa drain in Uttar Pradesh.

4.2.8 Watershed Management

The watershed management measures include developing and conserving the vegetative and soil covers and also to undertake structural works like check-dams, detention basins, diversion channels, etc. In the watershed management of upper catchment, land treatment through afforestation and grass land development practices should be supplemented by structural works for retarding the water velocity and arresting silt.

4.3 Non-Structural Measures

4.3.1 Flood Plain Zoning

Flood-plain zoning is a concept central to flood plain management. This concept recognizes the basic fact that the flood plain of a river is essentially its domain and any intrusion into or developmental activity therein must recognize the river’s ‘right of way’. Flood-plain zoning measures aim at demarcating zones or areas likely to be affected by floods of different magnitudes or frequencies and probability levels, and specify the types of permissible developments in these zones, so that whenever floods actually occur, the damage can be minimized, if not avoided. Unfortunately, while all in principle generally endorse this approach, scant attention is given to it in actual practice, leading to increased flood damages.

The Central Water Commission (CWC) has been continuously impressing upon the states the need to take follow-up action to implement the flood plain zoning approach. A model draft bill for flood plain zoning legislation was also circulated by the Union Government in 1975 to all the States.

This bill envisages zoning of flood plain of a river according to flood frequencies and defines the type of use of flood plain. The bill aims at no hindrance to natural flow of river and mitigation of likely damage by floods.

Model Flood Plain Zoning Bill was circulated by MOWR in 1975 but only Manipur, Rajasthan and Uttarakhand had enacted legislation and actual flood plain zoning is yet to be done.

Ministry of Water Resources has taken up the matter with all States and invited their views for revision of existing provisions of Model Bill. Some States like Bihar and Delhi have informed inability in implementation of the of Flood Plain Zoning Bill due to problems of shifting people from severe flood plain zones to elsewhere. Response from other States in this regard is awaited.

4.3.2 Flood Forecasting and Flood Warning

The work of flood forecasting and warning in India is entrusted with the Central Water Commission (CWC). Flood Forecasting and flood warning in India was commenced in a small way in the year 1958 with the establishment of a unit in the Central Water Commission (CWC), New Delhi, for flood forecasting for the river Yamuna at Delhi. Presently, there are 878 Hydrological and Hydro-meteorological sites being operated by CWC across the country covering 20 river basins for gauge, discharge, sediment & water quality observations. The formulation of a forecast requires effective means of real time data communication network from the forecasting stations and the base stations. The activity of flood forecasting comprises of Level Forecasting and Inflow Forecasting. The level forecasts help the user agencies in deciding mitigating measures like evacuation of people and shifting people and their movable property to safer locations. The Inflow Forecasting is used by various dam authorities in optimum operation of reservoirs for safe passage of flood downstream as well as to ensure adequate storage in the reservoirs for meeting demand during non-monsoon period.

In December, 2015, the Ministry has approved the Plan Scheme “Flood Forecasting” for Rs.281 crore for XII Plan to meet the expenditure on continuation of flood forecasting activities and undertake further work of modernisation of existing stations as well as expansion of flood forecasting network to cover more areas.

Presently, Flood Forecasts are issued by CWC at 226 stations (166 Level Forecast Stations + 60 Inflow Forecast Stations). Annually, about 6000 flood forecasts are issued by CWC during floods with accuracy of more than 96%. During high, unprecedented and emergent situations, alerts are also issued through SMS to the concerned authorities on their mobile phones.

In order to meet the requirement of real-time data collection, automatic data transmission and flood forecast formulation, expeditious data/information dissemination, the Central Water Commission has undertaken modernization and expansion of its data

collection and flood forecast network. So far, CWC has set up modern system of data collection, flood forecast formulation and its dissemination to concerned States/Agencies.

4.3.3 Flood Proofing

Flood proofing measures adopted in India in the past, consisted in raising a few villages above pre-determined flood levels and connecting them to nearby roads or high lands. Under this programme, several thousands of villages were raised in Uttar Pradesh in the fifties. In West Bengal and Assam also, land-fills were attempted in villages to keep houses above flood levels even though nearby agricultural lands were liable to inundation.

4.3.4 Living with Floods

The most common adjustment to the flood hazard in both flood plains and coastal areas is simply to suffer and bear the losses when they occur. This is essentially the response in areas where there is constraint of funds to do anything else or there is no alternative response. In some quarters, there is a feeling that it would be better to bear the occasional loss rather than go in for very expensive flood protection measures. With the growing emphasis on assessing all types of responses to the flood hazard in benefit-cost terms, in many cases, bearing the loss may be the cheapest of the range of possible adjustments, especially as far as the expenditure of public money is concerned.

In developed countries, the experience of being flooded usually results in taking up some adjustments which are meant to offset future losses. Recently, in the developing countries also, the rising needs for food crops and the increasing impact of flood losses on the economy have brought into focus the need for reduction of such losses. It is, now-a-days, possible to reduce such losses without much cost by the proper management of flood plains. This and other factors indicate that this approach of living with floods is gradually being abandoned and other types of adjustments are being considered.

There are conflicting views on managing the river system or leaving it as it is. The critics of flood control works such as embankments and reservoirs argue that they aggravate the problem rather than solving. They plead for not only stopping constructing new flood control structures but also removal of already constructed ones. They are justified to some extent because improperly designed, constructed, spaced and poorly maintained flood control work without due regard to river morphology etc have not given much relief to flood problem in some areas. However, well designed and maintained works including reservoirs have by and large given substantial benefits.

The pressure of population on land resource and need for developmental activities have forced the planners to go for structural/ engineering measures for management of flood. It has also been observed that in the areas where flood management works have been taken up, developmental activities have picked up & the areas prone to flooding have remained backward.

Keeping the above in view, it is pertinent that the Government has to have some strategy to develop vast flood plains available along major alluvial rivers in National Interest.

As per the views expressed by the experts, floods are natural phenomena except the situations involving failure of flood control structures or faulty regulation of reservoirs; and permanent immunity against floods is not techno-economically feasible. However, impacts of floods can be mitigated to a certain degree by adopting appropriate structural and non-structural measures.

Chapter 5

Outcome of Flood Management Measures

The chapter on outcome on flood management measures has been prepared based upon the data received from Accountant General of the States/UTs. The data mainly covers expenditure on revenue and capital expenditure related to the flood management measures which covers mainly structural measures applied for flood management. Further the chapter also covers non-structural measures wherein flood forecasting in respect of population affected has been presented.

5.1 Financial Performance of Flood Control and Drainage Projects

This chapter deals with financial performance of flood control and drainage projects. Under the major head “flood control and drainage”, there are three activities: Flood control, anti-sea erosion and improvement of drainage system. While classifying expenditure under these categories, as may be seen from Table A in Chapter 1, two sub-major heads, namely ‘Land’ and ‘General’ have been added with these three activities. However, during the reference period of this publication, no expenditure was found against the sub-major head “land”. As these activities are geographically location specific, all the three activities are not relevant to all the States and UTs of the country. The projects relating to these activities were carried out by State and Union Government especially in case of Union Territories.

As it is a fact that flood control is relevant in flood prone areas and anti-sea erosion is relevant in coastal areas, developing drainage is warranted in water logged areas. The anti-sea erosion projects are expected to be implemented in coastal areas. However, its scope has been broadened to include any other type of soil erosion also e.g. anti-river erosion.

The projects under the activities of this publication are not spread over all the States and UTs. But, the projects are fairly distributed over the country. Table 1 gives a summary indicating the States where these projects were carried out during 2000-2016. It shows that anti-sea erosion projects were implemented in 9 States including Puducherry and Union Government while drainage and flood control projects were implemented in 17 and 28 States respectively.

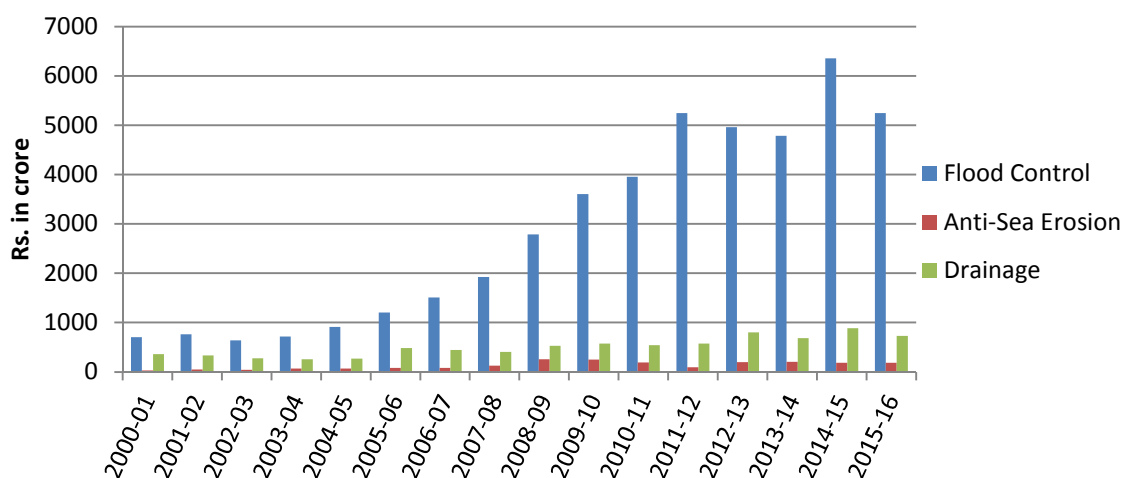
Table 1: States incurring expenditure by type of project during 2000-2016	
Project type	State
Flood control	All States excepting Mizoram and Nagaland
Anti-sea erosion	Goa, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Mizoram and Odisha, Puducherry, Tamil Nadu, West Bengal
Drainage	Andhra Pradesh, Arunachal Pradesh, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Jammu & Kashmir, Maharashtra, Odisha, Puducherry, Punjab, Sikkim, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, West Bengal
None	Nagaland

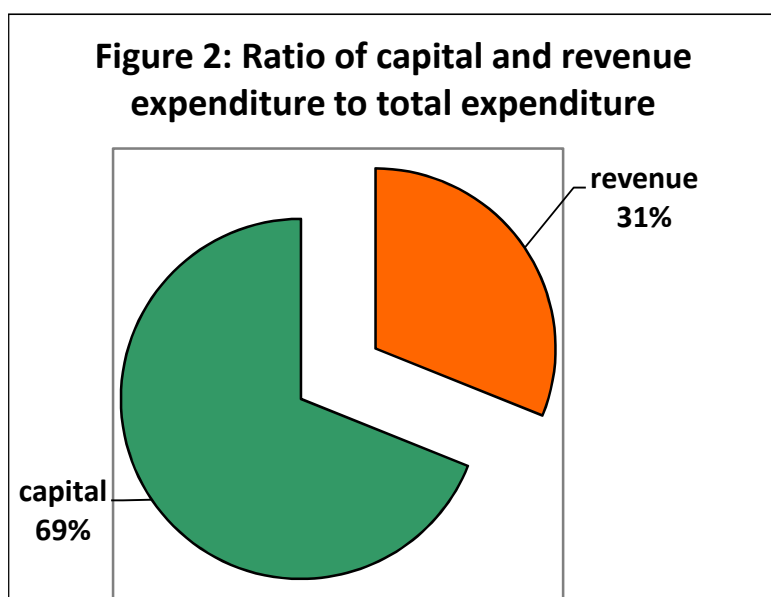
Table 2 presents yearly expenditure incurred during 2000-2016 by sub-major head of accounts. Here yearly expenditures are inclusive of both capital and revenue expenditure. Its penultimate row gives average yearly expenditure under the sub-major head of accounts during the reference period 2000-2016. And, the last row gives the percentage distribution of expenditure over the sub-major heads during this period. The table reveals that a yearly expenditure of ₹2832.03 crore was spent for flood control, ₹132.81crore on anti-sea erosion and ₹509.67 crore on drainage projects on an average in the country during 2000-2016. Overall, the expenditure incurred under head ‘general’ was only about ₹15.07 crore. However, the requirement of these protection measures are not uniform over the States of the country and all are not relevant to all States and UTs. The expenditure levels indicate the relative need/coverage of the type of the projects. The major expenditure is incurred under flood control projects followed by projects on drainage control. The data does not show any perceptible changes in total expenditure till 2004-05. However, it started increasing thereafter. A close look of the bar diagram reveals that there is an increasing trend of expenditure during 2004-2011 thereafter the data have slight fluctuation for flood control but no such conclusion can be drawn for anti-sea erosion or drainage projects.

Table 2: Yearly expenditure incurred by sub-major head of accounts during 2000-2016

Year	(Rs in crore)				
	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6
2000-01	703.48	32.57	359.64	126.75	1222.44
2001-02	763.41	49.29	333.48	79.88	1226.06
2002-03	640.78	45.75	274.10	13.71	974.35
2003-04	714.50	68.24	258.91	8.12	1049.77
2004-05	914.03	69.94	268.12	2.01	1254.09
2005-06	1207.03	81.51	481.53	2.11	1772.17
2006-07	1511.99	83.78	444.00	3.05	2042.81
2007-08	1922.93	129.73	409.20	0.52	2462.38
2008-09	2788.85	255.49	528.64	0.41	3573.39
2009-10	3601.25	249.15	576.59	0.00	4426.99
2010-11	3952.34	192.43	543.57	0.37	4688.71
2011-12	5245.93	93.29	574.43	0.88	5914.54
2012-13	4962.18	197.97	800.63	0.60	5961.37
2013-14	4782.93	203.36	684.34	1.86	5672.50
2014-15	6353.31	185.85	888.18	0.78	7428.11
2015-16	5247.60	186.55	729.42	0.00	6163.58
Average (Over the above years)	2832.03	132.81	509.67	15.07	3489.58
Percentage of expenditure	81.16	3.81	14.61	0.43	100.00

Figure 1: Yearly expenditure incurred by Sub-major head of accounts during 2000-2016





The expenditure given in Table 2 has been split into capital expenditure and revenue expenditure and presented in Tables 3 and 4 respectively. In general, capital expenditure is much higher than the corresponding revenue expenditure in a State. These are in about 69:31 ratio (see Figure 2). Table 3 shows yearly capital expenditure on an average is about ₹ 2029 crore for flood control

projects, ₹99 crore for anti-sea erosion project and ₹278 crore for drainage projects during 2000-01 to 2015-16, 84.35% of total expenditure in these projects were incurred for flood control. It also shows that capital expenditure on flood control remained more or less stable during 2000-2004 at about ₹ 300 crore and thereafter, it has started increasing and reached to a level of ₹ 3995 crore in 2011-12, Maximum expenditure of ₹4800 crore occurred in 2014-15. Under anti-sea erosion projects there was an increasing trend of capital expenditure during 2000-2016. However, there was a break point at 2010-12. For drainage projects no trend is exhibited. The trend of total capital expenditure is found to be similar to that of flood control as it constitutes the major share of the total capital expenditure. For flood control schemes, capital expenditure accounts 71.63% of total expenditure while for anti-sea erosion, it was only 74.53% of total expenditure and about 54.45% for drainage projects.

Table 3: Yearly capital expenditure incurred by sub-major head of accounts during 2000-2016					
Year	(Rs in crore)				
	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6
2000-01	308.40	20.31	173.32	0.00	502.03
2001-02	355.50	29.62	177.42	0.00	562.54
2002-03	317.84	35.88	107.75	0.00	461.47
2003-04	307.91	54.37	102.08	0.00	464.36
2004-05	524.50	57.67	110.84	0.00	693.02
2005-06	727.52	62.87	288.38	0.00	1078.77
2006-07	976.33	71.80	247.62	0.00	1295.75
2007-08	1369.46	107.80	264.38	0.00	1741.63
2008-09	2007.18	188.99	313.27	0.00	2509.44
2009-10	2760.11	220.26	284.52	0.00	3264.89
2010-11	3161.57	160.97	234.41	0.00	3556.96
2011-12	3995.36	48.24	286.49	0.00	4330.09
2012-13	3623.44	114.92	431.91	0.00	4170.27
2013-14	3308.94	148.98	368.61	0.00	3826.53
2014-15	4800.48	131.35	518.61	0.00	5450.44
2015-16	3912.91	129.62	530.76	0.00	4573.29
Average (Over the above years)	2028.59	98.98	277.52	0.00	2405.09
Percentage of expenditure	84.35	4.12	11.54	0.00	100.00
% Share of Capital expenditure out of total expenditure	71.63	74.53	54.45	0.00	68.92

Figure 3: Yearly Capital Expenditure incurred by sub-major head of accounts during 2000-2016

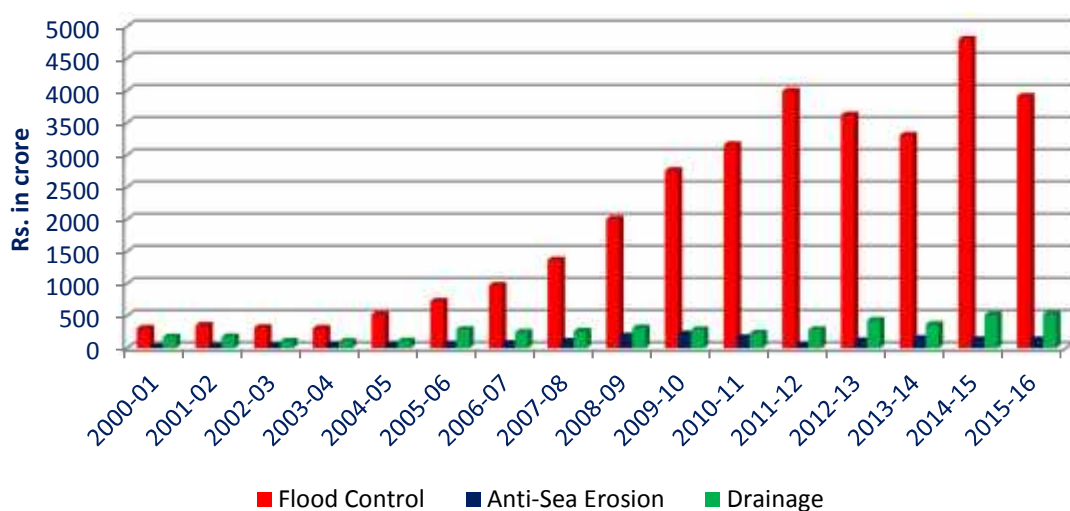


Table 4: Yearly revenue expenditure incurred by sub-major head of accounts during 2000-2016

Year	(Rs in crore)				
	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6
2000-01	395.08	12.25	186.32	126.75	720.41
2001-02	407.91	19.67	156.07	79.88	663.52
2002-03	322.94	9.87	166.36	13.71	512.88
2003-04	406.59	13.87	156.82	8.12	585.40
2004-05	389.53	12.26	157.28	2.01	561.07
2005-06	479.51	18.64	193.15	2.11	693.41
2006-07	535.66	11.98	196.38	3.05	747.06
2007-08	553.47	21.93	144.82	0.52	720.74
2008-09	781.67	66.50	215.37	0.41	1063.95
2009-10	841.14	28.89	292.06	0.00	1162.09
2010-11	790.76	31.46	309.16	0.37	1131.75
2011-12	1250.57	45.05	287.94	0.88	1584.44
2012-13	1338.74	83.05	368.72	0.60	1791.10
2013-14	1473.99	54.39	315.72	1.86	1845.97
2014-15	1552.82	54.50	369.57	0.78	1977.67
2015-16	1334.69	56.93	198.66	0.00	1590.29
Average (Over the above years)	803.44	33.83	232.15	15.07	1084.49
Percentage of expenditure	74.09	3.12	21.41	1.39	100.00
% Share of Revenue expenditure out of total expenditure	28.37	25.47	45.55	100.00	31.08

Figure 4: Yearly Revenue Expenditure incurred by sub-major head of accounts during 2000-2016

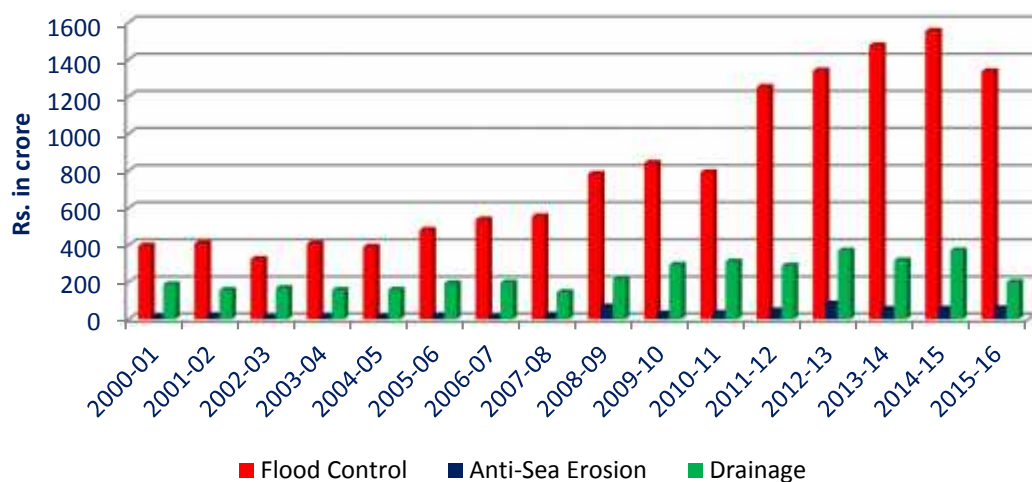


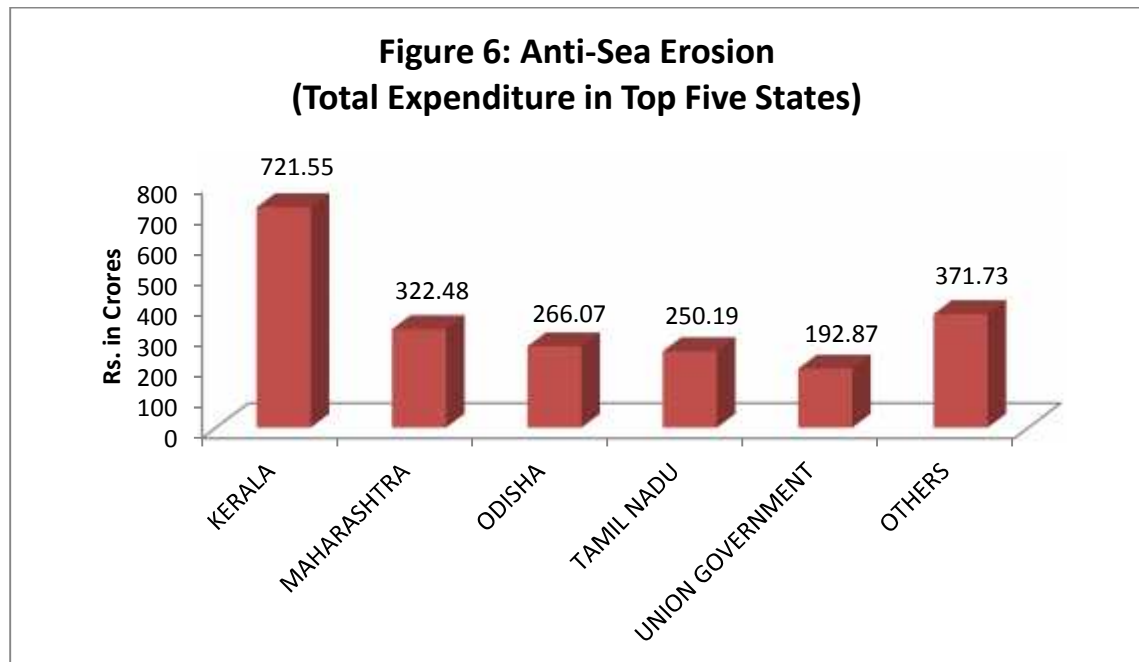
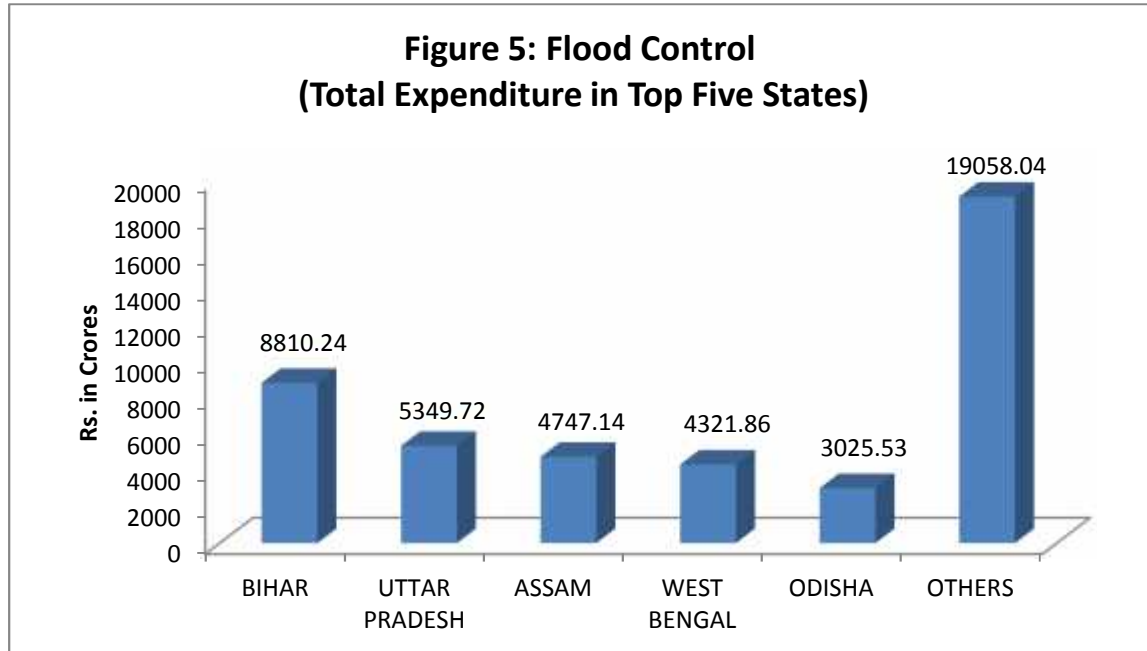
Table 4 gives no clear-cut pattern discerned by revenue expenditure for total. However, overall there is an increasing trend of revenue expenditure for flood control during 2003-15 with a dip in expenditure for 2010-11. All the figures presented are at current prices unless otherwise mentioned. For flood control schemes, capital expenditure accounts 28.37% of total expenditure while for anti-sea erosion it was only 25.47% of total expenditure and 45.55% for drainage projects.

Table 5: Distribution of expenditure by sub-major head of accounts and State during 2000-2016

State	(Rs in crore)							
	Flood Control (01)		Anti-Sea Erosion (02)		Drainage (03)		Total (99)	
	Expd	%	Expd	%	Expd	%	Expd	%
1	2	3	4	5	6	7	8	9
ANDHRA PRADESH	2001.21	4.42	0.00	0.00	1717.15	21.06	3718.36	6.69
ARUNACHAL PRADESH	633.44	1.40	0.00	0.00	1.00	0.01	634.44	1.14
ASSAM	4747.14	10.48	0.00	0.00	0.00	0.00	4747.14	8.54
BIHAR	8810.24	19.44	0.00	0.00	229.27	2.81	9039.50	16.26
CHHATTISGARH	88.46	0.20	0.00	0.00	29.88	0.37	118.35	0.21
DELHI	392.49	0.87	0.00	0.00	1270.34	15.58	1701.39	3.06
GOA	297.70	0.66	127.88	6.02	134.87	1.65	560.46	1.01
GUJARAT	857.19	1.89	0.00	0.00	495.90	6.08	1353.08	2.43
HARYANA	1511.91	3.34	0.00	0.00	0.00	0.00	1511.91	2.72
HIMACHAL PRADESH	909.90	2.01	0.00	0.00	0.00	0.00	909.90	1.64
JAMMU & KASHMIR	1550.98	3.42	0.47	0.02	0.46	0.01	1551.91	2.79
JHARKHAND	152.05	0.34	0.00	0.00	0.00	0.00	152.05	0.27
KARNATAKA	270.60	0.60	152.19	7.16	0.00	0.00	422.79	0.76
KERALA	779.76	1.72	721.55	33.96	0.00	0.00	1501.30	2.70
MADHYA PRADESH	100.76	0.22	0.00	0.00	0.00	0.00	100.76	0.18
MAHARASHTRA	419.04	0.92	322.48	15.18	177.73	2.18	919.25	1.65
MANIPUR	735.43	1.62	0.00	0.00	0.00	0.00	735.43	1.32
MEGHALAYA	56.26	0.12	0.00	0.00	0.00	0.00	56.26	0.10
MIZORAM	0.00	0.00	21.03	0.99	0.00	0.00	21.03	0.04
NAGALAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ODISHA	3025.53	6.68	266.07	12.52	722.15	8.86	4013.75	7.22
PUDUCHERRY	91.07	0.20	5.35	0.25	223.33	2.74	319.76	0.58
PUNJAB	1627.10	3.59	0.00	0.00	1197.11	14.68	2824.21	5.08
RAJASTHAN	106.41	0.23	0.00	0.00	0.00	0.00	106.41	0.19
SIKKIM	142.07	0.31	0.00	0.00	13.59	0.17	155.66	0.28
TAMIL NADU	2625.28	5.79	250.19	11.77	16.99	0.21	2892.45	5.20
TELANGANA	85.50	0.19	0.00	0.00	0.32	0.00	85.82	0.15
TRIPURA	269.40	0.59	0.00	0.00	0.00	0.00	269.40	0.48
UNION GOVERNMENT	2366.23	5.22	192.87	9.08	0.00	0.00	2559.10	4.60
UTTAR PRADESH	5349.72	11.81	0.00	0.00	726.11	8.90	6075.83	10.93
UTTARAKHAND	987.80	2.18	0.00	0.00	0.02	0.00	987.82	1.78
WEST BENGAL	4321.86	9.54	25.86	1.22	1198.97	14.70	5546.69	9.98
TOTAL	45312.54	100.00	2085.94	100.00	8155.17	100.00	55592.20	100.00

Expd : expenditure

Table 5 presents total expenditure – both capital and revenue - incurred during 2000-2016 by sub-major head of accounts over States. It shows that the States, namely, Bihar, Uttar Pradesh, Assam, West Bengal, Odisha and Tamil Nadu have implemented flood control related projects considerably higher compared to other States. As regards anti-sea erosion projects, they were undertaken mainly in Kerala, Maharashtra, Odisha and Tamil Nadu.



**Figure 7: Drainage
(Total Expenditure in Top Five States)**

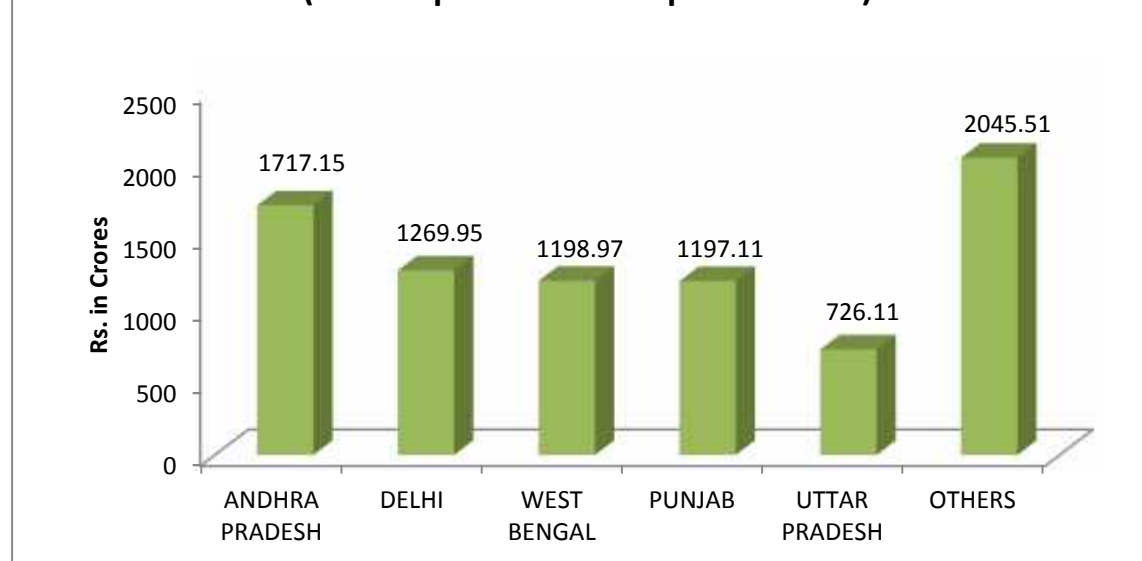


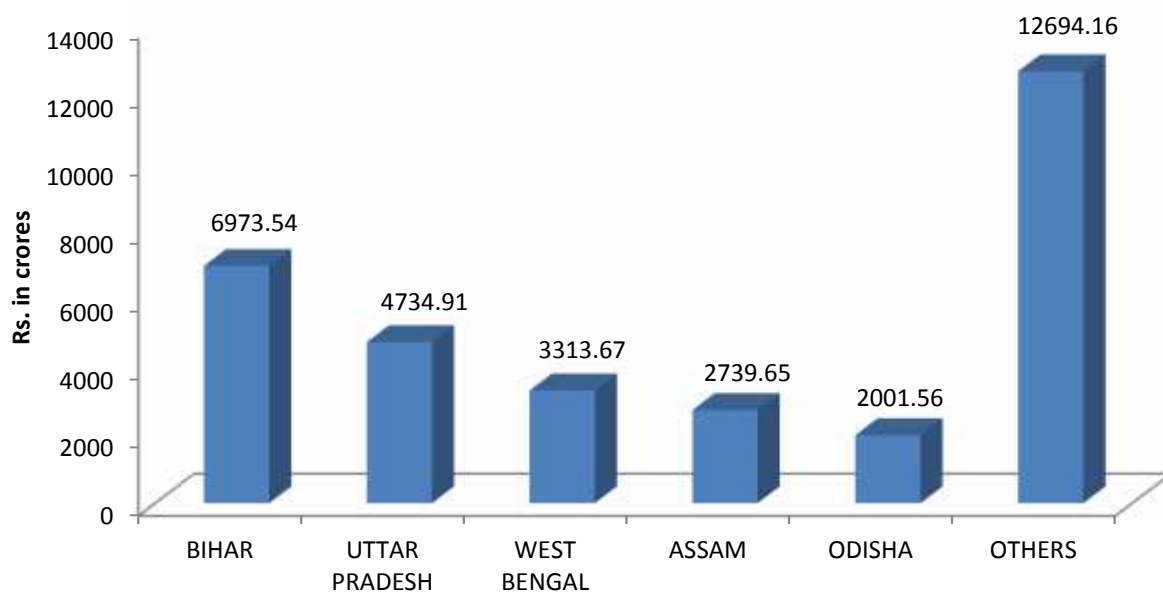
Table 6 presents capital expenditure incurred during 2000-2016 by sub-major head of accounts over States. It shows that the States, namely, Bihar, Uttar Pradesh, West Bengal, Assam, Odisha, Tamil Nadu and Andhra Pradesh have implemented flood control related projects considerably higher compared to other States. The States Mizoram and Nagaland have not taken up any such project.

Table 6: Distribution of capital expenditure by sub-major head of accounts and State during 2000-2016

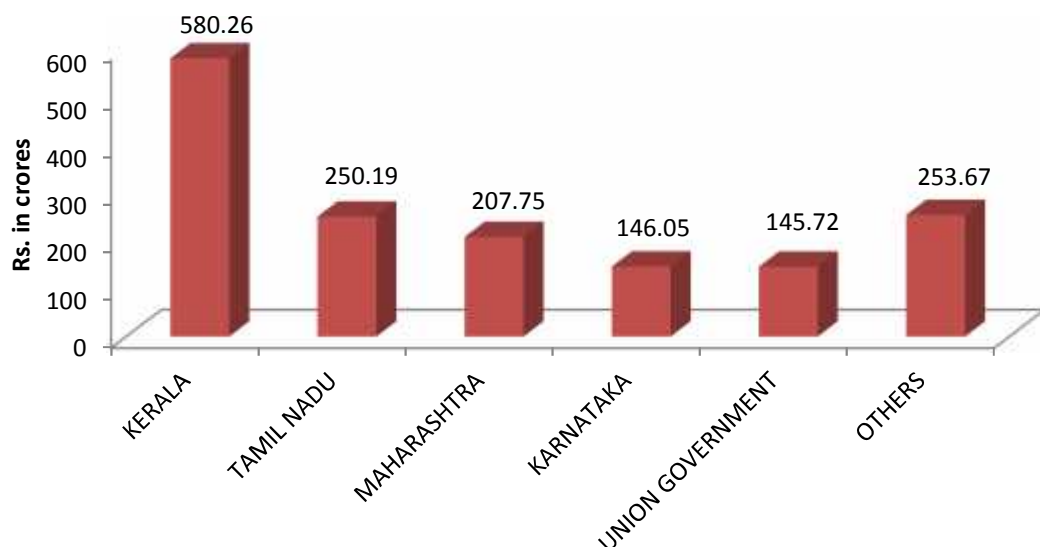
State	(Rs in crore)							
	Flood Control (01)		Anti-Sea Erosion (02)		Drainage (03)		Total (99)	
	Expd	%	Expd	%	Expd	%	Expd	%
1	2	3	4	5	6	7	8	9
ANDHRA PRADESH	1983.67	6.11	0.00	0.00	484.95	10.92	2468.61	6.42
ARUNACHAL PRADESH	482.27	1.49	0.00	0.00	1.00	0.02	483.27	1.26
ASSAM	2739.65	8.44	0.00	0.00	0.00	0.00	2739.65	7.12
BIHAR	6973.54	21.49	0.00	0.00	0.51	0.01	6974.05	18.12
CHHATTISGARH	73.08	0.23	0.00	0.00	0.00	0.00	73.08	0.19
DELHI	50.17	0.15	0.00	0.00	631.17	14.21	681.34	1.77
GOA	213.43	0.66	112.64	7.11	115.88	2.61	441.95	1.15
GUJARAT	586.55	1.81	0.00	0.00	412.00	9.28	998.55	2.59
HARYANA	1511.91	4.66	0.00	0.00	0.00	0.00	1511.91	3.93
HIMACHAL PRADESH	847.39	2.61	0.00	0.00	0.00	0.00	847.39	2.20
JAMMU & KASHMIR	829.01	2.55	0.47	0.03	0.22	0.00	829.70	2.16
JHARKHAND	147.84	0.46	0.00	0.00	0.00	0.00	147.84	0.38
KARNATAKA	269.64	0.83	146.05	9.22	0.00	0.00	415.69	1.08
KERALA	578.47	1.78	580.26	36.64	0.00	0.00	1158.73	3.01

MADHYA PRADESH	100.76	0.31	0.00	0.00	0.00	0.00	100.76	0.26
MAHARASHTRA	401.58	1.24	207.75	13.12	29.79	0.67	639.12	1.66
MANIPUR	574.89	1.77	0.00	0.00	0.00	0.00	574.89	1.49
MEGHALAYA	45.48	0.14	0.00	0.00	0.00	0.00	45.48	0.12
MIZORAM	0.00	0.00	21.03	1.33	0.00	0.00	21.03	0.05
NAGALAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ODISHA	2001.56	6.17	88.32	5.58	610.31	13.74	2700.19	7.02
PUDUCHERRY	75.71	0.23	5.35	0.34	208.41	4.69	289.47	0.75
PUNJAB	516.79	1.59	0.00	0.00	1128.82	25.42	1645.60	4.28
RAJASTHAN	106.41	0.33	0.00	0.00	0.00	0.00	106.41	0.28
SIKKIM	30.14	0.09	0.00	0.00	13.59	0.31	43.73	0.11
TAMIL NADU	2000.96	6.16	250.19	15.80	-0.01	0.00	2251.14	5.85
TELANGANA	85.37	0.26	0.00	0.00	0.32	0.01	85.69	0.22
TRIPURA	157.60	0.49	0.00	0.00	0.00	0.00	157.60	0.41
UNION GOVERNMENT	86.88	0.27	145.72	9.20	0.00	0.00	232.60	0.60
UTTAR PRADESH	4734.91	14.59	0.00	0.00	358.72	8.08	5093.63	13.24
UTTARAKHAND	938.16	2.89	0.00	0.00	0.00	0.00	938.16	2.44
WEST BENGAL	3313.67	10.21	25.86	1.63	444.70	10.02	3784.24	9.83
TOTAL	32457.46	100.00	1583.65	100.00	4440.37	100.00	38481.48	100.00

**Figure 8: Flood Control
(Capital Expenditure in Top Five States)**



**Figure 9: Anti-Sea Erosion
(Capital Expenditure in Top Five States)**



**Figure 10: Drainage
(Capital Expenditure in Top Five States)**

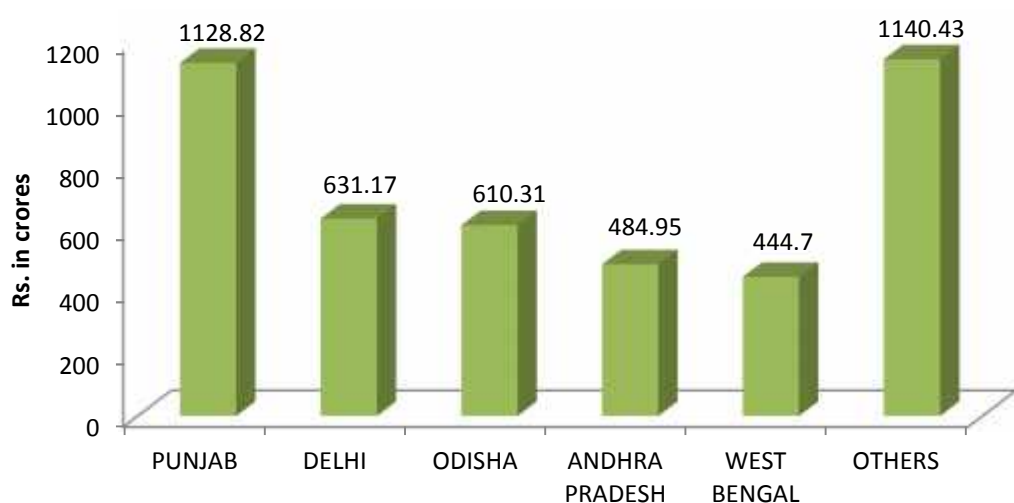


Table 7 presents revenue expenditure incurred during 2000-2016 by sub-major head of accounts over States. It shows that the States, namely, Union Government, Assam, Bihar, Punjab, Odisha and West Bengal have implemented flood control related projects considerably higher compared to other States. For anti-sea erosion, the revenue expenditure was considerable only in Odisha, Kerala and Maharashtra. For drainage projects the only States made considerable expenditure were Andhra Pradesh, West Bengal, Delhi, Uttar Pradesh and Bihar.

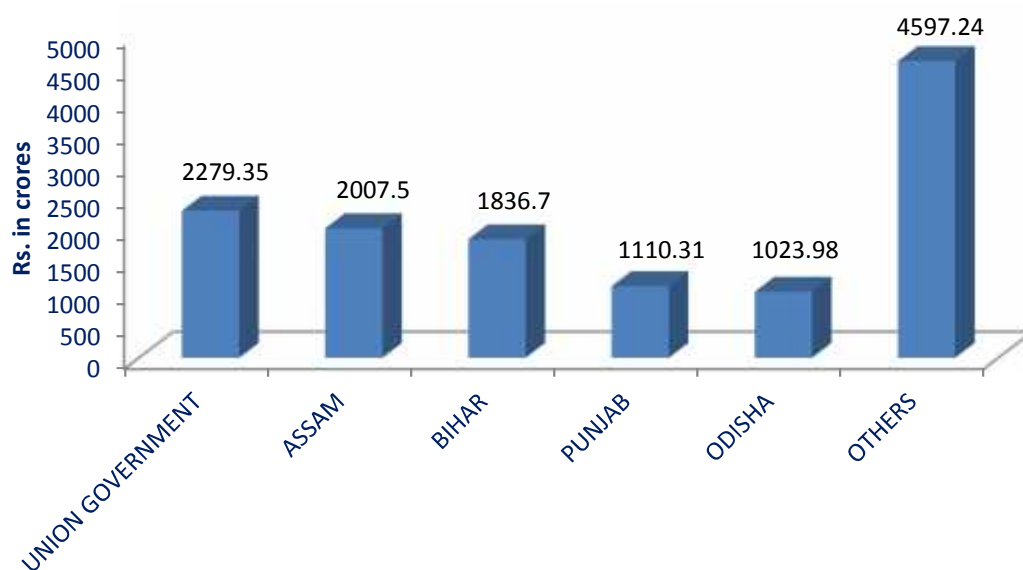
Table 7: Distribution of revenue expenditure by sub-major head of accounts and State during 2000-2016

State	(Rs in crore)							
	Flood Control (01)		Anti-Sea Erosion (02)		Drainage (03)		Total (99)	
	Expd	%	Expd	%	Expd	%	Expd	%
1	2	3	4	5	6	7	8	9
ANDHRA PRADESH	17.54	0.14	0.00	0.00	1232.21	33.17	1249.75	7.30
ARUNACHAL PRADESH	151.17	1.18	0.00	0.00	0.00	0.00	151.17	0.88
ASSAM	2007.50	15.62	0.00	0.00	0.00	0.00	2007.50	11.73
BIHAR	1836.70	14.29	0.00	0.00	228.75	6.16	2065.45	12.07
CHHATTISGARH	15.39	0.12	0.00	0.00	29.88	0.80	45.27	0.26
DELHI	342.32	2.66	0.00	0.00	639.16	17.21	1020.05	5.96
GOA	84.28	0.66	0.15	2.82	18.99	0.51	118.51	0.69
GUJARAT	270.64	2.11	0.00	0.00	83.90	2.26	354.53	2.07
HARYANA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HIMACHAL PRADESH	62.51	0.49	0.00	0.00	0.00	0.00	62.51	0.37
JAMMU & KASHMIR	721.97	5.62	0.00	0.00	0.24	0.01	722.21	4.22
JHARKHAND	4.20	0.03	0.00	0.00	0.00	0.00	4.20	0.02
KARNATAKA	0.97	0.01	0.06	1.13	0.00	0.00	7.10	0.04
KERALA	201.29	1.57	1.41	26.10	0.00	0.00	342.57	2.00
MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAHARASHTRA	17.46	0.14	1.15	21.20	147.94	3.98	280.13	1.64
MANIPUR	160.55	1.25	0.00	0.00	0.00	0.00	160.55	0.94
MEGHALAYA	10.78	0.08	0.00	0.00	0.00	0.00	10.78	0.06
MIZORAM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NAGALAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ODISHA	1023.98	7.97	1.78	32.84	111.84	3.01	1313.56	7.68
PUDUCHERRY	15.36	0.12	0.00	0.00	14.92	0.40	30.29	0.18
PUNJAB	1110.31	8.64	0.00	0.00	68.29	1.84	1178.60	6.89
RAJASTHAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SIKKIM	111.93	0.87	0.00	0.00	0.00	0.00	111.93	0.65
TAMIL NADU	624.32	4.86	0.00	0.00	17.00	0.46	641.32	3.75
TELANGANA	0.13	0.00	0.00	0.00	0.00	0.00	0.13	0.00
TRIPURA	111.80	0.87	0.00	0.00	0.00	0.00	111.80	0.65
UNION GOVERNMENT	2279.35	17.73	0.47	8.71	0.00	0.00	2326.50	13.60
UTTAR PRADESH	614.81	4.78	0.00	0.00	367.38	9.89	982.20	5.74
UTTARAKHAND	49.64	0.39	0.00	0.00	0.02	0.00	49.65	0.29
WEST BENGAL	1008.18	7.84	0.00	0.00	754.26	20.31	1762.45	10.30
TOTAL	12855.07	100.00	5.02	100.00	3714.80	100.00	17110.72	100.00

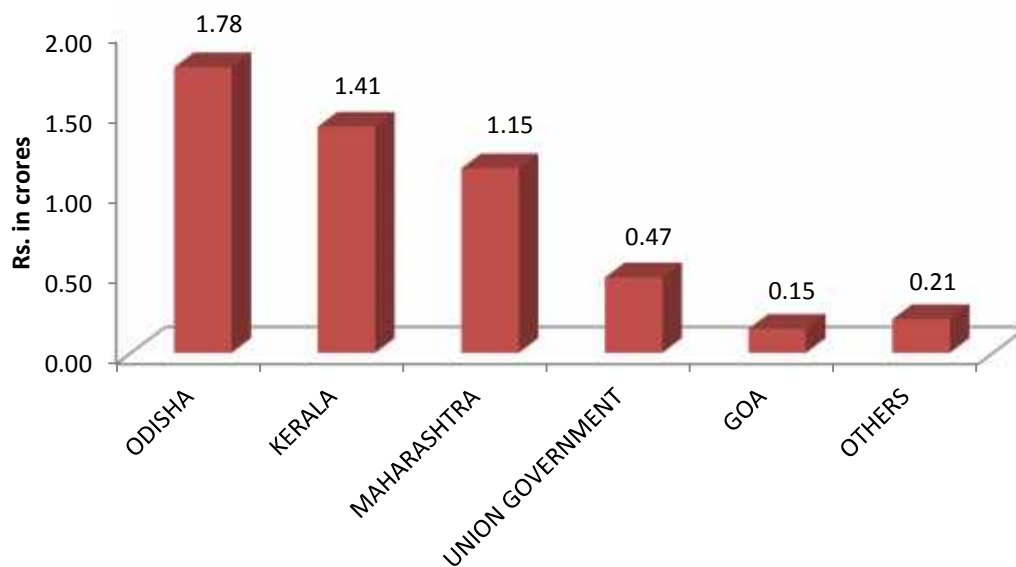
The detailed tables (Table A1 - A3¹) have been presented in Appendix Tables.

¹In these tables Union Government has been shown separately States. It corresponds to the projects directly spent by Union Government especially for UTs.

**Figure 11: Flood Control
(Revenue Expenditure in Top Five States)**



**Figure 12: Anti-Sea Erosion
(Revenue Expenditure in Top Five States)**



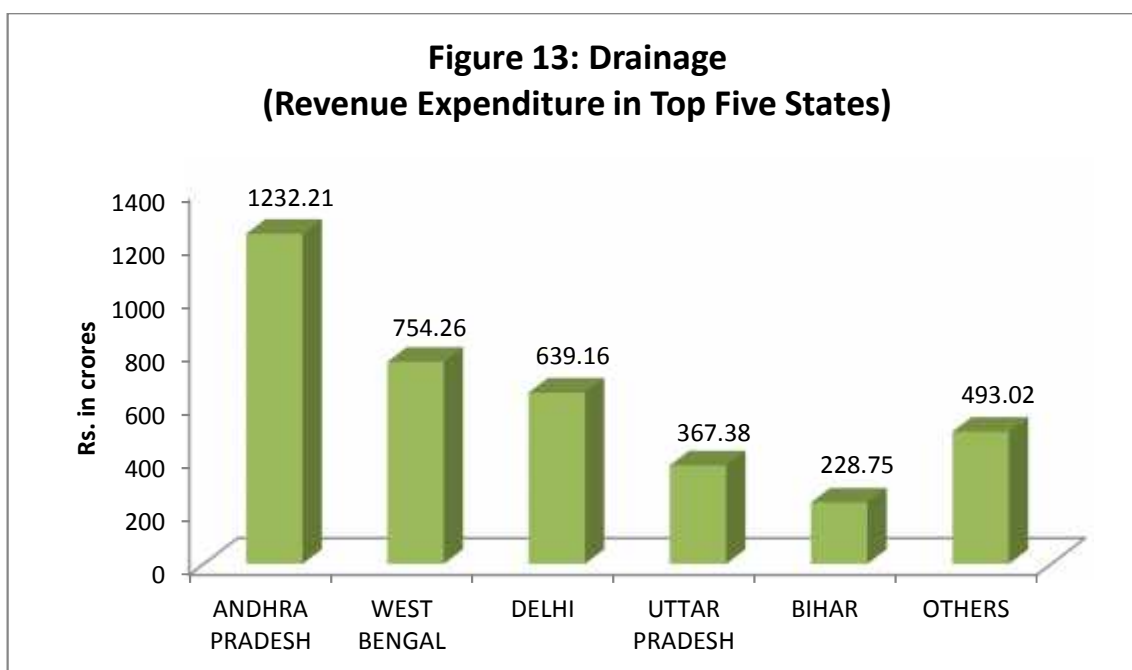


Table 8: Break up of expenditure by minor head of accounts during last 16 years from 2000-2016

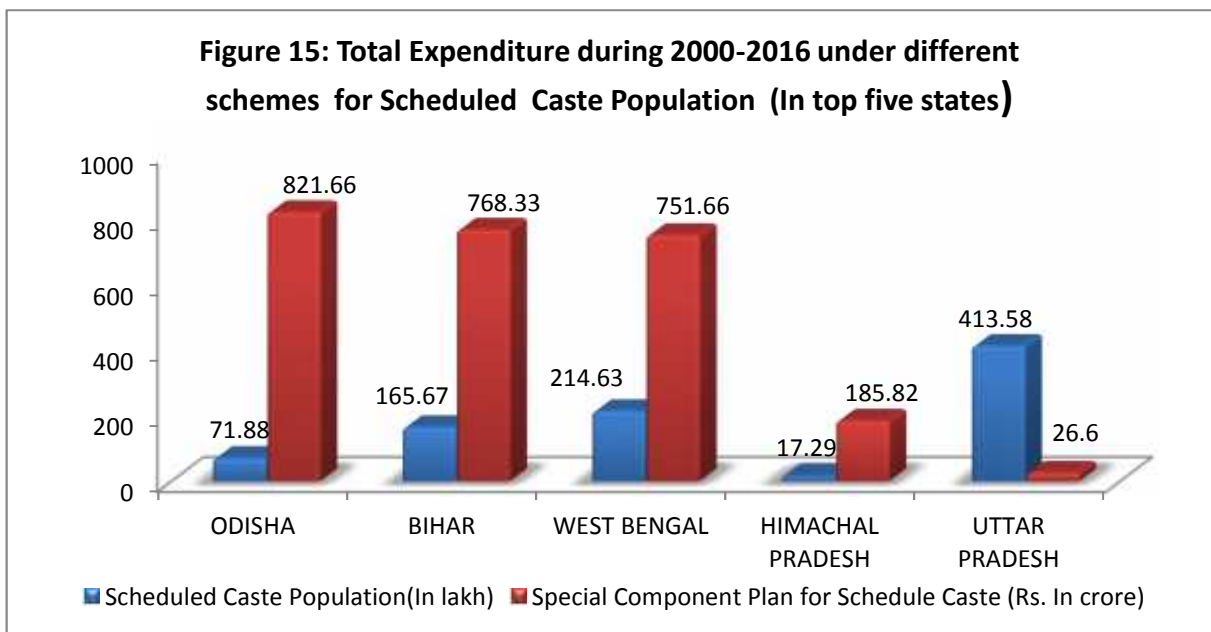
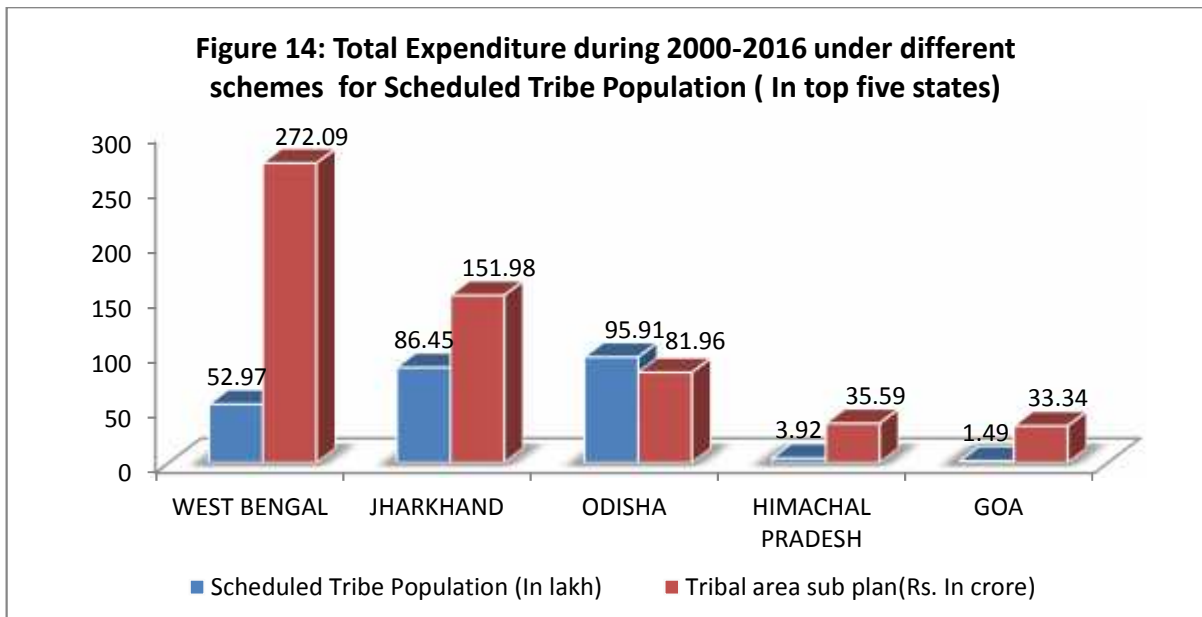
Minor head of accounts	Revenue expenditure		Capital expenditure		Total expenditure	
	Value (Rs crore)	%	Value (Rs crore)	%	Value (Rs crore)	%
1	2	3	4	5	6	7
001 Direction & Administration	6166.69	35.33	3726.53	10.19	9893.22	18.31
005 Survey & Investigation	4.32	0.02	0.00	0.00	4.32	0.01
052 Machinery & Equipment	979.38	5.61	26.06	0.07	1005.44	1.86
103 Training	4803.28	27.52	23129.86	63.25	27933.14	51.70
190 Investment in Public Sector & other Undertakings	114.73	0.66	314.66	0.86	429.39	0.79
191 Assistant to local bodies	2.75	0.02	0.00	0.00	2.75	0.01
198 Assistant to Gram Panchayats	1.12	0.01	0.00	0.00	1.12	0.00
201 Drainage & Flood Control	0.00	0.00	1163.81	3.18	1163.81	2.15
203 Anti water - Logging Scheme	0.00	0.00	20.10	0.05	20.10	0.04
789 Special Component Plan for SC	8.90	0.05	2609.75	7.14	2618.65	4.85
796 Tribal Area sub plan	0.45	0.00	589.29	1.61	589.75	1.09
799 Suspense	88.67	0.51	838.47	2.29	927.15	1.72
800 Other Expenditure	5303.39	30.38	4187.57	11.45	9490.96	17.57
Total	17455.39	100.00	36570.71	100.00	54026.09	100.00

Table 8 presents the break-up of expenditure incurred during 2000-2016 by minor head of accounts. Here, it may be mentioned that there are 32 minor heads for which some expenditure has been recorded by the Comptroller & Auditor General under the major heads 2711 or 4711. Out of 32, total expenditure under only 13 minor heads of accounts was ₹1 crore or more. These minor heads of accounts have been presented separately in

this table. The remaining heads have been merged. However, only three heads are significant. Interestingly, about more than one-half of the total expenditure has been reported against training. And, the 37% of the total is almost fifty-fifty among “direction & administration” and “other expenditure”. “Other expenditure” means the expenditure which has not been classified under one of the activities / minor heads listed in the table. Besides these three minor heads, no other minor had constituted significant part of the total expenditure. The expenditure on minor heads “special component plan for SC” and “Tribal area sub Plan” together constitutes about 5.93% of the total expenditure during 2000-2016. Although expenditure on the projects under “special component plan for Scheduled Caste (SC)” and “Tribal area sub Plan” is not very high. It would be worth to see the correlation between population size and expenditure incurred during 2000-2016. The figures are presented in Table 9. It shows the number of years during the reference period 2000-2016 that a State has implemented flood control and drainage projects under Tribal Area Sub-plan or Special Component Plan for Scheduled Caste. It reveals that the States accounting 65.49% ST and 40.11% SC did not spent any money under these two minor heads. The only States incurring significant expenditure were: Odisha, Bihar, West Bengal and Himachal Pradesh for special component plan for SC and West Bengal, Jharkhand and Odisha for Tribal Area Sub-plan.

Table 9: Total expenditure during 2000-2016 under schemes for social groups and their population

State	Population (In lakh)		Total expenditure during 2000-2016 (Rs in crore)		Number of years out of 16 years (2000-2016)	
	Scheduled Tribe	Scheduled Caste	Tribal area sub plan	Special Component Plan for Scheduled Caste	Tribal area sub plan	Special Component Plan for Scheduled Caste
	2	3	4	5	6	7
1						
BIHAR	13.37	165.67	-	768.33	0	5
GOA	1.49	0.25	33.34	4.40	10	10
HARYANA	-	51.14	-	18.06	0	2
HIMACHAL PRADESH	3.92	17.29	35.59	185.82	19	9
JHARKHAND	86.45	39.86	151.98	14.06	13	6
ODISHA	95.91	71.88	81.96	821.66	8	25
PUDUCHERRY	-	1.96	-	22.55	0	36
PUNJAB	-	88.60	-	2.74	0	5
RAJASTHAN	92.39	122.22	-	2.77	0	5
UNION GOVERNMENT	-	-	7.85	-	8	0
UTTAR PRADESH	11.34	413.58	-	26.60	0	2
UTTARAKHAND	2.92	18.93	6.93	-	6	0
WEST BENGAL	52.97	214.63	272.09	751.66	13	13
OTHER STATES	684.70	807.77	-	-	0	0
TOTAL	1045.46	2013.78	589.75	2618.65	77	118



In the CAG's report cumulative capital expenditure since beginning by head of accounts is given. Accordingly, the capital expenditure till March 2016 incurred by sub-major head of account has been presented in Table 10.

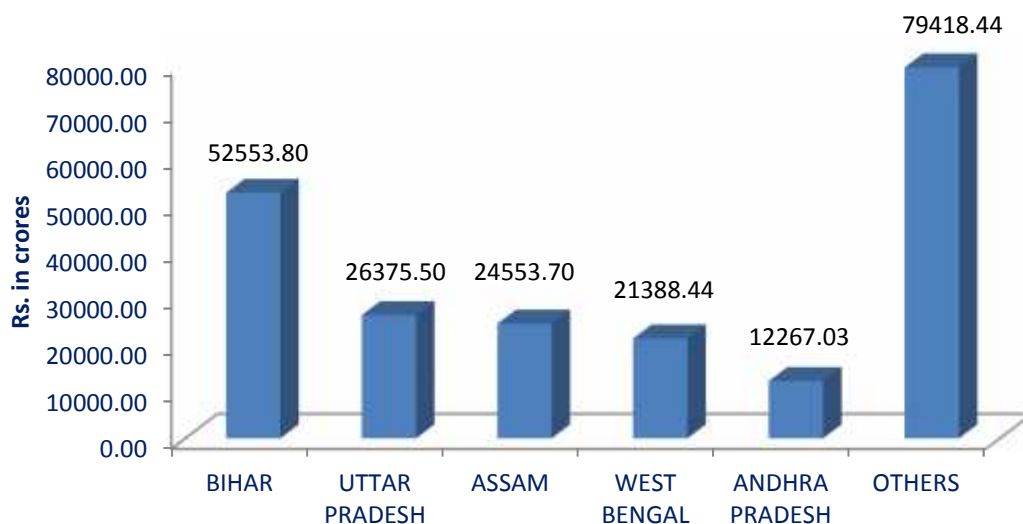
Table 10: Distribution of cumulative capital expenditure by sub-major head of accounts and State up to 31 March 2016

State	(Rs in crore)							
	Flood Control (01)		Anti-Sea Erosion (02)		Drainage (03)		Total (99)	
	Expd	%	Expd	%	Expd	%	Expd	%
1	2	3	4	5	6	7	8	9
ANDHRA PRADESH	12267.03	5.66	0.00	0.00	10163.68	18.69	22430.71	7.81
ARUNACHAL PRADESH	2914.35	1.35	77.04	0.47	5.18	0.01	2996.57	1.04
ASSAM	24553.70	11.34	0.00	0.00	0.00	0.00	24553.70	8.55
BIHAR	52553.80	24.27	0.00	0.00	451.10	0.83	53004.91	18.45
CHHATTISGARH	368.12	0.17	0.00	0.00	0.00	0.00	368.12	0.13
DELHI	552.83	0.26	0.00	0.00	7480.87	13.76	8033.70	2.80
GOA	1256.95	0.58	595.36	3.66	649.22	1.19	2501.54	0.87
GUJARAT	3280.88	1.52	0.00	0.00	4418.25	8.12	7699.13	2.68
HARYANA	11360.25	5.25	0.00	0.00	0.00	0.00	11360.25	3.96
HIMACHAL PRADESH	4560.85	2.11	0.00	0.00	14.89	0.03	4575.74	1.59
JAMMU & KASHMIR	6763.55	3.12	110.69	0.68	1.45	0.00	6875.69	2.39
JHARKHAND	456.10	0.21	0.00	0.00	0.00	0.00	456.10	0.16
KARNATAKA	2125.61	0.98	1686.64	10.36	0.00	0.00	3812.25	1.33
KERALA	3060.09	1.41	7313.15	44.94	0.00	0.00	10373.24	3.61
MADHYA PRADESH	719.56	0.33	0.00	0.00	0.00	0.00	719.56	0.25
MAHARASHTRA	1660.71	0.77	1977.03	12.15	371.88	0.68	4009.62	1.40
MANIPUR	3789.59	1.75	0.00	0.00	0.00	0.00	3789.59	1.32
MEGHALAYA	735.45	0.34	0.00	0.00	0.00	0.00	735.45	0.26
MIZORAM	19.06	0.01	126.19	0.78	0.00	0.00	145.24	0.05
NAGALAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ODISHA	9313.48	4.30	444.50	2.73	2881.48	5.30	12639.45	4.40
PUDUCHERRY	718.77	0.33	112.91	0.69	1704.99	3.14	2536.67	0.88
PUNJAB	5812.83	2.68	0.00	0.00	14292.99	26.28	20105.82	7.00
RAJASTHAN	2755.25	1.27	0.00	0.00	0.00	0.00	2755.25	0.96
SIKKIM	198.76	0.09	0.00	0.00	78.71	0.14	277.47	0.10
TAMIL NADU	10575.69	4.88	2177.41	13.38	111.93	0.21	12865.03	4.48
TELANGANA	104.90	0.05	0.00	0.00	0.63	0.00	105.53	0.04
TRIPURA	1954.00	0.90	0.00	0.00	0.00	0.00	1954.00	0.68
UNION GOVERNMENT	1054.04	0.49	1351.02	8.30	574.21	1.06	2979.28	1.04
UTTAR PRADESH	26375.50	12.18	0.00	0.00	3130.27	5.76	29505.77	10.27
UTTARAKHAND	3306.75	1.53	0.00	0.00	54.97	0.10	3361.73	1.17
WEST BENGAL	21388.44	9.88	300.75	1.85	7997.97	14.71	29687.16	10.34
Grand Total	216556.91	100.00	16272.68	100.00	54384.67	100.00	287214.26	100.00

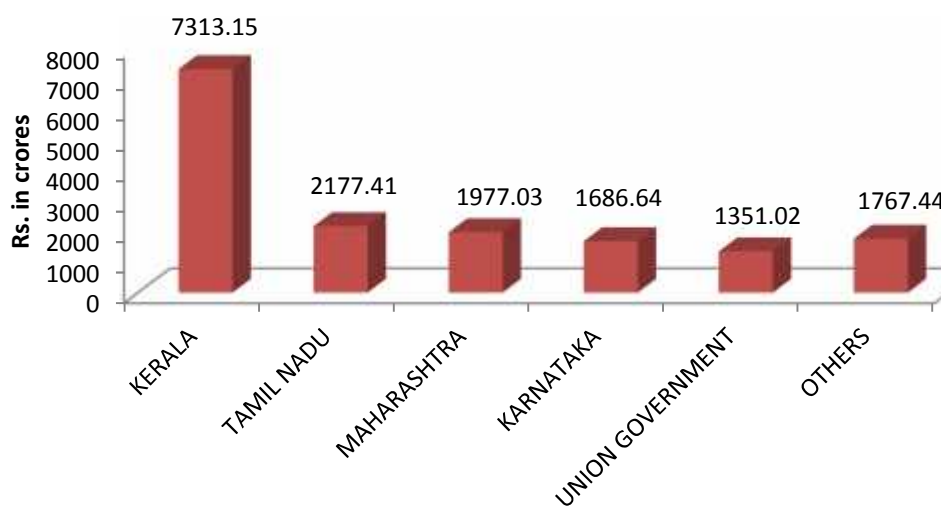
Expd : expenditure since beginning of the projects under study

In percentage terms, Bihar has the maximum share of total capital expenditure – 18.45% - followed by West Bengal (10.34%), Uttar Pradesh (10.27%), Assam (8.55%), Andhra Pradesh (7.81%) and Punjab (7.0%). Share of rest of States was 4.5% or less.

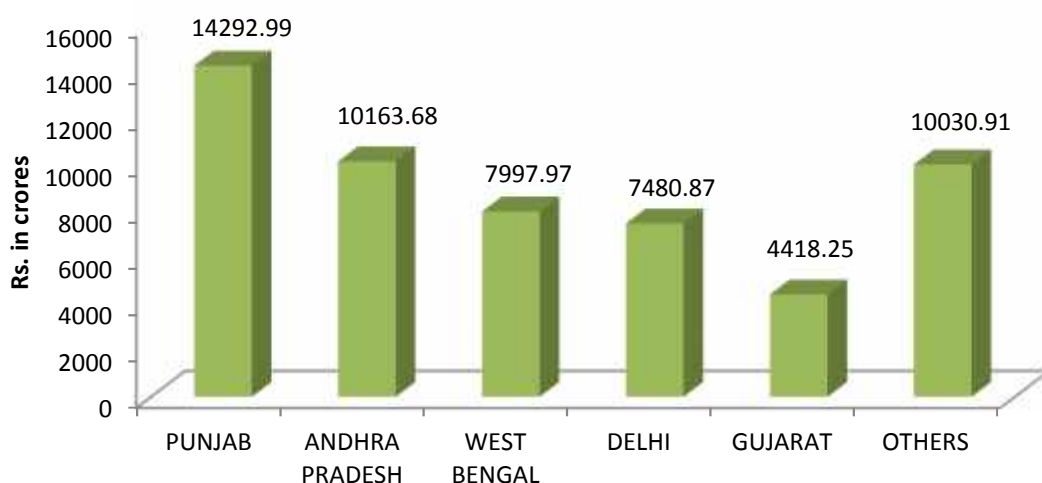
**Figure 16: Flood Control
(Cumulative Capital Expenditure in Top Five States)**



**Figure 17: Anti-Sea Erosion
(Cumulative Capital Expenditure in Top Five States)**



**Figure 18: Drainage
(Cumulative Capital Expenditure in Top Five States)**



As regards flood control, being major component of the total expenditure, the expenditure pattern of States was similar to their total expenditure. The table revealed that Bihar spent maximum capital expenditure amounting to 24.27% of total expenditure on flood control followed by Uttar Pradesh (12.18%), Assam (11.34%), Andhra Pradesh (5.66%) and Haryana (5.25%). For anti-sea erosion projects, 49.94% of the total capital expenditure incurred was in Kerala since start. Other States spending considerable amount were Tamil Nadu, Maharashtra and Karnataka. For drainage projects, cumulative capital expenditure is maximum in Punjab (26.28%) followed by Andhra Pradesh (18.69%), West Bengal (14.71%) and Delhi (13.76%). To summarise, the list of States incurring significant cumulative capital expenditure since start has been shown by type of project in Table 11.

Table 11: List of States incurred major expenditure by type of project			
Flood Control (01) 1	Anti-Sea Erosion (02) 2	Drainage (03) 3	Total (99) 4
BIHAR	KERALA	PUNJAB	BIHAR
UTTAR PRADESH	TAMIL NADU	ANDHRA PRADESH	WEST BENGAL
ASSAM	MAHARASHTRA	WEST BENGAL	UTTAR PRADESH
WEST BENGAL	KARNATAKA	DELHI	ASSAM

5.2 Physical Performance of Flood Control and Drainage Projects

Floods are water related disasters, which the life on earth has to encounter from time to time. Water management, in a broader sense, includes management of flood and water related disaster to mitigate the misery of humans, animals and infrastructure &

property. Floods continue to plague many parts of the country which are faced almost every year in varying magnitudes. After the unprecedented floods of 1954, the Government of India took several initiatives and constituted number of committees to suggest a suitable Flood Management strategy to be followed to reduce the impact of devastating floods. Providing absolute protection instantly to all flood prone areas is neither practically possible nor economically viable. Such an attempt would involve stupendously high cost of construction and maintenance besides time to implement the schemes. Hence a practical approach is to provide a reasonable degree of protection against floods damage at economic cost through a combination of structural measures, non-structural measures and catchment area treatment.

Flood management activities can be broadly classified into four major groups

- Attempt to modify the floods
- Attempt to modify the susceptibility to damage due to floods
- Attempts to modify the burden of loss
- Bearing of loss due to flood

All these measures for flood management can be classified under structural measures and non-structural measures. Broadly speaking, all physical measures like modifying the flood are classified as structural measures while all other measures are defined as non-structural measures.

The general approach about flood management has been in the form of physical measure to prevent the flood water from reaching potential damage centres. The main thrust of the flood protection programme undertaken in India, so far has been of structural measures like (i) Embankment, flood walls (ii) Dams and reservoirs (iii) Natural detention basin (iv) Channel improvement (v) Drainage improvement and (vi) Diversion of Flood water.

Table A4 in Appendix presents the extent of damage in terms of monetary value as well as physical assets including loss of cattle and human lives at all-India level. The summary of the findings based on this table is presented in the following paragraphs.

Table 12 below presents the extent of damage due to floods for the entire country was estimated to be Rs. 57393.761 Crore during the flood season 2015. The average annual damages to crops, houses and public utilities from the year 1953 to 2016 as reported by the state/UTs are of the order of Rs. 5667.303 Crore, the maximum annual damage being Rs. 57291.099 Crore during 2015.

A comparative details of damages occurred during the flood seasons 2014 to 2016 on different accounts, based on the reports (Tentative), receipt from the revenue authorities of the state government is given in the table.

Table 12 Damages occurred during flood season, 2014 to 2016

Sl. No.	Items	Damages occurred during the year			Average	Flood Damages during 1953-2016	
		2014	2015	2016		1953-2016	Maximum
					Year		Damage
1	2	3	4	5	6	7	8
1	Area affected (Mha)	11.817	2.305	5.317	7.058	1978	17.50
2	Population affected (Million)	26505	33.203	26.555	37.879	1978	70.45
3	Crop area damaged (Mha)	8.007	3.374	6.658	3.923	2005	12.29
4	Damage to crops(Rs. Crore)	7255.151	17043.98	4052.723	1598.026	2015	17043.95
5	Damage to houses (No.)	31125	3959191	278240	1241642	2015	3959191
6	Damage to houses (Rs. Crore)	581.978	8046.969	114.676	693.599	2009	10809.80
7	Cattle lost (No.)	60196	45597	22367	94104	1979	618248
8	Human live lost (No.)	1968	1420	1420	1648	1977	11316
9	Damage to public utilities (Rs. Crore)	7246.888	32131.17	1300.066	3108.656	2013	38902.61
10	Total Damage to crops, houses & public utilities (Rs. Crore)	15548.077	57393.76	5632.645	5431.894	2015	57393.76

Source : FMP, Central Water Commission

Table 13 State-wise Maximum Area Affected by Floods in any year during 1953-2010			
Sl. No.	State	Max Area affected (Mha)	Year of Maximum Area affected
1	2	3	4
1	ANDHRA PRADESH	9.040	2005
2	ARUNACHAL PRADESH	0.207	2003
3	ASSAM	3.820	1988
4	BIHAR	4.986	2004
5	CHATTISGARH	0.089	2001
6	DELHI	0.458	1997
7	GOA	0.000	0
8	GUJARAT	2.050	1988
9	HARYANA	1.000	1977
10	HIMACHAL PRADESH	2.870	1999
11	JAMMU & KASHMIR	0.514	1987
12	JARKHAND	0.000	0
13	KARNATAKA	0.900	1988
14	KERALA	1.470	1989
15	MADHYA PRADESH	0.377	1994
16	MAHARASHTRA	0.391	2002
17	MANIPUR	0.080	1989
18	MEGHALAYA	0.095	1987
19	MIZORAM	0.541	1993
20	NAGALAND	0.009	1993
21	ORISSA	1.400	1960
22	PUNJAB	2.790	1988
23	RAJASTHAN	3.260	1977
24	SIKKIM	1.170	2000
25	TAMILNADU	1.466	2010
26	TRIPURA	0.330	1963
27	UTTAR PRADESH	7.340	1978
28	UTTARAKHAND	0.002	2001
29	WEST BENGAL	3.080	1978
30	A & N ISLAND	0.030	1988
31	CHANDIGARH		
32	D & N HAVELI		
33	DAMAN & DIU		
34	LAKSHADWEEP		
35	PONDICHERRY	0.050	1977
	Total	49.815	

Notes : 1. Source : as per the reports received in CWC from State Revenue Authorities & MHA.
2. The figures of flood affected area from 2003 onwards are yet to be confirmed by State Governments.

Figure 19 depicts the area affected by flood in India during 1953 to 2016. The chart shows ups and downs over the years. The maximum damage was observed in 1978 and 1988 while the minimum loss was experienced in 2006 and 1965.

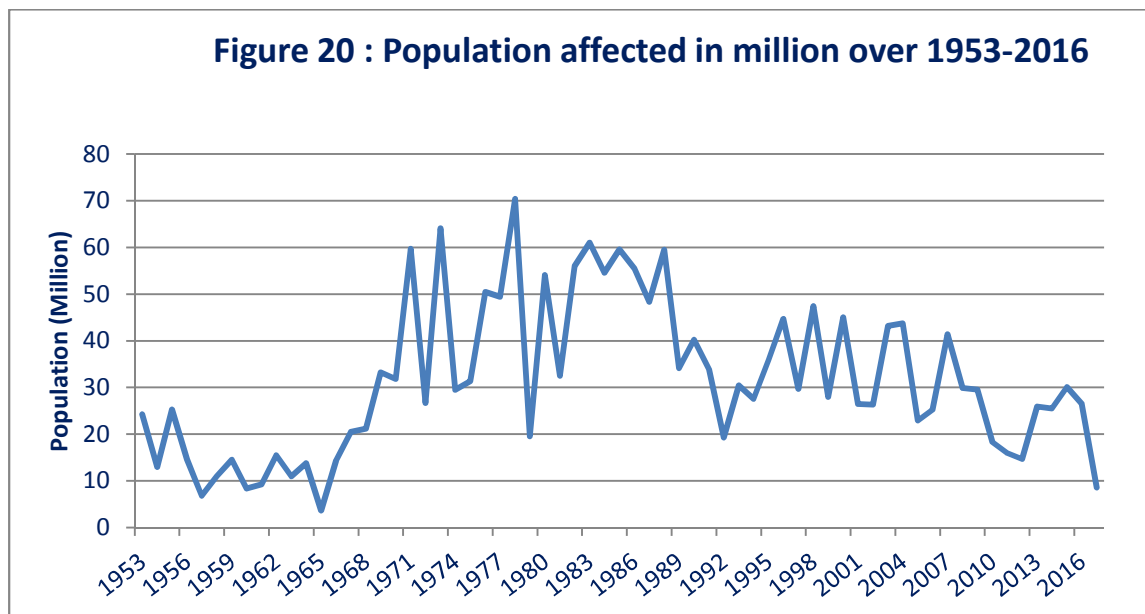
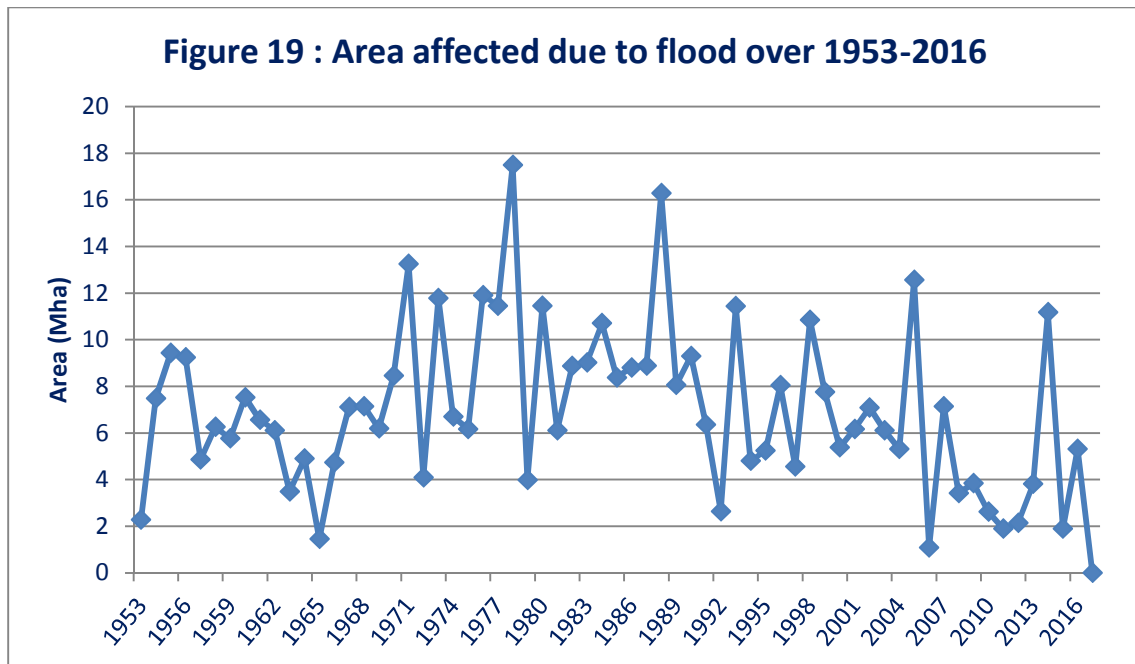


Figure 20 presents the population affected by flood in India during 1953 to 2016. The chart shows the effect is fluctuating. The population affected was the highest in 1978 while it was the lowest in 1965. A trend line fitted in the chart shows there is a slow increasing trend of population affected over the years from 1953 to 2016. In spite of undertaking extensive flood control measures, the size of affected population has increased during the period. However, population growth during that period was much faster.

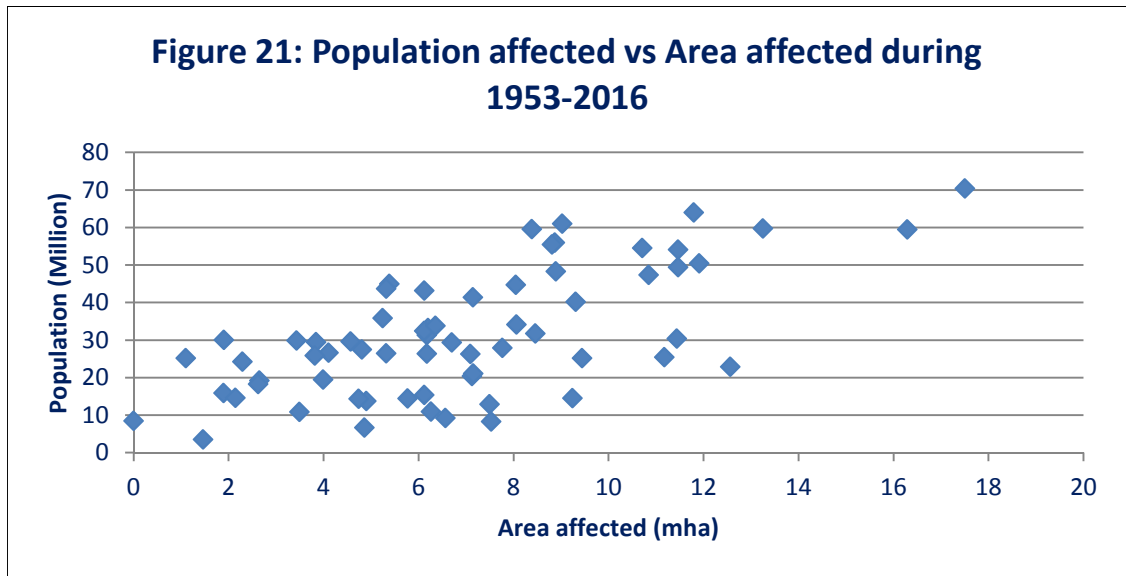


Figure 21 shows scatter diagram of area and population affected due to flood or heavy rain in the country over the period 1953-2016. It is expected that area and population affected due to flood or heavy rain would have a very high positive correlation. In reality, it is positive but not high. It is less than 0.6. It implies the areas affected over the years were different and they had varying population density.

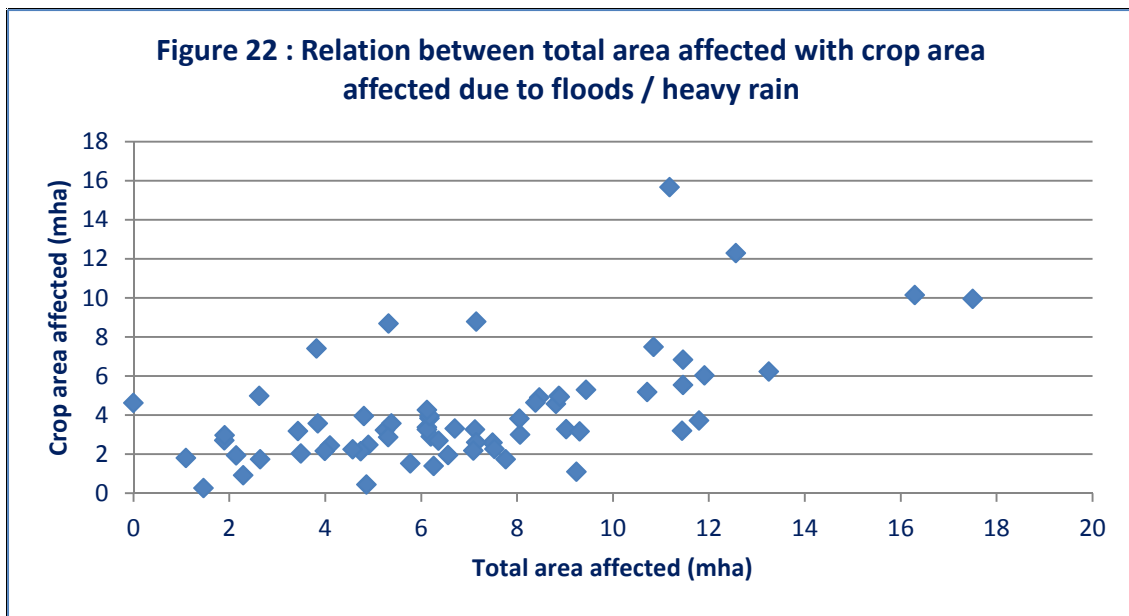


Figure 22 shows a scatter diagram between crop areas affected and total area affected which shows that pattern of damages to crops is faster than damages to area.

For physical performance in protecting from flood, the following indicators are measured:

- (i) Length of Embankments made
- (ii) Length of drainage channels made
- (iii) Number of towns /villages where protection works implemented
- (iv) Number of villages raised/protected against flood and
- (v) Area benefited from flood control projects

Embankment including ring bunds and protection works confine the flood flows. It is generally designed and constructed to afford a degree of protection against floods of a certain frequency and intensity or against the recorded maximum flood depending upon the location protected and their economic justification. The raising and strengthening of existing embankments have also been taken up in many flood prone States.

Drainage channel improvement is one of the important measures for flood or surface water drainage congestion in some pockets of the country. Under the flood management programme, construction of new channels or improvement in the discharge capacity of the existing drainage system is carried out.

Raising of a village here means making land-fills to keep houses above predetermined flood level even though nearby agricultural roads are liable to inundation and also connecting the village to nearby roads or high roads.

Table 14: Physical Progress of Flood management Works under Flood Management Programme till March 2017*

SI No	Name of State	Area Benefited (Mha)	Length of embankment (km)	Drainage channel (km)	Village raised (no)	Towns protected (no)	Raised platforms
1	2	3	4	5	6	7	8
1	Andhra Pradesh	1.31	2230.00	13569.00	23.00	72.00	0.00
2	Arunachal Pradesh	0.10	65.23	16.92	17.00	30.00	0.00
3	Assam	2.11	4473.82	874.97	1100.00	911.00	0.00
4	Bihar	3.69	3759.91	365.00	0.00	204.00	58.00
5	Chattisgarh	0.00	0.00	0.00	0.00	0.00	0.00
6	Delhi	0.08	83.00	453.00	0.00	0.00	0.00
7	Goa	0.00	23.19	32.77	0.00	2.00	0.00
8	Gujarat	0.48	104.12	271.00	30.00	805.00	0.00
9	Haryana	2.00	1144.00	4385.00	98.00	448.00	7.00
10	Himachal Pradesh	0.02	159.16	11.00	82.00	0.00	0.00
11	Jammu & Kashmir	0.22	560.68	324.00	1301.00	22.00	0.00
12	Jharkhand	0.00	14.00	0.00	5.00	2.00	0.00
13	Karnataka	0.01	73.52	10.00	0.00	0.00	0.00
14	Kerala	0.35	205.74	82.19	6.00	4.00	0.00
15	Madhya Pradesh	0.00	26.00	0.00	0.00	37.00	0.00
16	Maharashtra	0.00	44.50	110.00	0.00	0.00	0.00
17	Manipur	0.13	577.00	166.00	512.00	38.00	0.00
18	Meghalaya	0.02	112.00	0.00	10.00	8.00	0.00
19	Mizoram	0.00	0.00	0.00	0.00	38.00	0.00
20	Nagaland	0.63	10.52	0.00	0.00	8.00	0.00
21	Orissa	0.63	7137.75	650.00	14.00	29.00	0.00
22	Punjab	3.19	1370.00	6622.00	0.00	3.00	0.00
23	Rajasthan	0.08	145.00	197.00	0.00	25.00	0.00
24	Sikkim	0.04	101.81	64.86	0.00	18.00	0.00
25	Tamil Nadu	0.12	87.00	19.00	4.00	46.00	0.00
26	Tripura	0.03	141.74	95.23	0.00	11.00	0.00
27	Uttar Pradesh	1.70	3813.97	3995.00	4511.00	65.00	0.00
28	Uttaranchal	0.00	9.00	0.00	0.00	6.00	0.00
29	West Bengal	3.58	10539.00	7392.76	0.00	74.00	0.00
Union Territories							
30	A & N Islands	0.00	0.00	0.00	0.00		0.00
31	Chandigarh	0.00	0.00	0.00	0.00		0.00
32	Dadra & Nagar Haveli	0.00	0.00	0.00	0.00		0.00
33	Daman & Diu	0.00	0.00	0.00	0.00		0.00
34	Lakshadweep	0.00	0.00	0.00	0.00		0.00
35	Puducherry	0.00	61.00	20.00	0.00		0.00
	Total	20.54	37072.66	39726.70	7713.00	2906.00	65.00

*- Tentative as the table has been compiled from available information in office and website of various State Governments.

The details of the achievement made through flood control projects have been presented in Table 14. It gives cumulative progress up to 31 March 2017 since start of the activities against the indicators listed above. It shows that Embankment works were carried out in most of the States. However, this work was found to be concentrated in six States, namely, West Bengal, Orissa, Assam, Uttar Pradesh, Bihar and Andhra Pradesh. These 6 States accounted 86.19% of total length of embankment made by Government Agencies in the country. The table also shows that the area benefitted was the highest in Bihar followed by West Bengal, Punjab, Assam, Haryana and Uttar Pradesh. These six States taken together comprises 79.26% of total embankment works carried out in the country up to March 2017.

As regards construction of drainage channels, the share of Andhra Pradesh, West Bengal, Punjab, Haryana and Uttar Pradesh was significantly higher than other states. In these five States, the total length of drainage channel provided was 35963.76 km out of the total 39726.7 km in the whole country.

In addition at all-India level protection works against flood were carried out in 7713 villages and 2906 towns.

Chapter 6

Efforts of Central Government for Flood Management in the Country

6.1 Earlier Initiatives taken by Government of India in Flood Management:

The Government of India has taken number of initiatives for enabling the states in taking appropriate measures backed by latest technologies.

- i. The Government of India set up Rashtriya Barh Ayog (RBA) which submitted its report in 1980 recommending various measures of flood control.
- ii. The Government of India set up Ganga Flood Control Commission (GFCC) at Patna in 1972 and Brahmaputra Board in 1980 for advising the Ganga Basin States and NE-States respectively on Flood Management measures. These Organizations have prepared master plans for flood management in respective Basin States.
- iii. The Government of India issued National Water Policy-2012 which emphasizes construction of large storage reservoirs and other non-structural measures for integrated flood management.
- iv. The Government of India constituted a Task Force on Flood Management/Erosion Control in 2004 which submitted its report in December, 2004 recommending Immediate, Short Term and Long Term measures of flood management.
- v. Under NDM Act 2005, the Government of India set up National Disaster Management Authority (NDMA) which coordinates various policy matters and their implementation for management of disasters including flood disaster.
- vi. A Committee headed by GFCC identified 39 districts in 2006 as flood prone in the country. The Report of the Committee has been accepted by Planning Commission in February, 2011. During July, 2012, the Government of India has constituted an Expert Committee headed by Chairman, CWC for scientific assessment of flood prone areas in the country.
- vii. The Central Water Commission (CWC) set up by Government of India under MoWR in 1945 performs flood forecasting activities on major rivers and their tributaries in the country and issues flood forecast at 175 stations. The forecasts issued by CWC are utilized by local administration in taking suitable administrative measures including evacuation of people from flood affected areas to safer locations during floods. The inflow forecasts issued by CWC are utilized by the project authorities in proper operation of reservoirs in order to mitigate flood impact in the downstream areas.

viii. CWC has been making continuous endeavour to modernise its flood forecasting network for automatic data collection using sensor based equipment, real-time data transmission through satellite based system, automatic flood forecast formulation using state of the art mathematical models and expeditious flood forecast dissemination to local administration. CWC has also planned modernisation and expansion of remaining existing base and flood forecast stations including expansion of its network during XII Plan.

ix. Relief Measures During a Flood Disaster – During any flood disaster, relief measures are undertaken by the State Disaster Management Authorities (SDMAs) and expenditure on this account is met from State Disaster Response Fund (SDRF). The MHA also provides assistance in deployment of Para-Military Forces and medical help as per requirement. Additional central assistance is also provided by MHA to severely flood affected States from National Disaster Response Fund (NDRF) if required for undertaking immediate relief measures on the basis of assessment of damage and required relief measures by Central Teams and on recommendation of Inter-Ministerial Group headed by Secretary, MHA

6.2 Efforts of Central Government in respect of flood management special structural measures

6.2.1 Flood Management Program (FMP): The Ministry has approved Flood Management Program (FMP) with an outlay of Rs 8,000 Cr in XI Plan which was continued with outlay of Rs 10,000 Cr during XII Plan also.

A total 522 projects costing Rs 13238.37 Cr were approved during XI (420 projects costing Rs 7857.08 Cr) Plan and XII (102 projects costing Rs 5381.29 Cr) Plan. A Central Assistance of Rs 4873.07 Cr was released during XI(Rs 3566.00 Crore) and XII(Rs 1307.07 Cr) Plan. Further a Central assistance of Rs 562.67 Cr has also been released during current year 2017-18. Thus, since start of XI Plan, total Central Assistance released is Rs 5435.74 Cr is till 31-March-2018.

6.2.2 River Management Activities & Works related to Border Areas (RMBA) Component:

This started as a Central Sector Scheme in XI plan for taking up nonstructural measures such as Hydrological Observation and Flood Forecasting works on common border rivers, payment to neighboring countries (China) for supplying HO data on common rivers, investigation of WR projects in neighboring countries, activities of GFCC and Pancheswar Development Authority (PDA) was funded through this scheme. In addition to above activities, 100% Central Assistance was also provided for taking up structural measures such as Anti-Erosion/Flood Management schemes on rivers on international borders and Union Territories. An expenditure of Rs 478.26 Cr was done during XII Plan against outlay of Rs 740 Cr.

6.2.3 Works by Brahmaputra Board

The Brahmaputra Board was constituted in 1980 by an Act of Parliament **Brahmaputra Board Act, 1980 (No. 46 of 1980)** with the objective of planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra Valley and matters connected therewith. It started functioning since **January 11, 1982** with headquarters at Guwahati, Assam.

Main activities undertaken:

Since inception, the Board has carried out detailed planning and documentation of the water resources of the North Eastern Region and the related problems and potentials, which includes survey and investigations, preparation of Master Plans and Detailed Project Reports. Since 1999-2000, the Board has taken up various project construction works also in the areas of drainage development and erosion and flood control. The details are as under:

(a) Master Plans:

Out of 70 basins/ sub-basins identified for preparation of Master Plan, 49 Master Plans including Brahmaputra Main Stem and Barak are approved by Govt of India. Brief is as follows.

River/Tributaries	Nos	Status
Part-I: Main stem of river Brahmaputra	1	Approved by Govt. of India
Part-II: River Barak and its tributaries except Dhaleswari	1	
Part-III: Tributaries of river Brahmaputra, Dhaleswari (tributary of Barak) and rivers of Manipur, Meghalaya, Mizoram, Tripura	48	
Sub-total: approved	50	
Part-III: Tributaries of river Brahmaputra, and rivers of Manipur, Meghalaya, Mizoram, Tripura	8	Under modification (Jaldhaka, Tangani, Simsang, Umngot, Sankosh-Raidak, Torsa, Teesta & Kynshi)
	4	Draft master Plan completed
	8	Identified
Sub-total: Under different stage of process of approval	20	
Total Master Plans	70	

(b) **Flood Management Schemes:** On request of State Governments and approval of MoWR, RD & GR, GoI, Board taken up execution of Flood Management and drainage Development Schemes.

Flood management Schemes: Some major schemes viz Protection of Majuli Island, Avulsion of Brahmaputra at Dholla - Hatighuli are executed/being executed in various phases.

Drainage development schemes: Total 41 nos of drainage development schemes has been identified by Brahmaputra Board. Brief are as under:

- (i) Cleared by CWC: 14, (completed 2, under execution 4)
- (ii) Under compliance: 5
- (iii) Under preparation: 5
- (iv) Under process of deletion: 14
- (v) Deleted: 3

Appendix

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-01	ANDHRA PRADESH	193.32	0.00	6828.08	0.00	7021.40
	ARUNACHAL PRADESH	1765.00	0.00	0.00	0.00	1765.00
	ASSAM	6698.58	0.00	0.00	0.00	6698.58
	BIHAR	4901.79	0.00	213.23	0.00	5115.02
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	764.24	0.00	2283.58	0.00	3047.82
	GOA	93.87	16.23	0.00	0.00	110.10
	GUJARAT	444.77	0.00	287.05	0.00	731.82
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	122.53	0.00	0.00	0.00	122.53
	JAMMU & KASHMIR	2492.51	0.00	0.00	0.00	2492.51
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	16.39	0.00	0.00	16.39
	KERALA	1188.94	601.43	0.00	0.00	1790.37
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	802.90	0.00	802.90
	MANIPUR	834.08	0.00	0.00	0.00	834.08
	MEGHALAYA	34.97	0.00	0.00	0.00	34.97
	ODISHA	1784.79	266.26	0.00	0.00	2051.05
	PUDUCHERRY	19.10	0.00	86.34	0.00	105.44
	PUNJAB	1102.88	0.00	3404.90	0.00	4507.78
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	1147.98	0.00	0.00	0.00	1147.98
	TAMIL NADU	118.59	0.00	80.45	0.00	199.04
	TRIPURA	441.44	0.00	0.00	0.00	441.44
	UNION GOVERNMENT	11108.66	325.16	0.00	0.00	11433.82
	UTTAR PRADESH	1938.46	0.00	442.15	0.00	2380.61
	UTTARAKHAND	24.25	0.00	1.90	0.00	26.15
	WEST BENGAL	2287.62	0.00	4201.41	12675.09	19164.12
	Total (99)	39508.37	1225.47	18631.99	12675.09	72040.92

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2001-02	ANDHRA PRADESH	165.11	0.00	6971.90	0.00	7137.01
	ARUNACHAL PRADESH	999.99	0.00	0.00	0.00	999.99
	ASSAM	7002.34	0.00	0.00	0.00	7002.34
	BIHAR	4024.84	0.00	744.30	0.00	4769.14
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	824.58	0.00	2226.86	0.00	3051.44
	GOA	31.45	3.22	0.00	0.00	34.67
	GUJARAT	215.55	0.00	73.27	0.00	288.82
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	3.68	0.00	0.00	0.00	3.68
	JAMMU & KASHMIR	2433.82	0.00	0.00	0.00	2433.82
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	49.80	0.00	0.00	49.80
	KERALA	709.35	1053.77	0.00	0.00	1763.12
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	553.77	0.00	0.00	0.00	553.77
	MANIPUR	722.85	0.00	0.00	0.12	722.97
	MEGHALAYA	36.95	0.00	0.00	0.00	36.95
	ODISHA	1940.39	311.01	0.00	0.00	2251.40
	PUDUCHERRY	13.00	0.00	35.03	0.00	48.03
	PUNJAB	4093.07	0.00	650.08	0.00	4743.15
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	918.04	0.00	0.00	0.00	918.04
	TAMIL NADU	171.39	0.00	80.39	0.00	251.78
	TRIPURA	817.38	0.00	0.00	0.00	817.38
	UNION GOVERNMENT	11274.56	549.08	0.00	0.00	11823.64
	UTTAR PRADESH	1719.11	0.00	604.90	0.00	2324.01
	UTTARAKHAND	148.81	0.00	0.00	0.00	148.81
	WEST BENGAL	1970.48	0.00	4219.90	7987.67	14178.05
	Total (99)	40790.51	1966.88	15606.63	7987.79	66351.81

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2002-03	ANDHRA PRADESH	136.01	0.00	7051.11	0.00	7187.12
	ARUNACHAL PRADESH	1999.98	0.00	0.00	0.00	1999.98
	ASSAM	6622.15	0.00	0.00	0.00	6622.15
	BIHAR	4876.19	0.00	0.00	0.00	4876.19
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	1132.34	0.00	2244.74	0.00	3377.08
	GOA	21.38	1.66	2.32	0.00	25.36
	GUJARAT	241.22	0.00	93.39	0.00	334.61
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	-16.39	0.00	0.00	0.00	-16.39
	JAMMU & KASHMIR	2652.70	0.00	0.00	0.00	2652.70
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	48.45	0.00	0.00	0.00	48.45
	KERALA	444.67	663.81	0.00	0.00	1108.48
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	464.98	0.00	0.00	0.00	464.98
	MANIPUR	474.76	0.00	0.00	151.82	626.58
	MEGHALAYA	45.73	0.00	0.00	0.00	45.73
	ODISHA	1790.80	322.01	0.00	0.00	2112.81
	PUDUCHERRY	115.00	0.00	179.25	0.00	294.25
	PUNJAB	4209.12	0.00	2284.31	0.00	6493.43
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	1420.46	0.00	0.00	0.00	1420.46
	TAMIL NADU	179.02	0.00	80.39	0.00	259.41
	TRIPURA	658.04	0.00	0.00	0.00	658.04
	UNION GOVERNMENT	377.82	0.00	0.00	0.00	377.82
	UTTAR PRADESH	2789.40	0.00	687.95	0.00	3477.35
	UTTARAKHAND	201.47	0.00	0.00	0.00	201.47
	WEST BENGAL	1408.69	0.00	4012.17	1219.14	6640.00
	Total (99)	32293.99	987.48	16635.63	1370.96	51288.06

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2003-04	ANDHRA PRADESH	63.02	0.00	7097.76	0.00	7160.78
	ARUNACHAL PRADESH	1754.32	0.00	0.00	0.00	1754.32
	ASSAM	7494.62	0.00	0.00	0.00	7494.62
	BIHAR	3996.70	0.00	767.91	0.00	4764.61
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	1275.25	0.00	2260.18	0.00	3535.43
	GOA	36.80	5.32	4.54	0.00	46.66
	GUJARAT	203.87	0.00	107.46	0.00	311.33
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	0.00	0.00	0.00	0.00	0.00
	JAMMU & KASHMIR	2769.74	0.00	19.20	0.00	2788.94
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	48.78	0.00	0.00	48.78
	KERALA	847.99	742.86	0.00	0.00	1590.85
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	581.63	0.00	581.63
	MANIPUR	534.91	0.00	0.00	146.78	681.69
	MEGHALAYA	46.79	0.00	0.00	0.00	46.79
	ODISHA	1478.54	255.86	0.00	0.00	1734.40
	PUDUCHERRY	17.07	0.00	112.23	0.00	129.30
	PUNJAB	4267.67	0.00	484.67	0.00	4752.34
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	894.49	0.00	0.00	0.00	894.49
	TAMIL NADU	205.35	0.00	80.40	0.00	285.75
	TRIPURA	489.11	0.00	0.00	0.00	489.11
	UNION GOVERNMENT	10156.80	333.98	0.00	0.00	10490.78
	UTTAR PRADESH	2521.32	0.00	460.28	0.00	2981.60
	UTTARAKHAND	293.94	0.00	0.00	0.00	293.94
	WEST BENGAL	1310.86	0.00	3706.08	665.17	5682.11
	Total (99)	40659.16	1386.8	15682.34	811.95	58540.25

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2004-05	ANDHRA PRADESH	100.09	0.00	7290.34	0.00	7390.43
	ARUNACHAL PRADESH	699.14	0.00	0.00	0.00	699.14
	ASSAM	8323.08	0.00	0.00	0.00	8323.08
	BIHAR	4648.51	0.00	0.00	0.00	4648.51
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	1392.21	0.00	2376.20	0.00	3768.41
	GOA	50.24	10.29	3.90	0.00	64.43
	GUJARAT	258.26	0.00	233.26	0.00	491.52
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	28.37	0.00	0.00	0.00	28.37
	JAMMU & KASHMIR	2929.63	0.00	0.30	0.00	2929.93
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	48.06	0.00	0.00	0.00	48.06
	KERALA	547.92	497.10	0.00	0.00	1045.02
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	727.31	0.00	0.00	0.00	727.31
	MANIPUR	538.24	0.00	0.00	112.36	650.60
	MEGHALAYA	50.22	0.00	0.00	0.00	50.22
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	2102.94	364.16	0.00	0.00	2467.10
	PUDUCHERRY	47.40	0.00	109.57	0.00	156.97
	PUNJAB	4157.32	0.00	4.96	0.00	4162.28
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	216.21	0.00	0.00	0.00	216.21
	TAMIL NADU	281.45	0.00	158.28	0.00	439.73
	TRIPURA	557.45	0.00	0.00	0.00	557.45
	UNION GOVERNMENT	6332.33	354.75	0.00	0.00	6687.08
	UTTAR PRADESH	2690.81	0.00	1011.26	0.00	3702.07
	UTTARAKHAND	289.81	0.00	0.00	0.00	289.81
	WEST BENGAL	1935.76	0.00	4539.67	88.20	6563.63
	Total (99)	37017.00	1226.30	11188.07	112.36	49543.73

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2005-06	ANDHRA PRADESH	180.71	0.00	7483.85	0.00	7664.56
	ARUNACHAL PRADESH	0.00	0.00	0.00	0.00	0.00
	ASSAM	8074.08	0.00	0.00	0.00	8074.08
	BIHAR	4860.95	0.00	829.73	0.00	5690.68
	CHHATTISGARH	1538.79	0.00	2988.34	0.00	4527.13
	DELHI	0.00	0.00	0.00	0.00	0.00
	GOA	79.94	16.62	8.41	0.00	104.97
	GUJARAT	177.58	0.00	150.40	0.00	327.98
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	28.64	0.00	0.00	0.00	28.64
	JAMMU & KASHMIR	3281.41	0.00	0.00	0.00	3281.41
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	48.95	0.00	0.00	48.95
	KERALA	979.34	848.60	0.00	0.00	1827.94
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	1382.26	0.00	1382.26
	MANIPUR	749.62	0.00	0.00	149.84	899.46
	MEGHALAYA	64.10	0.00	0.00	0.00	64.10
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	3118.31	531.71	89.33	0.00	3739.35
	PUDUCHERRY	54.75	0.00	143.55	0.00	198.30
	PUNJAB	4489.03	0.00	0.00	0.00	4489.03
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	283.76	0.00	0.00	0.00	283.76
	TAMIL NADU	419.86	0.00	495.58	0.00	915.44
	TRIPURA	653.59	0.00	0.00	0.00	653.59
	UNION GOVERNMENT	12382.73	418.00	0.00	0.00	12800.73
	UTTAR PRADESH	2703.56	0.00	746.37	0.00	3449.93
	UTTARAKHAND	290.78	0.00	0.00	0.00	290.78
	WEST BENGAL	3539.39	0.00	4997.42	60.92	8597.73
	Total (99)	47950.92	1863.88	19315.24	210.76	69340.8

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2006-07	ANDHRA PRADESH	119.36	0.00	7365.38	0.00	7484.74
	ARUNACHAL PRADESH	1534.65	0.00	0.00	0.00	1534.65
	ASSAM	9929.35	0.00	0.00	0.00	9929.35
	BIHAR	4905.18	0.00	892.04	0.00	5797.22
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	1454.35	0.00	2701.94	0.00	4156.29
	GOA	221.65	47.83	35.45	0.00	304.93
	GUJARAT	390.04	0.00	767.29	0.00	1157.33
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	47.06	0.00	0.00	0.00	47.06
	JAMMU & KASHMIR	3290.95	0.00	4.30	0.00	3295.25
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	59.43	0.00	0.00	59.43
	KERALA	257.57	282.31	0.00	0.00	539.88
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	745.36	0.00	745.36
	MANIPUR	546.40	0.00	0.00	279.38	825.78
	MEGHALAYA	54.75	0.00	0.00	0.00	54.75
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	4061.51	572.63	204.44	0.00	4838.58
	PUDUCHERRY	104.53	0.00	156.96	0.00	261.49
	PUNJAB	4790.23	0.00	0.00	0.00	4790.23
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	777.96	0.00	0.00	0.00	777.96
	TAMIL NADU	209.88	0.00	80.51	0.00	290.39
	TRIPURA	771.23	0.00	0.00	0.00	771.23
	UNION GOVERNMENT	13284.34	235.42	0.00	0.00	13519.76
	UTTAR PRADESH	2749.78	0.00	632.04	0.00	3381.82
	UTTARAKHAND	276.80	0.00	0.00	0.00	276.80
	WEST BENGAL	3788.12	0.00	6052.46	25.40	9865.98
	Total (99)	53565.69	1197.62	19638.17	304.78	74706.26

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2007-08	ANDHRA PRADESH	251.00	0.00	1841.20	0.00	2092.20
	ARUNACHAL PRADESH	698.36	0.00	0.00	0.00	698.36
	ASSAM	10826.87	0.00	0.00	0.00	10826.87
	BIHAR	6455.89	0.00	964.10	0.00	7419.99
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	1504.96	0.00	2827.72	0.00	4332.68
	GOA	283.87	57.18	74.33	0.00	415.38
	GUJARAT	690.51	0.00	235.90	0.00	926.41
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	61.20	0.00	0.00	0.00	61.20
	JAMMU & KASHMIR	3467.88	0.00	0.00	0.00	3467.88
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	39.45	0.00	0.00	39.45
	KERALA	1028.74	708.08	0.00	0.00	1736.82
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	920.30	0.00	920.30
	MANIPUR	813.06	0.00	0.00	0.00	813.06
	MEGHALAYA	64.00	0.00	0.00	0.00	64.00
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	6206.69	916.80	283.37	0.00	7406.86
	PUDUCHERRY	287.00	0.00	100.00	0.00	387.00
	PUNJAB	5490.96	0.00	0.00	0.00	5490.96
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	614.44	0.00	0.00	0.00	614.44
	TAMIL NADU	533.43	0.00	80.51	0.00	613.94
	TRIPURA	654.39	0.00	0.00	0.00	654.39
	UNION GOVERNMENT	9631.90	471.68	0.00	0.00	10103.58
	UTTAR PRADESH	2567.98	0.00	775.57	0.00	3343.55
	UTTARAKHAND	283.29	0.00	0.00	0.00	283.29
	WEST BENGAL	2930.70	0.00	6379.12	51.99	9361.81
	Total (99)	55347.12	2193.19	14482.12	51.99	72074.42

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2008-09	ANDHRA PRADESH	61.39	0.00	10302.39	0.00	10363.78
	ARUNACHAL PRADESH	530.00	0.00	0.00	0.00	530.00
	ASSAM	10951.58	0.00	0.00	0.00	10951.58
	BIHAR	9615.05	0.00	1555.97	0.00	11171.02
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	2271.71	3895.19	0.00	0.00	6166.90
	GOA	203.78	62.77	81.88	0.00	348.43
	GUJARAT	2922.36	0.00	1324.68	0.00	4247.04
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	111.72	0.00	0.00	0.00	111.72
	JAMMU & KASHMIR	3478.28	0.00	0.00	0.00	3478.28
	JHARKHAND	420.45	0.00	0.00	0.00	420.45
	KARNATAKA	0.00	40.85	0.00	0.00	40.85
	KERALA	1927.75	1116.11	0.00	0.00	3043.86
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	809.02	0.00	809.02
	MANIPUR	997.48	0.00	0.00	0.00	997.48
	MEGHALAYA	63.43	0.00	0.00	0.00	63.43
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	11197.43	1135.05	397.61	0.00	12730.09
	PUDUCHERRY	72.05	0.00	83.70	0.00	155.75
	PUNJAB	5617.02	0.00	0.00	0.00	5617.02
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	1778.96	0.00	0.00	0.00	1778.96
	TAMIL NADU	720.32	0.00	80.51	0.00	800.83
	TRIPURA	714.36	0.00	0.00	0.00	714.36
	UNION GOVERNMENT	17128.01	399.80	0.00	0.00	17527.81
	UTTAR PRADESH	2809.68	0.00	682.72	0.00	3492.40
	UTTARAKHAND	309.02	0.00	0.00	0.00	309.02
	WEST BENGAL	4265.28	0.00	6218.36	41.42	10525.06
	Total (99)	78167.11	6649.77	21536.84	41.42	106395.14

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2009-10	ANDHRA PRADESH	95.80	0.00	9954.91	0.00	10050.71
	ARUNACHAL PRADESH	932.23	0.00	0.00	0.00	932.23
	ASSAM	12422.92	0.00	0.00	0.00	12422.92
	BIHAR	18864.90	0.00	2426.13	0.00	21291.03
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	2217.76	0.00	5478.82	0.00	7696.58
	GOA	656.91	254.96	170.02	0.00	1081.89
	GUJARAT	3352.03	0.00	1100.66	0.00	4452.69
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	111.72	0.00	0.00	0.00	111.72
	JAMMU & KASHMIR	4231.44	0.00	0.00	0.00	4231.44
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	43.91	0.00	0.00	43.91
	KERALA	1363.79	693.78	0.00	0.00	2057.57
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	1027.41	0.00	1027.41
	MANIPUR	970.70	0.00	0.00	0.00	970.70
	MEGHALAYA	74.09	0.00	0.00	0.00	74.09
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	7492.07	1398.56	467.56	0.00	9358.19
	PUDUCHERRY	115.00	0.00	74.95	0.00	189.95
	PUNJAB	6733.54	0.00	0.00	0.00	6733.54
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	355.64	0.00	0.00	0.00	355.64
	TAMIL NADU	1561.28	0.00	80.51	0.00	1641.79
	TRIPURA	948.07	0.00	0.00	0.00	948.07
	UNION GOVERNMENT	14639.58	497.60	0.00	0.00	15137.18
	UTTAR PRADESH	3017.96	0.00	1204.91	0.00	4222.87
	UTTARAKHAND	350.19	0.00	0.00	0.00	350.19
	WEST BENGAL	3606.68	0.00	7220.41	0.00	10827.09
	Total (99)	84114.30	2888.81	29206.29	0.00	116209.40

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2010-11	ANDHRA PRADESH	45.93	0.00	10866.61	0.00	10912.54
	ARUNACHAL PRADESH	153.09	0.00	0.00	0.00	153.09
	ASSAM	0.00	0.00	0.00	0.00	0.00
	BIHAR	18614.20	0.00	2441.33	0.00	21055.53
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	2622.44	0.00	5281.98	0.00	7904.42
	GOA	936.49	198.81	344.36	0.00	1479.66
	GUJARAT	4072.61	0.00	822.31	0.00	4894.92
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	83.25	0.00	0.00	0.00	83.25
	JAMMU & KASHMIR	4863.08	0.00	0.00	0.00	4863.08
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	46.14	0.00	0.00	46.14
	KERALA	1475.72	860.39	0.00	0.00	2336.11
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	0.00	1254.85	0.00	1254.85
	MANIPUR	1229.05	0.00	0.00	0.00	1229.05
	MEGHALAYA	80.92	0.00	0.00	0.00	80.92
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	8015.30	1642.29	1045.99	0.00	10703.58
	PUDUCHERRY	92.00	0.00	115.00	0.00	207.00
	PUNJAB	7877.03	0.00	0.00	0.00	7877.03
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	228.48	0.00	0.00	0.00	228.48
	TAMIL NADU	3433.67	0.00	80.51	0.00	3514.18
	TRIPURA	654.44	0.00	0.00	0.00	654.44
	UNION GOVERNMENT	17435.39	398.42	0.00	0.00	17833.81
	UTTAR PRADESH	2963.12	0.00	1564.47	0.00	4527.59
	UTTARAKHAND	386.04	0.00	0.00	0.00	386.04
	WEST BENGAL	3814.22	0.00	7098.56	36.81	10949.59
	Total (99)	79076.47	3146.05	30915.97	36.81	113175.30

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2011-12	ANDHRA PRADESH	179.40		11533.43		11712.83
	ARUNACHAL PRADESH	2099.96				2099.96
	ASSAM	21062.14		0.00		21062.14
	BIHAR	20377.24		2532.66		22909.90
	CHHATTISGARH	0.00				0.00
	DELHI	3867.13		5450.32		9317.45
	GOA	917.48	254.86	291.07		1463.41
	GUJARAT	2856.96		923.88		3780.84
	HARYANA					
	HIMACHAL PRADESH	87.55				87.55
	JAMMU & KASHMIR	6033.72				6033.72
	JHARKHAND					
	KARNATAKA	0.00	20.00			20.00
	KERALA	993.64	650.19			1643.83
	MADHYA PRADESH					
	MAHARASHTRA		2220.00	1615.27		3835.27
	MANIPUR	1455.90				1455.90
	MEGHALAYA	90.60				90.60
	MIZORAM	0.00	0.00	0.00		0.00
	NAGALAND					
	ODISHA	7818.53	1339.35	1215.31		10373.19
	PUDUCHERRY	121.80		105.50		227.30
	PUNJAB	9853.99				9853.99
	RAJASTHAN					
	SIKKIM	564.95				564.95
	TAMIL NADU	7430.85		80.51		7511.36
	TRIPURA	525.11				525.11
	UNION GOVERNMENT	16711.99	20.55			16732.54
	UTTAR PRADESH	5974.34		1380.60		7354.94
	UTTARAKHAND	324.05				324.05
	WEST BENGAL	15709.71		3665.70	88.23	19463.64
	Total (99)	125057.04	4504.95	28794.25	88.23	158444.47

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2012-13	ANDHRA PRADESH	57.27	0.00	10793.77	0.00	10851.04
	ARUNACHAL PRADESH	0.00	0.00	0.00	0.00	0.00
	ASSAM	22364.64	0.00	0.00	0.00	22364.64
	BIHAR	17800.25	0.00	2294.70	0.00	20094.95
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	3480.96	0.00	6256.01	0.00	9736.97
	GOA	889.85	194.73	259.17	0.00	1343.75
	GUJARAT	3859.25	0.00	686.11	0.00	4545.36
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	523.98	0.00	0.00	0.00	523.98
	JAMMU & KASHMIR	7096.37	0.00	0.00	0.00	7096.37
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	50.16	0.00	0.00	50.16
	KERALA	2412.51	1538.13	0.00	0.00	3950.64
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	4396.54	1333.81	0.00	5730.35
	MANIPUR	1572.74	0.00	0.00	0.00	1572.74
	MEGHALAYA	97.33	0.00	0.00	0.00	97.33
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	9187.89	1585.02	1503.06	0.00	12275.97
	PUDUCHERRY	85.12	0.00	58.40	0.00	143.52
	PUNJAB	11266.20	0.00	0.00	0.00	11266.20
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	611.22	0.00	0.00	0.00	611.22
	TAMIL NADU	9822.84	0.00	80.51	0.00	9903.35
	TRIPURA	438.83	0.00	0.00	0.00	438.83
	UNION GOVERNMENT	19336.81	540.11	0.00	0.00	19876.92
	UTTAR PRADESH	6270.94	0.00	8616.44	0.00	14887.38
	UTTARAKHAND	413.90	0.00	0.00	0.00	413.90
	WEST BENGAL	16285.06	0.00	4989.72	60.06	21334.84
	Total (99)	133873.96	8304.69	36871.7	60.06	179110.41

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2013-14	ANDHRA PRADESH	75.44	0.00	10794.85	0.00	10870.29
	ARUNACHAL PRADESH	1949.99	0.00	0.00	0.00	1949.99
	ASSAM	23165.44	0.00	0.00	0.00	23165.44
	BIHAR	20561.85	0.00	2490.16	0.00	23052.01
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	3582.79	0.00	6441.58	0.00	10024.37
	GOA	1361.59	60.02	42.22	0.00	1463.83
	GUJARAT	3308.68	0.00	551.66	0.00	3860.34
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	180.02	0.00	0.00	0.00	180.02
	JAMMU & KASHMIR	7144.52	0.00	0.00	0.00	7144.52
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	52.79	0.00	0.00	52.79
	KERALA	3012.98	971.27	0.00	0.00	3984.25
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	2480.80	1373.55	0.00	3854.35
	MANIPUR	1519.42	0.00	0.00	0.00	1519.42
	MEGHALAYA	98.71	0.00	0.00	0.00	98.71
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	11026.97	1809.81	1814.32	0.00	14651.10
	PUDUCHERRY	143.33	0.00	65.59	0.00	208.92
	PUNJAB	11759.40	0.00	0.00	0.00	11759.40
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	209.94	0.00	0.00	0.00	209.94
	TAMIL NADU	11492.64	0.00	80.51	0.00	11573.15
	TRIPURA	577.10	0.00	0.00	0.00	577.10
	UNION GOVERNMENT	20270.79	64.24	0.00	0.00	20335.03
	UTTAR PRADESH	6695.38	0.00	4043.92	0.00	10739.30
	UTTARAKHAND	396.52	0.00	0.00	0.00	396.52
	WEST BENGAL	18865.25	0.00	3874.11	186.45	22925.81
	Total (99)	147398.75	5438.93	31572.47	186.45	184596.60

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2014-15	ANDHRA PRADESH	7.99	0.00	7044.89	0.00	7052.88
	ARUNACHAL PRADESH	0.00	0.00	0.00	0.00	0.00
	ASSAM	25630.63	0.00	0.00	0.00	25630.63
	BIHAR	20047.80	0.00	2485.98	0.00	22533.78
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	3800.59	0.00	8427.10	0.00	12227.69
	GOA	1129.28	120.32	318.90	0.00	1568.50
	GUJARAT	2050.45	0.00	395.44	0.00	2445.89
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	3894.27	0.00	0.00	0.00	3894.27
	JAMMU & KASHMIR	7127.55	0.00	0.00	0.00	7127.55
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	54.68	0.00	0.00	54.68
	KERALA	1530.11	609.40	0.00	0.00	2139.51
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	2122.50	1474.41	0.00	3596.91
	MANIPUR	1572.75	0.00	0.00	0.00	1572.75
	MEGHALAYA	84.37	0.00	0.00	0.00	84.37
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	12631.94	2436.71	1958.11	0.00	17026.76
	PUDUCHERRY	129.20	0.00	35.21	0.00	164.41
	PUNJAB	12512.57	0.00	0.00	0.00	12512.57
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	160.31	0.00	0.00	0.00	160.31
	TAMIL NADU	12885.09	0.00	80.51	0.00	12965.60
	TELANGANA	13.16	0.00	0.00	0.00	13.16
	TRIPURA	1099.32	0.00	0.00	0.00	1099.32
	UNION GOVERNMENT	22423.18	106.00	0.00	0.00	22529.18
	UTTAR PRADESH	6962.42	0.00	10485.27	0.00	17447.69
	UTTARAKHAND	488.84	0.00	0.00	0.00	488.84
	WEST BENGAL	19100.35	0.00	4251.29	78.06	23429.70
	Total (99)	155282.17	5449.61	36957.11	78.06	197766.95

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2015-16	ANDHRA PRADESH	22.13	0.00	0.06	0.00	22.19
	ARUNACHAL PRADESH	0.00	0.00	0.00	0.00	0.00
	ASSAM	20181.26	0.00	0.00	0.00	20181.26
	BIHAR	19118.59	0.00	2237.03	0.00	21355.62
	CHHATTISGARH	0.00	0.00	0.00	0.00	0.00
	DELHI	4040.90	0.00	9620.36	0.00	13661.26
	GOA	1512.95	219.37	262.44	0.00	1994.76
	GUJARAT	2019.59	0.00	636.97	0.00	2656.56
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	983.70	0.00	0.00	0.00	983.70
	JAMMU & KASHMIR	8903.30	0.00	0.00	0.00	8903.30
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	0.00	42.17	0.00	0.00	42.17
	KERALA	1407.68	2291.44	0.00	0.00	3699.12
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	0.00	253.33	1473.40	0.00	1726.73
	MANIPUR	1522.65	0.00	0.00	0.00	1522.65
	MEGHALAYA	91.44	0.00	0.00	0.00	91.44
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	12543.66	2887.01	2205.39	0.00	17636.06
	PUDUCHERRY	120.11	0.00	31.13	0.00	151.24
	PUNJAB	12811.08	0.00	0.00	0.00	12811.08
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	1009.98	0.00	0.00	0.00	1009.98
	TAMIL NADU	12965.99	0.00	0.00	0.00	12965.99
	TELANGANA	0.00	0.00	0.00	0.00	0.00
	TRIPURA	1180.52	0.00	0.00	0.00	1180.52
	UNION GOVERNMENT	25440.55	0.00	0.00	0.00	25440.55
	UTTAR PRADESH	7107.09	0.00	3399.54	0.00	10506.63
	UTTARAKHAND	485.85	0.00	0.00	0.00	485.85
	WEST BENGAL	0.00	0.00	0.00	0.00	0.00
	Total (99)	133469.02	5693.32	19866.32	0.00	159028.66

Table A1: Distribution of revenue expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-2016	ANDHRA PRADESH	1753.97	0.00	123220.53	0.00	124974.50
	ARUNACHAL PRADESH	15116.71	0.00	0.00	0.00	15116.71
	ASSAM	200749.68	0.00	0.00	0.00	200749.68
	BIHAR	183669.93	0.00	22875.27	0.00	206545.20
	CHHATTISGARH	1538.79	0.00	2988.34	0.00	4527.13
	DELHI	34232.21	3895.19	63877.39	0.00	102004.79
	GOA	8427.53	1524.19	1899.01	0.00	11850.73
	GUJARAT	27063.73	0.00	8389.73	0.00	35453.46
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	6251.30	0.00	0.00	0.00	6251.30
	JAMMU & KASHMIR	72196.90	0.00	23.80	0.00	72220.70
	JHARKHAND	420.45	0.00	0.00	0.00	420.45
	KARNATAKA	96.51	613.50	0.00	0.00	710.01
	KERALA	20128.70	14128.67	0.00	0.00	34257.37
	MADHYA PRADESH	0.00	0.00	0.00	0.00	0.00
	MAHARASHTRA	1746.06	11473.17	14794.17	0.00	28013.40
	MANIPUR	16054.61	0.00	0.00	840.30	16894.91
	MEGHALAYA	1078.40	0.00	0.00	0.00	1078.40
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	102397.76	17774.24	11184.49	0.00	131356.49
	PUDUCHERRY	1536.46	0.00	1492.41	0.00	3028.87
	PUNJAB	111031.11	0.00	6828.92	0.00	117860.03
	RAJASTHAN	0.00	0.00	0.00	0.00	0.00
	SIKKIM	11192.82	0.00	0.00	0.00	11192.82
	TAMIL NADU	62431.65	0.00	1700.08	0.00	64131.73
	TELANGANA	13.16	0.00	0.00	0.00	13.16
	TRIPURA	11180.38	0.00	0.00	0.00	11180.38
	UNION GOVERNMENT	227935.44	4714.79	0.00	0.00	232650.23
	UTTAR PRADESH	61481.35	0.00	36738.39	0.00	98219.74
	UTTARAKHAND	4963.56	0.00	1.90	0.00	4965.46
	WEST BENGAL	100818.17	0.00	75426.38	23264.61	199509.16
	Total (99)	1285507.34	54123.75	371440.81	24104.91	1735176.81

Table A2: Distribution of capital expenditure by sub-major head of accounts and State						
(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-01	ANDHRA PRADESH	3747.84	0.00	2426.17	0.00	6174.01
	ARUNACHAL PRADESH	404.81	0.00	0.00	0.00	404.81
	ASSAM	3154.00	0.00	0.00	0.00	3154.00
	BIHAR	8236.50	0.00	51.42	0.00	8287.92
	CHHATTISGARH	0.87	0.00	0.00	0.00	0.87
	DELHI	162.80	0.00	1567.87	0.00	1730.67
	GOA	28.48	0.20	26.57	0.00	55.25
	GUJARAT	21.81	0.00	1329.03	0.00	1350.84
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	749.84	0.00	0.00	0.00	749.84
	JAMMU & KASHMIR	387.41	0.00	0.00	0.00	387.41
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	509.46	450.05	0.00	0.00	959.51
	KERALA	261.98	569.84	0.00	0.00	831.82
	MADHYA PRADESH	31.51	0.00	0.00	0.00	31.51
	MAHARASHTRA	194.77	408.25	120.35	0.00	723.37
	MANIPUR	44.03	0.00	0.00	0.00	44.03
	MEGHALAYA	257.99	0.00	0.00	0.00	257.99
	ODISHA	179.67	99.35	117.74	0.00	396.76
	PUDUCHERRY	153.95	17.71	267.68	0.00	439.34
	PUNJAB	1580.42	0.00	8514.10	0.00	10094.52
	RAJASTHAN	217.29	0.00	0.00	0.00	217.29
	SIKKIM	0.00	0.00	0.00	0.00	0.00
	TAMIL NADU	549.50	102.78	-0.97	0.00	651.31
	TRIPURA	764.93	0.00	0.00	0.00	764.93
	UNION GOVERNMENT	200.05	276.16	0.00	0.00	476.21
	UTTAR PRADESH	3363.43	0.00	50.52	0.00	3413.95
	UTTARAKHAND	-2.60	0.00	0.00	0.00	-2.60
	WEST BENGAL	5639.25	106.72	2861.59	0.00	8607.56
	Total (99)	30839.99	2031.06	17332.07	0.00	50203.12

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2001-02	ANDHRA PRADESH	6063.52	0.00	0.00	0.00	6063.52
	ARUNACHAL PRADESH	367.98	0.00	0.00	0.00	367.98
	ASSAM	1757.13	0.00	0.00	0.00	1757.13
	BIHAR	8692.95	0.00	0.00	0.00	8692.95
	CHHATTISGARH	10.32	0.00	0.00	0.00	10.32
	DELHI	167.18	0.00	1596.57	0.00	1763.75
	GOA	67.26	29.60	58.15	0.00	155.01
	GUJARAT	76.02	0.00	1183.82	0.00	1259.84
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	744.43	0.00	0.00	0.00	744.43
	JAMMU & KASHMIR	553.14	0.00	0.00	0.00	553.14
	JHARKHAND	148.62	0.00	0.00	0.00	148.62
	KARNATAKA	617.79	64.93	0.00	0.00	682.72
	KERALA	394.22	1621.63	0.00	0.00	2015.85
	MADHYA PRADESH	22.00	0.00	0.00	0.00	22.00
	MAHARASHTRA	61.42	345.32	325.08	0.00	731.82
	MANIPUR	32.44	0.00	0.00	0.00	32.44
	MEGHALAYA	192.96	0.00	0.00	0.00	192.96
	ODISHA	308.48	31.20	96.05	0.00	435.73
	PUDUCHERRY	168.51	23.60	153.78	0.00	345.89
	PUNJAB	3249.64	0.00	10091.37	0.00	13341.01
	RAJASTHAN	385.86	0.00	0.00	0.00	385.86
	SIKKIM	0.00	0.00	0.00	0.00	0.00
	TAMIL NADU	268.58	239.17	0.00	0.00	507.75
	TRIPURA	449.27	0.00	0.00	0.00	449.27
	UNION GOVERNMENT	306.33	302.35	0.00	0.00	608.68
	UTTAR PRADESH	2191.06	0.00	933.34	0.00	3124.40
	UTTARAKHAND	321.34	0.00	0.00	0.00	321.34
	WEST BENGAL	7931.72	304.27	3303.66	0.00	11539.65
	Total (99)	35550.17	2962.07	17741.82	0.00	56254.06

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2002-03	ANDHRA PRADESH	4123.28	0.00	0.00	0.00	4123.28
	ARUNACHAL PRADESH	374.12	0.00	0.00	0.00	374.12
	ASSAM	2152.77	0.00	0.00	0.00	2152.77
	BIHAR	8432.85	0.00	0.00	0.00	8432.85
	CHHATTISGARH	30.14	0.00	0.00	0.00	30.14
	DELHI	182.50	0.00	1761.94	0.00	1944.44
	GOA	108.44	75.42	83.54	0.00	267.40
	GUJARAT	18.37	0.00	969.61	0.00	987.98
	HARYANA	3163.46	0.00	0.00	0.00	3163.46
	HIMACHAL PRADESH	1353.37	0.00	0.00	0.00	1353.37
	JAMMU & KASHMIR	814.45	0.00	0.00	0.00	814.45
	JHARKHAND	22.87	0.00	0.00	0.00	22.87
	KARNATAKA	311.45	499.36	0.00	0.00	810.81
	KERALA	318.24	1621.32	0.00	0.00	1939.56
	MADHYA PRADESH	248.66	0.00	0.00	0.00	248.66
	MAHARASHTRA	35.58	235.21	94.16	0.00	364.95
	MANIPUR	68.51	0.00	0.00	0.00	68.51
	MEGHALAYA	106.41	0.00	0.00	0.00	106.41
	ODISHA	273.48	45.54	293.28	0.00	612.30
	PUDUCHERRY	324.03	1.89	591.94	0.00	917.86
	PUNJAB	253.67	0.00	2477.57	0.00	2731.24
	RAJASTHAN	385.96	0.00	0.00	0.00	385.96
	SIKKIM	0.00	0.00	0.00	0.00	0.00
	TAMIL NADU	156.44	682.68	0.00	0.00	839.12
	TRIPURA	417.98	0.00	0.00	0.00	417.98
	UNION GOVERNMENT	257.20	379.00	0.00	0.00	636.20
	UTTAR PRADESH	3158.90	0.00	1027.21	0.00	4186.11
	UTTARAKHAND	370.17	0.00	0.00	0.00	370.17
	WEST BENGAL	4320.59	47.38	3475.57	0.00	7843.54
	Total (99)	31783.89	3587.8	10774.82	0.00	46146.51

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2003-04	ANDHRA PRADESH	742.03	0.00	1232.94	0.00	1974.97
	ARUNACHAL PRADESH	1648.06	0.00	0.00	0.00	1648.06
	ASSAM	1493.70	0.00	0.00	0.00	1493.70
	BIHAR	8344.64	0.00	0.00	0.00	8344.64
	CHHATTISGARH	29.42	0.00	0.00	0.00	29.42
	DELHI	203.83	0.00	1559.60	0.00	1763.43
	GOA	140.05	146.07	155.37	0.00	441.49
	GUJARAT	33.01	0.00	1032.68	0.00	1065.69
	HARYANA	3255.76	0.00	0.00	0.00	3255.76
	HIMACHAL PRADESH	1582.52	0.00	0.00	0.00	1582.52
	JAMMU & KASHMIR	1604.30	0.00	1.82	0.00	1606.12
	JHARKHAND	47.93	0.00	0.00	0.00	47.93
	KARNATAKA	270.20	441.07	0.00	0.00	711.27
	KERALA	290.31	2252.26	0.00	0.00	2542.57
	MADHYA PRADESH	95.22	0.00	0.00	0.00	95.22
	MAHARASHTRA	81.29	980.04	30.31	0.00	1091.64
	MANIPUR	420.58	0.00	0.00	0.00	420.58
	MEGHALAYA	161.51	0.00	0.00	0.00	161.51
	ODISHA	74.40	6.78	175.61	0.00	256.79
	PUDUCHERRY	358.98	12.42	378.18	0.00	749.58
	PUNJAB	195.99	0.00	1124.20	0.00	1320.19
	RAJASTHAN	345.95	0.00	0.00	0.00	345.95
	SIKKIM	161.44	0.00	0.00	0.00	161.44
	TAMIL NADU	427.57	916.32	0.00	0.00	1343.89
	TRIPURA	694.98	0.00	0.00	0.00	694.98
	UNION GOVERNMENT	178.19	671.91	0.00	0.00	850.10
	UTTAR PRADESH	4904.56	0.00	763.79	0.00	5668.35
	UTTARAKHAND	603.58	0.00	0.00	0.00	603.58
	WEST BENGAL	2401.19	9.93	3753.99	0.00	6165.11
	Total (99)	30791.19	5436.80	10208.49	0.00	46436.48

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2004-05	ANDHRA PRADESH	2264.93	0.00	1284.86	0.00	3549.79
	ARUNACHAL PRADESH	274.99	0.00	100.00	0.00	374.99
	ASSAM	4054.84	0.00	0.00	0.00	4054.84
	BIHAR	11874.09	0.00	0.00	0.00	11874.09
	CHHATTISGARH	15.04	0.00	0.00	0.00	15.04
	DELHI	200.07	0.00	1399.94	0.00	1600.01
	GOA	124.87	70.05	250.76	0.00	445.68
	GUJARAT	14.07	0.00	739.15	0.00	753.22
	HARYANA	3982.68	0.00	0.00	0.00	3982.68
	HIMACHAL PRADESH	1422.49	0.00	0.00	0.00	1422.49
	JAMMU & KASHMIR	1328.57	7.00	4.19	0.00	1339.76
	JHARKHAND	131.45	0.00	0.00	0.00	131.45
	KARNATAKA	328.51	422.14	0.00	0.00	750.65
	KERALA	194.75	2139.34	0.00	0.00	2334.09
	MADHYA PRADESH	475.29	0.00	0.00	0.00	475.29
	MAHARASHTRA	231.70	837.45	91.62	0.00	1160.77
	MANIPUR	687.04	0.00	0.00	0.00	687.04
	MEGHALAYA	144.76	0.00	0.00	0.00	144.76
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	75.78	74.67	353.88	0.00	504.33
	PUDUCHERRY	737.96	176.26	298.25	0.00	1212.47
	PUNJAB	840.96	0.00	2583.06	0.00	3424.02
	RAJASTHAN	985.37	0.00	0.00	0.00	985.37
	SIKKIM	195.31	0.00	50.00	0.00	245.31
	TAMIL NADU	1336.33	1733.20	0.00	0.00	3069.53
	TRIPURA	300.84	0.00	0.00	0.00	300.84
	UNION GOVERNMENT	572.62	295.91	0.00	0.00	868.53
	UTTAR PRADESH	14412.67	0.00	1120.34	0.00	15533.01
	UTTARAKHAND	766.92	0.00	0.00	0.00	766.92
	WEST BENGAL	4475.17	11.46	2807.91	0.00	7294.54
	Total (99)	52450.07	5767.48	11083.96	0.00	69301.51

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2005-06	ANDHRA PRADESH	1170.16	0.00	3796.92	0.00	4967.08
	ARUNACHAL PRADESH	575.00	0.00	0.00	0.00	575.00
	ASSAM	4809.60	0.00	0.00	0.00	4809.60
	BIHAR	14004.47	0.00	0.00	0.00	14004.47
	CHHATTISGARH	68.54	0.00	0.00	0.00	68.54
	DELHI	281.82	0.00	3871.49	0.00	4153.31
	GOA	108.04	98.36	175.51	0.00	381.91
	GUJARAT	15.33	0.00	800.16	0.00	815.49
	HARYANA	6118.67	0.00	0.00	0.00	6118.67
	HIMACHAL PRADESH	1641.56	0.00	0.00	0.00	1641.56
	JAMMU & KASHMIR	2016.71	6.01	0.00	0.00	2022.72
	JHARKHAND	211.63	0.00	0.00	0.00	211.63
	KARNATAKA	545.67	381.13	0.00	0.00	926.80
	KERALA	280.09	714.15	0.00	0.00	994.24
	MADHYA PRADESH	232.89	0.00	0.00	0.00	232.89
	MAHARASHTRA	151.29	455.68	5.18	0.00	612.15
	MANIPUR	652.29	0.00	0.00	0.00	652.29
	MEGHALAYA	439.91	0.00	0.00	0.00	439.91
	MIZORAM	0.00	60.00	0.00	0.00	60.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	444.86	41.76	611.29	0.00	1097.91
	PUDUCHERRY	660.56	293.62	1723.74	0.00	2677.92
	PUNJAB	2260.24	0.00	4601.02	0.00	6861.26
	RAJASTHAN	730.72	0.00	0.00	0.00	730.72
	SIKKIM	168.65	0.00	22.18	0.00	190.83
	TAMIL NADU	1776.32	4125.47	0.00	0.00	5901.79
	TRIPURA	773.67	0.00	0.00	0.00	773.67
	UNION GOVERNMENT	696.68	90.97	0.00	0.00	787.65
	UTTAR PRADESH	20738.85	0.00	9579.47	0.00	30318.32
	UTTARAKHAND	3614.37	0.00	0.00	0.00	3614.37
	WEST BENGAL	7563.72	19.48	3650.78	0.00	11233.98
	Total (99)	72752.31	6286.63	28837.74	0.00	107876.68

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2006-07	ANDHRA PRADESH	5210.42	0.00	7432.64	0.00	12643.06
	ARUNACHAL PRADESH	904.51	0.00	0.00	0.00	904.51
	ASSAM	12303.66	0.00	0.00	0.00	12303.66
	BIHAR	13243.13	0.00	0.00	0.00	13243.13
	CHHATTISGARH	174.32	0.00	0.00	0.00	174.32
	DELHI	282.09	0.00	1511.85	0.00	1793.94
	GOA	453.26	525.34	260.24	0.00	1238.84
	GUJARAT	189.40	0.00	939.69	0.00	1129.09
	HARYANA	5849.00	0.00	0.00	0.00	5849.00
	HIMACHAL PRADESH	1873.30	0.00	0.00	0.00	1873.30
	JAMMU & KASHMIR	3492.49	34.28	0.05	0.00	3526.82
	JHARKHAND	-1559.11	0.00	0.00	0.00	-1559.11
	KARNATAKA	845.53	1223.28	0.00	0.00	2068.81
	KERALA	59.77	1142.11	0.00	0.00	1201.88
	MADHYA PRADESH	514.83	0.00	0.00	0.00	514.83
	MAHARASHTRA	1109.51	857.81	31.46	0.00	1998.78
	MANIPUR	1477.21	0.00	0.00	0.00	1477.21
	MEGHALAYA	248.20	0.00	0.00	0.00	248.20
	MIZORAM	0.00	351.00	0.00	0.00	351.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	568.20	201.51	1086.04	0.00	1855.75
	PUDUCHERRY	397.33	9.67	3145.01	0.00	3552.01
	PUNJAB	1983.96	0.00	932.55	0.00	2916.51
	RAJASTHAN	309.58	0.00	0.00	0.00	309.58
	SIKKIM	158.71	0.00	85.46	0.00	244.17
	TAMIL NADU	1136.64	2150.30	0.00	0.00	3286.94
	TRIPURA	1299.53	0.00	0.00	0.00	1299.53
	UNION GOVERNMENT	388.60	684.61	0.00	0.00	1073.21
	UTTAR PRADESH	30865.07	0.00	8077.88	0.00	38942.95
	UTTARAKHAND	3788.34	0.00	0.00	0.00	3788.34
	WEST BENGAL	10065.93	0.00	1258.78	0.00	11324.71
	Total (99)	97633.41	7179.91	24761.65	0.00	129574.97

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2007-08	ANDHRA PRADESH	19711.20	0.00	5520.85	0.00	25232.05
	ARUNACHAL PRADESH	712.85	0.00	0.00	0.00	712.85
	ASSAM	9127.85	0.00	0.00	0.00	9127.85
	BIHAR	25775.70	0.00	0.00	0.00	25775.70
	CHHATTISGARH	418.54	0.00	0.00	0.00	418.54
	DELHI	310.19	0.00	2762.64	0.00	3072.83
	GOA	709.02	404.98	374.86	0.00	1488.86
	GUJARAT	8627.90	0.00	1663.63	0.00	10291.53
	HARYANA	6448.76	0.00	0.00	0.00	6448.76
	HIMACHAL PRADESH	2288.62	0.00	0.00	0.00	2288.62
	JAMMU & KASHMIR	2897.98	0.00	1.59	0.00	2899.57
	JHARKHAND	681.70	0.00	0.00	0.00	681.70
	KARNATAKA	1471.66	465.09	0.00	0.00	1936.75
	KERALA	387.70	3789.96	0.00	0.00	4177.66
	MADHYA PRADESH	1629.65	0.00	0.00	0.00	1629.65
	MAHARASHTRA	978.67	1553.23	510.22	0.00	3042.12
	MANIPUR	1091.64	0.00	0.00	0.00	1091.64
	MEGHALAYA	357.00	0.00	0.00	0.00	357.00
	MIZORAM	0.00	271.00	0.00	0.00	271.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	2307.72	205.43	3470.93	0.00	5984.08
	PUDUCHERRY	314.99	0.00	2058.00	0.00	2372.99
	PUNJAB	5037.07	0.00	4956.68	0.00	9993.75
	RAJASTHAN	178.63	0.00	0.00	0.00	178.63
	SIKKIM	116.14	0.00	164.43	0.00	280.57
	TAMIL NADU	1019.79	2842.58	0.00	0.00	3862.37
	TRIPURA	1155.41	0.00	0.00	0.00	1155.41
	UNION GOVERNMENT	154.38	933.84	0.00	0.00	1088.22
	UTTAR PRADESH	27120.42	0.00	4279.51	0.00	31399.93
	UTTARAKHAND	2357.72	0.00	0.00	0.00	2357.72
	WEST BENGAL	13556.64	313.93	674.21	0.00	14544.78
	Total (99)	136945.54	10780.04	26437.55	0.00	174163.13

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2008-09	ANDHRA PRADESH	18193.47	0.00	2752.65	0.00	20946.12
	ARUNACHAL PRADESH	6527.08	0.00	0.00	0.00	6527.08
	ASSAM	19540.27	0.00	0.00	0.00	19540.27
	BIHAR	57284.16	0.00	0.00	0.00	57284.16
	CHHATTISGARH	333.71	0.00	0.00	0.00	333.71
	DELHI	324.36	0.00	4167.29	0.00	4491.65
	GOA	1582.24	1442.16	542.16	0.00	3566.56
	GUJARAT	5876.70	0.00	1724.21	0.00	7600.91
	HARYANA	8104.58	0.00	0.00	0.00	8104.58
	HIMACHAL PRADESH	2361.96	0.00	0.00	0.00	2361.96
	JAMMU & KASHMIR	5764.79	0.00	0.00	0.00	5764.79
	JHARKHAND	571.32	0.00	0.00	0.00	571.32
	KARNATAKA	2414.85	914.04	0.00	0.00	3328.89
	KERALA	701.41	10384.90	0.00	0.00	11086.31
	MADHYA PRADESH	1264.94	0.00	0.00	0.00	1264.94
	MAHARASHTRA	2059.85	2595.46	80.37	0.00	4735.68
	MANIPUR	6430.09	0.00	0.00	0.00	6430.09
	MEGHALAYA	538.82	0.00	0.00	0.00	538.82
	MIZORAM	0.00	1108.19	0.00	0.00	1108.19
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	4533.19	105.69	2799.15	0.00	7438.03
	PUDUCHERRY	294.96	0.00	1031.95	0.00	1326.91
	PUNJAB	2588.92	0.00	12430.85	0.00	15019.77
	RAJASTHAN	162.23	0.00	0.00	0.00	162.23
	SIKKIM	406.25	0.00	62.06	0.00	468.31
	TAMIL NADU	4135.86	995.58	0.00	0.00	5131.44
	TRIPURA	922.45	0.00	0.00	0.00	922.45
	UNION GOVERNMENT	655.75	1113.71	0.00	0.00	1769.46
	UTTAR PRADESH	33787.07	0.00	3737.53	0.00	37524.60
	UTTARAKHAND	1808.51	0.00	0.00	0.00	1808.51
	WEST BENGAL	11548.14	239.19	1998.79	0.00	13786.12
	Total (99)	200717.93	18898.92	31327.01	0.00	250943.86

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2009-10	ANDHRA PRADESH	25901.94	0.00	3165.06	0.00	29067.00
	ARUNACHAL PRADESH	2921.38	0.00	0.00	0.00	2921.38
	ASSAM	30005.56	0.00	0.00	0.00	30005.56
	BIHAR	76309.62	0.00	0.00	0.00	76309.62
	CHHATTISGARH	538.70	0.00	0.00	0.00	538.70
	DELHI	364.68	0.00	5909.36	0.00	6274.04
	GOA	3715.73	1409.87	1534.78	0.00	6660.38
	GUJARAT	5903.19	0.00	3212.39	0.00	9115.58
	HARYANA	7898.24	0.00	0.00	0.00	7898.24
	HIMACHAL PRADESH	7097.28	0.00	0.00	0.00	7097.28
	JAMMU & KASHMIR	5047.21	0.00	0.00	0.00	5047.21
	JHARKHAND	1132.51	0.00	0.00	0.00	1132.51
	KARNATAKA	703.91	704.24	0.00	0.00	1408.15
	KERALA	248.49	14262.77	0.00	0.00	14511.26
	MADHYA PRADESH	689.70	0.00	0.00	0.00	689.70
	MAHARASHTRA	1697.03	4205.37	213.20	0.00	6115.60
	MANIPUR	5534.75	0.00	0.00	0.00	5534.75
	MEGHALAYA	280.15	0.00	0.00	0.00	280.15
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	12433.74	0.00	0.00	0.00	12433.74
	PUDUCHERRY	237.94	0.00	2898.67	0.00	3136.61
	PUNJAB	5338.27	0.00	8674.88	0.00	14013.15
	RAJASTHAN	162.23	0.00	0.00	0.00	162.23
	SIKKIM	318.19	0.00	11.93	0.00	330.12
	TAMIL NADU	16234.68	221.49	0.00	0.00	16456.17
	TRIPURA	799.86	0.00	0.00	0.00	799.86
	UNION GOVERNMENT	424.89	1098.00	0.00	0.00	1522.89
	UTTAR PRADESH	34994.32	0.00	848.07	0.00	35842.39
	UTTARAKHAND	509.66	0.00	0.00	0.00	509.66
	WEST BENGAL	28567.27	124.06	1984.11	0.00	30675.44
	Total (99)	276011.12	22025.80	28452.45	0.00	326489.37

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2010-11	ANDHRA PRADESH	18581.53	0.00	3573.17	0.00	22154.70
	ARUNACHAL PRADESH	9017.99	0.00	0.00	0.00	9017.99
	ASSAM	26189.84	0.00	0.00	0.00	26189.84
	BIHAR	70290.00	0.00	0.00	0.00	70290.00
	CHHATTISGARH	428.20	0.00	0.00	0.00	428.20
	DELHI	347.52	0.00	4832.53	0.00	5180.05
	GOA	3377.12	488.66	1181.66	0.00	5047.44
	GUJARAT	5477.30	0.00	4316.42	0.00	9793.72
	HARYANA	12131.00	0.00	0.00	0.00	12131.00
	HIMACHAL PRADESH	12416.38	0.00	0.00	0.00	12416.38
	JAMMU & KASHMIR	8322.63	0.00	0.00	0.00	8322.63
	JHARKHAND	1156.72	0.00	0.00	0.00	1156.72
	KARNATAKA	1203.77	1130.34	0.00	0.00	2334.11
	KERALA	6103.90	4371.49	0.00	0.00	10475.39
	MADHYA PRADESH	1588.18	0.00	0.00	0.00	1588.18
	MAHARASHTRA	1743.90	8150.83	212.52	0.00	10107.25
	MANIPUR	8580.67	0.00	0.00	0.00	8580.67
	MEGHALAYA	197.82	0.00	0.00	0.00	197.82
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	6931.19	369.27	3381.99	0.00	10682.45
	PUDUCHERRY	1161.28	0.00	901.79	0.00	2063.07
	PUNJAB	1313.55	0.00	3071.53	0.00	4385.08
	RAJASTHAN	192.42	0.00	0.00	0.00	192.42
	SIKKIM	311.56	0.00	217.53	0.00	529.09
	TAMIL NADU	28201.93	398.65	0.00	0.00	28600.58
	TRIPURA	1687.88	0.00	0.00	0.00	1687.88
	UNION GOVERNMENT	948.20	564.65	0.00	0.00	1512.85
	UTTAR PRADESH	45249.89	0.00	119.17	0.00	45369.06
	UTTARAKHAND	2062.80	0.00	0.00	0.00	2062.80
	WEST BENGAL	40941.87	623.55	1633.10	0.00	43198.52
	Total (99)	316157.04	16097.44	23441.41	0.00	355695.89

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2011-12	ANDHRA PRADESH	27040.48		3275.63		30316.11
	ARUNACHAL PRADESH	6017.61				6017.61
	ASSAM	31932.17				31932.17
	BIHAR	113652.46				113652.46
	CHHATTISGARH	2516.94				2516.94
	DELHI	428.77		4879.47		5308.24
	GOA	2735.04	1035.00	1457.39		5227.43
	GUJARAT	3308.42		4157.53		7465.95
	HARYANA	13327.20				13327.20
	HIMACHAL PRADESH	4691.15				4691.15
	JAMMU & KASHMIR	11634.46	0.00	-0.54		11633.92
	JHARKHAND	1585.73				1585.73
	KARNATAKA	2024.02	625.74			2649.76
	KERALA	3465.03	168.77			3633.80
	MADHYA PRADESH	661.77				661.77
	MAHARASHTRA	2208.83	150.00	335.72		2694.55
	MANIPUR	8486.93				8486.93
	MEGHALAYA	622.69				622.69
	MIZORAM	0.00	115.65	0.00		115.65
	NAGALAND					
	ODISHA	13311.51	365.26	7734.23		21411.00
	PUDUCHERRY	422.00		1179.23		1601.23
	PUNJAB	2338.17		3328.50		5666.67
	RAJASTHAN	184.63				184.63
	SIKKIM	49.99		241.05		291.04
	TAMIL NADU	85545.58	301.39	0.00		85846.97
	TRIPURA	1905.14				1905.14
	UNION GOVERNMENT	573.18	1668.78			2241.96
	UTTAR PRADESH	35425.74		699.19		36124.93
	UTTARAKHAND	1543.60				1543.60
	WEST BENGAL	21896.62	393.89	1361.75		23652.26
	Total (99)	399535.86	4824.48	28649.15		433009.49

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2012-13	ANDHRA PRADESH	16769.06	0.00	3621.80	0.00	20390.86
	ARUNACHAL PRADESH	2093.75	0.00	0.00	0.00	2093.75
	ASSAM	33446.55	0.00	0.00	0.00	33446.55
	BIHAR	95698.95	0.00	0.00	0.00	95698.95
	CHHATTISGARH	487.77	0.00	0.00	0.00	487.77
	DELHI	449.94	0.00	7369.46	0.00	7819.40
	GOA	1693.52	1241.90	1069.28	0.00	4004.70
	GUJARAT	1703.20	0.00	5002.96	0.00	6706.16
	HARYANA	16329.90	0.00	0.00	0.00	16329.90
	HIMACHAL PRADESH	5626.81	0.00	0.00	0.00	5626.81
	JAMMU & KASHMIR	10129.94	0.00	14.63	0.00	10144.57
	JHARKHAND	1747.78	0.00	0.00	0.00	1747.78
	KARNATAKA	6077.29	644.00	0.00	0.00	6721.29
	KERALA	12641.58	2672.31	0.00	0.00	15313.89
	MADHYA PRADESH	621.79	0.00	0.00	0.00	621.79
	MAHARASHTRA	3240.99	0.00	261.67	0.00	3502.66
	MANIPUR	8916.90	0.00	0.00	0.00	8916.90
	MEGHALAYA	286.46	0.00	0.00	0.00	286.46
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	18412.99	978.24	7776.80	0.00	27168.03
	PUDUCHERRY	242.37	0.00	1075.85	0.00	1318.22
	PUNJAB	5865.51	0.00	10483.79	0.00	16349.30
	RAJASTHAN	1020.42	0.00	0.00	0.00	1020.42
	SIKKIM	479.38	0.00	232.38	0.00	711.76
	TAMIL NADU	26037.66	4080.84	0.00	0.00	30118.50
	TRIPURA	2159.58	0.00	0.00	0.00	2159.58
	UNION GOVERNMENT	499.34	1591.53	0.00	0.00	2090.87
	UTTAR PRADESH	43481.67	0.00	2282.24	0.00	45763.91
	UTTARAKHAND	3950.25	0.00	0.00	0.00	3950.25
	WEST BENGAL	42232.32	283.16	4000.04	0.00	46515.52
	Total (99)	362343.67	11491.98	43190.90	0.00	417026.55

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2013-14	ANDHRA PRADESH	12321.48	0.00	3141.35	0.00	15462.83
	ARUNACHAL PRADESH	2029.81	0.00	0.00	0.00	2029.81
	ASSAM	19849.36	0.00	0.00	0.00	19849.36
	BIHAR	75395.90	0.00	0.00	0.00	75395.90
	CHHATTISGARH	915.40	0.00	0.00	0.00	915.40
	DELHI	449.57	0.00	6968.41	0.00	7417.98
	GOA	2059.35	1423.02	1268.32	0.00	4750.69
	GUJARAT	8898.10	0.00	5505.01	0.00	14403.11
	HARYANA	21910.03	0.00	0.00	0.00	21910.03
	HIMACHAL PRADESH	3926.95	0.00	0.00	0.00	3926.95
	JAMMU & KASHMIR	4391.47	0.00	0.00	0.00	4391.47
	JHARKHAND	901.09	0.00	0.00	0.00	901.09
	KARNATAKA	4054.28	1213.27	0.00	0.00	5267.55
	KERALA	4052.33	3572.80	0.00	0.00	7625.13
	MADHYA PRADESH	678.10	0.00	0.00	0.00	678.10
	MAHARASHTRA	3943.16	0.00	149.10	0.00	4092.26
	MANIPUR	9498.72	0.00	0.00	0.00	9498.72
	MEGHALAYA	393.90	0.00	0.00	0.00	393.90
	MIZORAM	0.00	13.00	0.00	0.00	13.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	40722.03	2153.35	7446.30	0.00	50321.68
	PUDUCHERRY	241.73	0.00	1085.37	0.00	1327.10
	PUNJAB	4072.64	0.00	5515.16	0.00	9587.80
	RAJASTHAN	881.49	0.00	0.00	0.00	881.49
	SIKKIM	250.40	0.00	129.06	0.00	379.46
	TAMIL NADU	8922.09	4480.69	0.00	0.00	13402.78
	TRIPURA	958.31	0.00	0.00	0.00	958.31
	UNION GOVERNMENT	579.78	1951.42	0.00	0.00	2531.20
	UTTAR PRADESH	40721.02	0.00	988.05	0.00	41709.07
	UTTARAKHAND	8805.77	0.00	0.00	0.00	8805.77
	WEST BENGAL	49070.16	90.00	4665.31	0.00	53825.47
	Total (99)	330894.42	14897.55	36861.44	0.00	382653.41

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2014-15	ANDHRA PRADESH	19954.56	0.00	2676.78	0.00	22631.34
	ARUNACHAL PRADESH	3076.37	0.00	0.00	0.00	3076.37
	ASSAM	51917.54	0.00	0.00	0.00	51917.54
	BIHAR	45006.62	0.00	0.00	0.00	45006.62
	CHHATTISGARH	824.47	0.00	0.00	0.00	824.47
	DELHI	481.79	0.00	8119.31	0.00	8601.10
	GOA	2449.15	1511.29	1796.12	0.00	5756.56
	GUJARAT	12829.79	0.00	3999.20	0.00	16828.99
	HARYANA	22152.37	0.00	0.00	0.00	22152.37
	HIMACHAL PRADESH	32771.55	0.00	0.00	0.00	32771.55
	JAMMU & KASHMIR	9039.10	0.00	0.00	0.00	9039.10
	JHARKHAND	2923.03	0.00	0.00	0.00	2923.03
	KARNATAKA	2978.90	2288.31	0.00	0.00	5267.21
	KERALA	7464.02	4388.28	0.00	0.00	11852.30
	MADHYA PRADESH	697.92	0.00	0.00	0.00	697.92
	MAHARASHTRA	13758.76	0.00	281.80	0.00	14040.56
	MANIPUR	3256.43	0.00	0.00	0.00	3256.43
	MEGHALAYA	193.61	0.00	0.00	0.00	193.61
	MIZORAM	0.00	38.40	0.00	0.00	38.40
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	41248.67	1954.54	9792.88	0.00	52996.09
	PUDUCHERRY	1637.63	0.00	1606.76	0.00	3244.39
	PUNJAB	6509.22	0.00	16583.94	0.00	23093.16
	RAJASTHAN	256.87	0.00	0.00	0.00	256.87
	SIKKIM	282.53	0.00	142.77	0.00	425.30
	TAMIL NADU	18035.28	1434.71	0.00	0.00	19469.99
	TELANGANA	1953.35	0.00	31.59	0.00	1984.94
	TRIPURA	1259.21	0.00	0.00	0.00	1259.21
	UNION GOVERNMENT	1219.81	1500.27	0.00	0.00	2720.08
	UTTAR PRADESH	63648.10	0.00	-211.03	0.00	63437.07
	UTTARAKHAND	31065.02	0.00	0.00	0.00	31065.02
	WEST BENGAL	81156.75	19.29	7040.80	0.00	88216.84
	Total (99)	480048.42	13135.09	51860.92	0.00	545044.43

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2015-16	ANDHRA PRADESH	16570.66	0.00	4593.82	0.00	21164.48
	ARUNACHAL PRADESH	11280.81	0.00	0.00	0.00	11280.81
	ASSAM	22229.84	0.00	0.00	0.00	22229.84
	BIHAR	65111.60	0.00	0.00	0.00	65111.60
	CHHATTISGARH	515.23	0.00	0.00	0.00	515.23
	DELHI	379.45	0.00	4839.52	0.00	5218.97
	GOA	1991.16	1362.14	1353.43	0.00	4706.73
	GUJARAT	5662.46	0.00	4624.40	0.00	10286.86
	HARYANA	20519.10	0.00	0.00	0.00	20519.10
	HIMACHAL PRADESH	4190.39	0.00	0.00	0.00	4190.39
	JAMMU & KASHMIR	15476.81	0.00	0.00	0.00	15476.81
	JHARKHAND	5080.82	0.00	0.00	0.00	5080.82
	KARNATAKA	2606.59	3138.06	0.00	0.00	5744.65
	KERALA	20983.24	4353.91	0.00	0.00	25337.15
	MADHYA PRADESH	623.76	0.00	0.00	0.00	623.76
	MAHARASHTRA	8661.59	0.00	236.07	0.00	8897.66
	MANIPUR	2310.56	0.00	0.00	0.00	2310.56
	MEGHALAYA	125.83	0.00	0.00	0.00	125.83
	MIZORAM	0.00	146.00	0.00	0.00	146.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	58329.61	2199.89	15894.53	0.00	76424.03
	PUDUCHERRY	216.81	0.00	2444.34	0.00	2661.15
	PUNJAB	8250.46	0.00	17512.60	0.00	25763.06
	RAJASTHAN	4241.02	0.00	0.00	0.00	4241.02
	SIKKIM	115.48	0.00	0.00	0.00	115.48
	TAMIL NADU	6311.67	312.89	0.00	0.00	6624.56
	TELANGANA	6583.56	0.00	0.00	0.00	6583.56
	TRIPURA	210.92	0.00	0.00	0.00	210.92
	UNION GOVERNMENT	1032.59	1449.19	0.00	0.00	2481.78
	UTTAR PRADESH	69428.23	0.00	1576.95	0.00	71005.18
	UTTARAKHAND	32251.00	0.00	0.00	0.00	32251.00
	WEST BENGAL	0.00	0.00	0.00	0.00	0.00
	Total (99)	391291.25	12962.08	53075.66	0.00	457328.99

Table A2: Distribution of capital expenditure by sub-major head of accounts and State

(Rsin lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-2016	ANDHRA PRADESH	198366.56	0.00	48494.64	0.00	246861.20
	ARUNACHAL PRADESH	48227.12	0.00	100.00	0.00	48327.12
	ASSAM	273964.68	0.00	0.00	0.00	273964.68
	BIHAR	697353.64	0.00	51.42	0.00	697405.06
	CHHATTISGARH	7307.61	0.00	0.00	0.00	7307.61
	DELHI	5016.56	0.00	63117.25	0.00	68133.81
	GOA	21342.73	11264.06	11588.14	0.00	44194.93
	GUJARAT	58655.07	0.00	41199.89	0.00	99854.96
	HARYANA	151190.75	0.00	0.00	0.00	151190.75
	HIMACHAL PRADESH	84738.60	0.00	0.00	0.00	84738.60
	JAMMU & KASHMIR	82901.46	47.29	21.74	0.00	82970.49
	JHARKHAND	14784.09	0.00	0.00	0.00	14784.09
	KARNATAKA	26963.88	14605.05	0.00	0.00	41568.93
	KERALA	57847.06	58025.84	0.00	0.00	115872.90
	MADHYA PRADESH	10076.21	0.00	0.00	0.00	10076.21
	MAHARASHTRA	40158.34	20774.65	2978.83	0.00	63911.82
	MANIPUR	57488.79	0.00	0.00	0.00	57488.79
	MEGHALAYA	4548.02	0.00	0.00	0.00	4548.02
	MIZORAM	0.00	2103.24	0.00	0.00	2103.24
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	200155.52	8832.48	61030.70	0.00	270018.70
	PUDUCHERRY	7571.03	535.17	20840.54	0.00	28946.74
	PUNJAB	51678.69	0.00	112881.80	0.00	164560.49
	RAJASTHAN	10640.67	0.00	0.00	0.00	10640.67
	SIKKIM	3014.03	0.00	1358.85	0.00	4372.88
	TAMIL NADU	200095.92	25018.74	-0.97	0.00	225113.69
	TELANGANA	8536.91	0.00	31.59	0.00	8568.50
	TRIPURA	15759.96	0.00	0.00	0.00	15759.96
	UNION GOVERNMENT	8687.59	14572.30	0.00	0.00	23259.89
	UTTAR PRADESH	473491.00	0.00	35872.23	0.00	509363.23
	UTTARAKHAND	93816.45	0.00	0.00	0.00	93816.45
	WEST BENGAL	331367.34	2586.31	44470.39	0.00	378424.04
	Total (99)	3245746.28	158365.13	444037.04	0.00	3848148.45

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-01	ANDHRA PRADESH	3941.16	0.00	9254.25	0.00	13195.41
	ARUNACHAL PRADESH	2169.81	0.00	0.00	0.00	2169.81
	ASSAM	9852.58	0.00	0.00	0.00	9852.58
	BIHAR	13138.29	0.00	264.65	0.00	13402.94
	CHHATTISGARH	0.87	0.00	0.00	0.00	0.87
	DELHI	927.04	0.00	3851.45	0.00	4778.49
	GOA	122.35	16.43	26.57	0.00	165.35
	GUJARAT	466.58	0.00	1616.08	0.00	2082.66
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	872.37	0.00	0.00	0.00	872.37
	JAMMU & KASHMIR	2879.92	0.00	0.00	0.00	2879.92
	JHARKHAND	0.00	0.00	0.00	0.00	0.00
	KARNATAKA	509.46	466.44	0.00	0.00	975.90
	KERALA	1450.92	1171.27	0.00	0.00	2622.19
	MADHYA PRADESH	31.51	0.00	0.00	0.00	31.51
	MAHARASHTRA	194.77	408.25	923.25	0.00	1526.27
	MANIPUR	878.11	0.00	0.00	0.00	878.11
	MEGHALAYA	292.96	0.00	0.00	0.00	292.96
	ODISHA	1964.46	365.61	117.74	0.00	2447.81
	PUDUCHERRY	173.05	17.71	354.02	0.00	544.78
	PUNJAB	2683.30	0.00	11919.00	0.00	14602.30
	RAJASTHAN	217.29	0.00	0.00	0.00	217.29
	SIKKIM	1147.98	0.00	0.00	0.00	1147.98
	TAMIL NADU	668.09	102.78	79.48	0.00	850.35
	TRIPURA	1206.37	0.00	0.00	0.00	1206.37
	UNION GOVERNMENT	11308.71	601.32	0.00	0.00	11910.03
	UTTAR PRADESH	5301.89	0.00	492.67	0.00	5794.56
	UTTARAKHAND	21.65	0.00	1.90	0.00	23.55
	WEST BENGAL	7926.87	106.72	7063.00	12675.09	27771.68
	Total (99)	70348.36	3256.53	35964.06	12675.09	122244.04

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2001-02	ANDHRA PRADESH	6228.63	0.00	6971.90	0.00	13200.53
	ARUNACHAL PRADESH	1367.97	0.00	0.00	0.00	1367.97
	ASSAM	8759.47	0.00	0.00	0.00	8759.47
	BIHAR	12717.79	0.00	744.30	0.00	13462.09
	CHHATTISGARH	10.32	0.00	0.00	0.00	10.32
	DELHI	991.76	0.00	3823.43	0.00	4815.19
	GOA	98.71	32.82	58.15	0.00	189.68
	GUJARAT	291.57	0.00	1257.09	0.00	1548.66
	HARYANA	0.00	0.00	0.00	0.00	0.00
	HIMACHAL PRADESH	748.11	0.00	0.00	0.00	748.11
	JAMMU & KASHMIR	2986.96	0.00	0.00	0.00	2986.96
	JHARKHAND	148.62	0.00	0.00	0.00	148.62
	KARNATAKA	617.79	114.73	0.00	0.00	732.52
	KERALA	1103.57	2675.40	0.00	0.00	3778.97
	MADHYA PRADESH	22.00	0.00	0.00	0.00	22.00
	MAHARASHTRA	615.19	345.32	325.08	0.00	1285.59
	MANIPUR	755.29	0.00	0.00	0.12	755.41
	MEGHALAYA	229.91	0.00	0.00	0.00	229.91
	ODISHA	2248.87	342.21	96.05	0.00	2687.13
	PUDUCHERRY	181.51	23.60	188.81	0.00	393.92
	PUNJAB	7342.71	0.00	10741.45	0.00	18084.16
	RAJASTHAN	385.86	0.00	0.00	0.00	385.86
	SIKKIM	918.04	0.00	0.00	0.00	918.04
	TAMIL NADU	439.97	239.17	80.39	0.00	759.53
	TRIPURA	1266.65	0.00	0.00	0.00	1266.65
	UNION GOVERNMENT	11580.89	851.43	0.00	0.00	12432.32
	UTTAR PRADESH	3910.17	0.00	1538.24	0.00	5448.41
	UTTARAKHAND	470.15	0.00	0.00	0.00	470.15
	WEST BENGAL	9902.20	304.27	7523.56	7987.67	25717.70
	Total (99)	76340.68	4928.95	33348.45	7987.79	122605.87

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2002-03	ANDHRA PRADESH	4259.29	0.00	7051.11	0.00	11310.40
	ARUNACHAL PRADESH	2374.10	0.00	0.00	0.00	2374.10
	ASSAM	8774.92	0.00	0.00	0.00	8774.92
	BIHAR	13309.04	0.00	0.00	0.00	13309.04
	CHHATTISGARH	30.14	0.00	0.00	0.00	30.14
	DELHI	1314.84	0.00	4006.68	0.00	5321.52
	GOA	129.82	77.08	85.86	0.00	292.76
	GUJARAT	259.59	0.00	1063.00	0.00	1322.59
	HARYANA	3163.46	0.00	0.00	0.00	3163.46
	HIMACHAL PRADESH	1336.98	0.00	0.00	0.00	1336.98
	JAMMU & KASHMIR	3467.15	0.00	0.00	0.00	3467.15
	JHARKHAND	22.87	0.00	0.00	0.00	22.87
	KARNATAKA	359.90	499.36	0.00	0.00	859.26
	KERALA	762.91	2285.13	0.00	0.00	3048.04
	MADHYA PRADESH	248.66	0.00	0.00	0.00	248.66
	MAHARASHTRA	500.56	235.21	94.16	0.00	829.93
	MANIPUR	543.27	0.00	0.00	151.82	695.09
	MEGHALAYA	152.14	0.00	0.00	0.00	152.14
	ODISHA	2064.28	367.55	293.28	0.00	2725.11
	PUDUCHERRY	439.03	1.89	771.19	0.00	1212.11
	PUNJAB	4462.79	0.00	4761.88	0.00	9224.67
	RAJASTHAN	385.96	0.00	0.00	0.00	385.96
	SIKKIM	1420.46	0.00	0.00	0.00	1420.46
	TAMIL NADU	335.46	682.68	80.39	0.00	1098.53
	TRIPURA	1076.02	0.00	0.00	0.00	1076.02
	UNION GOVERNMENT	635.02	379.00	0.00	0.00	1014.02
	UTTAR PRADESH	5948.30	0.00	1715.16	0.00	7663.46
	UTTARAKHAND	571.64	0.00	0.00	0.00	571.64
	WEST BENGAL	5729.28	47.38	7487.74	1219.14	14483.54
	Total (99)	64077.88	4575.28	27410.45	1370.96	97434.57

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2003-04	ANDHRA PRADESH	805.05	0.00	8330.70	0.00	9135.75
	ARUNACHAL PRADESH	3402.38	0.00	0.00	0.00	3402.38
	ASSAM	8988.32	0.00	0.00	0.00	8988.32
	BIHAR	12341.34	0.00	767.91	0.00	13109.25
	CHHATTISGARH	29.42	0.00	0.00	0.00	29.42
	DELHI	1479.08	0.00	3819.78	0.00	5298.86
	GOA	176.85	151.39	159.91	0.00	488.15
	GUJARAT	236.88	0.00	1140.14	0.00	1377.02
	HARYANA	3255.76	0.00	0.00	0.00	3255.76
	HIMACHAL PRADESH	1582.52	0.00	0.00	0.00	1582.52
	JAMMU & KASHMIR	4374.04	0.00	21.02	0.00	4395.06
	JHARKHAND	47.93	0.00	0.00	0.00	47.93
	KARNATAKA	270.20	489.85	0.00	0.00	760.05
	KERALA	1138.30	2995.12	0.00	0.00	4133.42
	MADHYA PRADESH	95.22	0.00	0.00	0.00	95.22
	MAHARASHTRA	81.29	980.04	611.94	0.00	1673.27
	MANIPUR	955.49	0.00	0.00	146.78	1102.27
	MEGHALAYA	208.30	0.00	0.00	0.00	208.30
	ODISHA	1552.94	262.64	175.61	0.00	1991.19
	PUDUCHERRY	376.05	12.42	490.41	0.00	878.88
	PUNJAB	4463.66	0.00	1608.87	0.00	6072.53
	RAJASTHAN	345.95	0.00	0.00	0.00	345.95
	SIKKIM	1055.93	0.00	0.00	0.00	1055.93
	TAMIL NADU	632.92	916.32	80.40	0.00	1629.64
	TRIPURA	1184.09	0.00	0.00	0.00	1184.09
	UNION GOVERNMENT	10334.99	1005.89	0.00	0.00	11340.88
	UTTAR PRADESH	7425.88	0.00	1224.07	0.00	8649.95
	UTTARAKHAND	897.52	0.00	0.00	0.00	897.52
	WEST BENGAL	3712.05	9.93	7460.07	665.17	11847.22
	Total (99)	71450.35	6823.60	25890.83	811.95	104976.73

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2004-05	ANDHRA PRADESH	2365.02	0.00	8575.20	0.00	10940.22
	ARUNACHAL PRADESH	974.13	0.00	100.00	0.00	1074.13
	ASSAM	12377.92	0.00	0.00	0.00	12377.92
	BIHAR	16522.60	0.00	0.00	0.00	16522.60
	CHHATTISGARH	15.04	0.00	0.00	0.00	15.04
	DELHI	1592.28	0.00	3776.14	0.00	5368.42
	GOA	175.11	80.34	254.66	0.00	510.11
	GUJARAT	272.33	0.00	972.41	0.00	1244.74
	HARYANA	3982.68	0.00	0.00	0.00	3982.68
	HIMACHAL PRADESH	1450.86	0.00	0.00	0.00	1450.86
	JAMMU & KASHMIR	4258.20	7.00	4.49	0.00	4269.69
	JHARKHAND	131.45	0.00	0.00	0.00	131.45
	KARNATAKA	376.57	422.14	0.00	0.00	798.71
	KERALA	742.67	2636.44	0.00	0.00	3379.11
	MADHYA PRADESH	475.29	0.00	0.00	0.00	475.29
	MAHARASHTRA	959.01	837.45	91.62	0.00	1888.08
	MANIPUR	1225.28	0.00	0.00	112.36	1337.64
	MEGHALAYA	194.98	0.00	0.00	0.00	194.98
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	2178.72	438.83	353.88	0.00	2971.43
	PUDUCHERRY	785.36	176.26	407.82	0.00	1369.44
	PUNJAB	4998.28	0.00	2588.02	0.00	7586.30
	RAJASTHAN	985.37	0.00	0.00	0.00	985.37
	SIKKIM	411.52	0.00	50.00	0.00	461.52
	TAMIL NADU	1617.78	1733.20	158.28	0.00	3509.26
	TRIPURA	858.29	0.00	0.00	0.00	858.29
	UNION GOVERNMENT	6904.95	650.66	0.00	0.00	7555.61
	UTTAR PRADESH	17103.48	0.00	2131.60	0.00	19235.08
	UTTARAKHAND	1056.73	0.00	0.00	0.00	1056.73
	WEST BENGAL	6410.93	11.46	7347.58	88.20	13858.17
	Total (99)	91402.83	6993.78	26811.70	200.56	125408.87

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2005-06	ANDHRA PRADESH	1350.87	0.00	11280.77	0.00	12631.64
	ARUNACHAL PRADESH	575.00	0.00	0.00	0.00	575.00
	ASSAM	12883.68	0.00	0.00	0.00	12883.68
	BIHAR	18865.42	0.00	829.73	0.00	19695.15
	CHHATTISGARH	1607.33	0.00	2988.34	0.00	4595.67
	DELHI	281.82	0.00	3871.49	0.00	4153.31
	GOA	187.98	114.98	183.92	0.00	486.88
	GUJARAT	192.91	0.00	950.56	0.00	1143.47
	HARYANA	6118.67	0.00	0.00	0.00	6118.67
	HIMACHAL PRADESH	1670.20	0.00	0.00	0.00	1670.20
	JAMMU & KASHMIR	5298.12	6.01	0.00	0.00	5304.13
	JHARKHAND	211.63	0.00	0.00	0.00	211.63
	KARNATAKA	545.67	430.08	0.00	0.00	975.75
	KERALA	1259.43	1562.75	0.00	0.00	2822.18
	MADHYA PRADESH	232.89	0.00	0.00	0.00	232.89
	MAHARASHTRA	151.29	455.68	1387.44	0.00	1994.41
	MANIPUR	1401.91	0.00	0.00	149.84	1551.75
	MEGHALAYA	504.01	0.00	0.00	0.00	504.01
	MIZORAM	0.00	60.00	0.00	0.00	60.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	3563.17	573.47	700.62	0.00	4837.26
	PUDUCHERRY	715.31	293.62	1867.29	0.00	2876.22
	PUNJAB	6749.27	0.00	4601.02	0.00	11350.29
	RAJASTHAN	730.72	0.00	0.00	0.00	730.72
	SIKKIM	452.41	0.00	22.18	0.00	474.59
	TAMIL NADU	2196.18	4125.47	495.58	0.00	6817.23
	TRIPURA	1427.26	0.00	0.00	0.00	1427.26
	UNION GOVERNMENT	13079.41	508.97	0.00	0.00	13588.38
	UTTAR PRADESH	23442.41	0.00	10325.84	0.00	33768.25
	UTTARAKHAND	3905.15	0.00	0.00	0.00	3905.15
	WEST BENGAL	11103.11	19.48	8648.20	60.92	19831.71
	Total (99)	120703.23	8150.51	48152.98	210.76	177217.48

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2006-07	ANDHRA PRADESH	5329.78	0.00	14798.02	0.00	20127.80
	ARUNACHAL PRADESH	2439.16	0.00	0.00	0.00	2439.16
	ASSAM	22233.01	0.00	0.00	0.00	22233.01
	BIHAR	18148.31	0.00	892.04	0.00	19040.35
	CHHATTISGARH	174.32	0.00	0.00	0.00	174.32
	DELHI	1736.44	0.00	4213.79	0.00	5950.23
	GOA	674.91	573.17	295.69	0.00	1543.77
	GUJARAT	579.44	0.00	1706.98	0.00	2286.42
	HARYANA	5849.00	0.00	0.00	0.00	5849.00
	HIMACHAL PRADESH	1920.36	0.00	0.00	0.00	1920.36
	JAMMU & KASHMIR	6783.44	34.28	4.35	0.00	6822.07
	JHARKHAND	-1559.11	0.00	0.00	0.00	-1559.11
	KARNATAKA	845.53	1282.71	0.00	0.00	2128.24
	KERALA	317.34	1424.42	0.00	0.00	1741.76
	MADHYA PRADESH	514.83	0.00	0.00	0.00	514.83
	MAHARASHTRA	1109.51	857.81	776.82	0.00	2744.14
	MANIPUR	2023.61	0.00	0.00	279.38	2302.99
	MEGHALAYA	302.95	0.00	0.00	0.00	302.95
	MIZORAM	0.00	351.00	0.00	0.00	351.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	4629.71	774.14	1290.48	0.00	6694.33
	PUDUCHERRY	501.86	9.67	3301.97	0.00	3813.50
	PUNJAB	6774.19	0.00	932.55	0.00	7706.74
	RAJASTHAN	309.58	0.00	0.00	0.00	309.58
	SIKKIM	936.67	0.00	85.46	0.00	1022.13
	TAMIL NADU	1346.52	2150.30	80.51	0.00	3577.33
	TRIPURA	2070.76	0.00	0.00	0.00	2070.76
	UNION GOVERNMENT	13672.94	920.03	0.00	0.00	14592.97
	UTTAR PRADESH	33614.85	0.00	8709.92	0.00	42324.77
	UTTARAKHAND	4065.14	0.00	0.00	0.00	4065.14
	WEST BENGAL	13854.05	0.00	7311.24	25.40	21190.69
	Total (99)	151199.1	8377.53	44399.82	304.78	204281.23

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2007-08	ANDHRA PRADESH	19962.20	0.00	7362.05	0.00	27324.25
	ARUNACHAL PRADESH	1411.21	0.00	0.00	0.00	1411.21
	ASSAM	19954.72	0.00	0.00	0.00	19954.72
	BIHAR	32231.59	0.00	964.10	0.00	33195.69
	CHHATTISGARH	418.54	0.00	0.00	0.00	418.54
	DELHI	1815.15	0.00	5590.36	0.00	7405.51
	GOA	992.89	462.16	449.19	0.00	1904.24
	GUJARAT	9318.41	0.00	1899.53	0.00	11217.94
	HARYANA	6448.76	0.00	0.00	0.00	6448.76
	HIMACHAL PRADESH	2349.82	0.00	0.00	0.00	2349.82
	JAMMU & KASHMIR	6365.86	0.00	1.59	0.00	6367.45
	JHARKHAND	681.70	0.00	0.00	0.00	681.70
	KARNATAKA	1471.66	504.54	0.00	0.00	1976.20
	KERALA	1416.44	4498.04	0.00	0.00	5914.48
	MADHYA PRADESH	1629.65	0.00	0.00	0.00	1629.65
	MAHARASHTRA	978.67	1553.23	1430.52	0.00	3962.42
	MANIPUR	1904.70	0.00	0.00	0.00	1904.70
	MEGHALAYA	421.00	0.00	0.00	0.00	421.00
	MIZORAM	0.00	271.00	0.00	0.00	271.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	8514.41	1122.23	3754.30	0.00	13390.94
	PUDUCHERRY	601.99	0.00	2158.00	0.00	2759.99
	PUNJAB	10528.03	0.00	4956.68	0.00	15484.71
	RAJASTHAN	178.63	0.00	0.00	0.00	178.63
	SIKKIM	730.58	0.00	164.43	0.00	895.01
	TAMIL NADU	1553.22	2842.58	80.51	0.00	4476.31
	TRIPURA	1809.80	0.00	0.00	0.00	1809.80
	UNION GOVERNMENT	9786.28	1405.52	0.00	0.00	11191.80
	UTTAR PRADESH	29688.40	0.00	5055.08	0.00	34743.48
	UTTARAKHAND	2641.01	0.00	0.00	0.00	2641.01
	WEST BENGAL	16487.34	313.93	7053.33	51.99	23906.59
	Total (99)	192292.66	12973.23	40919.67	51.99	246237.55

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2008-09	ANDHRA PRADESH	18254.86	0.00	13055.04	0.00	31309.90
	ARUNACHAL PRADESH	7057.08	0.00	0.00	0.00	7057.08
	ASSAM	30491.85	0.00	0.00	0.00	30491.85
	BIHAR	66899.21	0.00	1555.97	0.00	68455.18
	CHHATTISGARH	333.71	0.00	0.00	0.00	333.71
	DELHI	2596.07	3895.19	4167.29	0.00	10658.55
	GOA	1786.02	1504.93	624.04	0.00	3914.99
	GUJARAT	8799.06	0.00	3048.89	0.00	11847.95
	HARYANA	8104.58	0.00	0.00	0.00	8104.58
	HIMACHAL PRADESH	2473.68	0.00	0.00	0.00	2473.68
	JAMMU & KASHMIR	9243.07	0.00	0.00	0.00	9243.07
	JHARKHAND	991.77	0.00	0.00	0.00	991.77
	KARNATAKA	2414.85	954.89	0.00	0.00	3369.74
	KERALA	2629.16	11501.01	0.00	0.00	14130.17
	MADHYA PRADESH	1264.94	0.00	0.00	0.00	1264.94
	MAHARASHTRA	2059.85	2595.46	889.39	0.00	5544.70
	MANIPUR	7427.57	0.00	0.00	0.00	7427.57
	MEGHALAYA	602.25	0.00	0.00	0.00	602.25
	MIZORAM	0.00	1108.19	0.00	0.00	1108.19
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	15730.62	1240.74	3196.76	0.00	20168.12
	PUDUCHERRY	367.01	0.00	1115.65	0.00	1482.66
	PUNJAB	8205.94	0.00	12430.85	0.00	20636.79
	RAJASTHAN	162.23	0.00	0.00	0.00	162.23
	SIKKIM	2185.21	0.00	62.06	0.00	2247.27
	TAMIL NADU	4856.18	995.58	80.51	0.00	5932.27
	TRIPURA	1636.81	0.00	0.00	0.00	1636.81
	UNION GOVERNMENT	17783.76	1513.51	0.00	0.00	19297.27
	UTTAR PRADESH	36596.75	0.00	4420.25	0.00	41017.00
	UTTARAKHAND	2117.53	0.00	0.00	0.00	2117.53
	WEST BENGAL	15813.42	239.19	8217.15	41.42	24311.18
	Total (99)	278885.04	25548.69	52863.85	41.42	357339.00

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2009-10	ANDHRA PRADESH	25997.74	0.00	13119.97	0.00	39117.71
	ARUNACHAL PRADESH	3853.61	0.00	0.00	0.00	3853.61
	ASSAM	42428.48	0.00	0.00	0.00	42428.48
	BIHAR	95174.52	0.00	2426.13	0.00	97600.65
	CHHATTISGARH	538.70	0.00	0.00	0.00	538.70
	DELHI	2582.44	0.00	11388.18	0.00	13970.62
	GOA	4372.64	1664.83	1704.80	0.00	7742.27
	GUJARAT	9255.22	0.00	4313.05	0.00	13568.27
	HARYANA	7898.24	0.00	0.00	0.00	7898.24
	HIMACHAL PRADESH	7209.00	0.00	0.00	0.00	7209.00
	JAMMU & KASHMIR	9278.65	0.00	0.00	0.00	9278.65
	JHARKHAND	1132.51	0.00	0.00	0.00	1132.51
	KARNATAKA	703.91	748.15	0.00	0.00	1452.06
	KERALA	1612.28	14956.55	0.00	0.00	16568.83
	MADHYA PRADESH	689.70	0.00	0.00	0.00	689.70
	MAHARASHTRA	1697.03	4205.37	1240.61	0.00	7143.01
	MANIPUR	6505.45	0.00	0.00	0.00	6505.45
	MEGHALAYA	354.24	0.00	0.00	0.00	354.24
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	19925.81	1398.56	467.56	0.00	21791.93
	PUDUCHERRY	352.94	0.00	2973.62	0.00	3326.56
	PUNJAB	12071.81	0.00	8674.88	0.00	20746.69
	RAJASTHAN	162.23	0.00	0.00	0.00	162.23
	SIKKIM	673.83	0.00	11.93	0.00	685.76
	TAMIL NADU	17795.96	221.49	80.51	0.00	18097.96
	TRIPURA	1747.93	0.00	0.00	0.00	1747.93
	UNION GOVERNMENT	15064.47	1595.60	0.00	0.00	16660.07
	UTTAR PRADESH	38012.28	0.00	2052.98	0.00	40065.26
	UTTARAKHAND	859.85	0.00	0.00	0.00	859.85
	WEST BENGAL	32173.95	124.06	9204.52	0.00	41502.53
	Total (99)	360125.42	24914.61	57658.74	0.00	442698.77

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2010-11	ANDHRA PRADESH	18627.46	0.00	14439.78	0.00	33067.24
	ARUNACHAL PRADESH	9171.08	0.00	0.00	0.00	9171.08
	ASSAM	26189.84	0.00	0.00	0.00	26189.84
	BIHAR	88904.20	0.00	2441.33	0.00	91345.53
	CHHATTISGARH	428.20	0.00	0.00	0.00	428.20
	DELHI	2969.96	0.00	10114.51	0.00	13084.47
	GOA	4313.61	687.47	1526.02	0.00	6527.10
	GUJARAT	9549.91	0.00	5138.73	0.00	14688.64
	HARYANA	12131.00	0.00	0.00	0.00	12131.00
	HIMACHAL PRADESH	12499.63	0.00	0.00	0.00	12499.63
	JAMMU & KASHMIR	13185.71	0.00	0.00	0.00	13185.71
	JHARKHAND	1156.72	0.00	0.00	0.00	1156.72
	KARNATAKA	1203.77	1176.48	0.00	0.00	2380.25
	KERALA	7579.62	5231.88	0.00	0.00	12811.50
	MADHYA PRADESH	1588.18	0.00	0.00	0.00	1588.18
	MAHARASHTRA	1743.90	8150.83	1467.37	0.00	11362.10
	MANIPUR	9809.72	0.00	0.00	0.00	9809.72
	MEGHALAYA	278.74	0.00	0.00	0.00	278.74
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	14946.49	2011.56	4427.98	0.00	21386.03
	PUDUCHERRY	1253.28	0.00	1016.79	0.00	2270.07
	PUNJAB	9190.58	0.00	3071.53	0.00	12262.11
	RAJASTHAN	192.42	0.00	0.00	0.00	192.42
	SIKKIM	540.04	0.00	217.53	0.00	757.57
	TAMIL NADU	31635.60	398.65	80.51	0.00	32114.76
	TRIPURA	2342.32	0.00	0.00	0.00	2342.32
	UNION GOVERNMENT	18383.59	963.07	0.00	0.00	19346.66
	UTTAR PRADESH	48213.01	0.00	1683.64	0.00	49896.65
	UTTARAKHAND	2448.84	0.00	0.00	0.00	2448.84
	WEST BENGAL	44756.09	623.55	8731.66	36.81	54148.11
	Total (99)	395233.51	19243.49	54357.38	36.81	468871.19

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2011-12	ANDHRA PRADESH	27219.88		14809.06		42028.94
	ARUNACHAL PRADESH	8117.57				8117.57
	ASSAM	52994.31		0.00		52994.31
	BIHAR	134029.70		2532.66		136562.36
	CHHATTISGARH	2516.94				2516.94
	DELHI	4295.90		10329.79		14625.69
	GOA	3652.52	1289.86	1748.46		6690.84
	GUJARAT	6165.38		5081.41		11246.79
	HARYANA	13327.20				13327.20
	HIMACHAL PRADESH	4778.70				4778.70
	JAMMU & KASHMIR	17668.18	0.00	-0.54		17667.64
	JHARKHAND	1585.73				1585.73
	KARNATAKA	2024.02	645.74			2669.76
	KERALA	4458.67	818.96			5277.63
	MADHYA PRADESH	661.77				661.77
	MAHARASHTRA	2208.83	2370.00	1950.99		6529.82
	MANIPUR	9942.83				9942.83
	MEGHALAYA	713.29				713.29
	MIZORAM	0.00	115.65	0.00		115.65
	NAGALAND					
	ODISHA	21130.04	1704.61	8949.54		31784.19
	PUDUCHERRY	543.80		1284.73		1828.53
	PUNJAB	12192.16		3328.50		15520.66
	RAJASTHAN	184.63				184.63
	SIKKIM	614.94		241.05		855.99
	TAMIL NADU	92976.43	301.39	80.51		93358.33
	TRIPURA	2430.25				2430.25
	UNION GOVERNMENT	17285.17	1689.33			18974.50
	UTTAR PRADESH	41400.08		2079.79		43479.87
	UTTARAKHAND	1867.65				1867.65
	WEST BENGAL	37606.33	393.89	5027.45	88.23	43115.90
	Total (99)	524592.90	9329.43	57443.40	88.23	591453.96

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2012-13	ANDHRA PRADESH	16826.33	0.00	14415.57	0.00	31241.90
	ARUNACHAL PRADESH	2093.75	0.00	0.00	0.00	2093.75
	ASSAM	55811.19	0.00	0.00	0.00	55811.19
	BIHAR	113499.20	0.00	2294.70	0.00	115793.90
	CHHATTISGARH	487.77	0.00	0.00	0.00	487.77
	DELHI	3930.90	0.00	13625.47	0.00	17556.37
	GOA	2583.37	1436.63	1328.45	0.00	5348.45
	GUJARAT	5562.45	0.00	5689.07	0.00	11251.52
	HARYANA	16329.90	0.00	0.00	0.00	16329.90
	HIMACHAL PRADESH	6150.79	0.00	0.00	0.00	6150.79
	JAMMU & KASHMIR	17226.31	0.00	14.63	0.00	17240.94
	JHARKHAND	1747.78	0.00	0.00	0.00	1747.78
	KARNATAKA	6077.29	694.16	0.00	0.00	6771.45
	KERALA	15054.09	4210.44	0.00	0.00	19264.53
	MADHYA PRADESH	621.79	0.00	0.00	0.00	621.79
	MAHARASHTRA	3240.99	4396.54	1595.48	0.00	9233.01
	MANIPUR	10489.64	0.00	0.00	0.00	10489.64
	MEGHALAYA	383.79	0.00	0.00	0.00	383.79
	MIZORAM	0.00	0.00	0.00	0.00	0.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	27600.88	2563.26	9279.86	0.00	39444.00
	PUDUCHERRY	327.49	0.00	1134.25	0.00	1461.74
	PUNJAB	17131.71	0.00	10483.79	0.00	27615.50
	RAJASTHAN	1020.42	0.00	0.00	0.00	1020.42
	SIKKIM	1090.60	0.00	232.38	0.00	1322.98
	TAMIL NADU	35860.50	4080.84	80.51	0.00	40021.85
	TRIPURA	2598.41	0.00	0.00	0.00	2598.41
	UNION GOVERNMENT	19836.15	2131.64	0.00	0.00	21967.79
	UTTAR PRADESH	49752.61	0.00	10898.68	0.00	60651.29
	UTTARAKHAND	4364.15	0.00	0.00	0.00	4364.15
	WEST BENGAL	58517.38	283.16	8989.76	60.06	67850.36
	Total (99)	496217.63	19796.67	80062.60	60.06	596136.96

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2013-14	ANDHRA PRADESH	12396.92	0.00	13936.20	0.00	26333.12
	ARUNACHAL PRADESH	3979.80	0.00	0.00	0.00	3979.80
	ASSAM	43014.80	0.00	0.00	0.00	43014.80
	BIHAR	95957.75	0.00	2490.16	0.00	98447.91
	CHHATTISGARH	915.40	0.00	0.00	0.00	915.40
	DELHI	4032.36	0.00	13409.99	0.00	17442.35
	GOA	3420.94	1483.04	1310.54	0.00	6214.52
	GUJARAT	12206.78	0.00	6056.67	0.00	18263.45
	HARYANA	21910.03	0.00	0.00	0.00	21910.03
	HIMACHAL PRADESH	4106.97	0.00	0.00	0.00	4106.97
	JAMMU & KASHMIR	11535.99	0.00	0.00	0.00	11535.99
	JHARKHAND	901.09	0.00	0.00	0.00	901.09
	KARNATAKA	4054.28	1266.06	0.00	0.00	5320.34
	KERALA	7065.31	4544.07	0.00	0.00	11609.38
	MADHYA PRADESH	678.10	0.00	0.00	0.00	678.10
	MAHARASHTRA	3943.16	2480.80	1522.65	0.00	7946.61
	MANIPUR	11018.14	0.00	0.00	0.00	11018.14
	MEGHALAYA	492.61	0.00	0.00	0.00	492.61
	MIZORAM	0.00	13.00	0.00	0.00	13.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	51749.00	3963.16	9260.62	0.00	64972.78
	PUDUCHERRY	385.06	0.00	1150.96	0.00	1536.02
	PUNJAB	15832.04	0.00	5515.16	0.00	21347.20
	RAJASTHAN	881.49	0.00	0.00	0.00	881.49
	SIKKIM	460.34	0.00	129.06	0.00	589.40
	TAMIL NADU	20414.73	4480.69	80.51	0.00	24975.93
	TRIPURA	1535.41	0.00	0.00	0.00	1535.41
	UNION GOVERNMENT	20850.57	2015.66	0.00	0.00	22866.23
	UTTAR PRADESH	47416.40	0.00	5031.97	0.00	52448.37
	UTTARAKHAND	9202.29	0.00	0.00	0.00	9202.29
	WEST BENGAL	67935.41	90.00	8539.42	186.45	76751.28
	Total (99)	478293.17	20336.48	68433.91	186.45	567250.01

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2014-15	ANDHRA PRADESH	19962.55	0.00	9721.67	0.00	29684.22
	ARUNACHAL PRADESH	3076.37	0.00	0.00	0.00	3076.37
	ASSAM	77548.17	0.00	0.00	0.00	77548.17
	BIHAR	65054.42	0.00	2485.98	0.00	67540.40
	CHHATTISGARH	824.47	0.00	0.00	0.00	824.47
	DELHI	4282.38	0.00	16546.41	0.00	20828.79
	GOA	3578.43	1631.61	2115.02	0.00	7325.06
	GUJARAT	14880.24	0.00	4394.64	0.00	19274.88
	HARYANA	22152.37	0.00	0.00	0.00	22152.37
	HIMACHAL PRADESH	36665.82	0.00	0.00	0.00	36665.82
	JAMMU & KASHMIR	16166.65	0.00	0.00	0.00	16166.65
	JHARKHAND	2923.03	0.00	0.00	0.00	2923.03
	KARNATAKA	2978.90	2342.99	0.00	0.00	5321.89
	KERALA	8994.13	4997.68	0.00	0.00	13991.81
	MADHYA PRADESH	697.92	0.00	0.00	0.00	697.92
	MAHARASHTRA	13758.76	2122.50	1756.21	0.00	17637.47
	MANIPUR	4829.18	0.00	0.00	0.00	4829.18
	MEGHALAYA	277.98	0.00	0.00	0.00	277.98
	MIZORAM	0.00	38.40	0.00	0.00	38.40
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	53880.61	4391.25	11750.99	0.00	70022.85
	PUDUCHERRY	1766.83	0.00	1641.97	0.00	3408.80
	PUNJAB	19021.79	0.00	16583.94	0.00	35605.73
	RAJASTHAN	256.87	0.00	0.00	0.00	256.87
	SIKKIM	442.84	0.00	142.77	0.00	585.61
	TAMIL NADU	30920.37	1434.71	80.51	0.00	32435.59
	TELANGANA	1966.51	0.00	31.59	0.00	1998.10
	TRIPURA	2358.53	0.00	0.00	0.00	2358.53
	UNION GOVERNMENT	23642.99	1606.27	0.00	0.00	25249.26
	UTTAR PRADESH	70610.52	0.00	10274.24	0.00	80884.76
	UTTARAKHAND	31553.86	0.00	0.00	0.00	31553.86
	WEST BENGAL	100257.10	19.29	11292.09	78.06	111646.54
	Total (99)	635330.59	18584.70	88818.03	78.06	742811.38

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2015-16	ANDHRA PRADESH	16592.79	0.00	4593.88	0.00	21186.67
	ARUNACHAL PRADESH	11280.81	0.00	0.00	0.00	11280.81
	ASSAM	42411.10	0.00	0.00	0.00	42411.10
	BIHAR	84230.19	0.00	2237.03	0.00	86467.22
	CHHATTISGARH	515.23	0.00	0.00	0.00	515.23
	DELHI	4420.35	0.00	14459.88	0.00	18880.23
	GOA	3504.11	1581.51	1615.87	0.00	6701.49
	GUJARAT	7682.05	0.00	5261.37	0.00	12943.42
	HARYANA	20519.10	0.00	0.00	0.00	20519.10
	HIMACHAL PRADESH	5174.09	0.00	0.00	0.00	5174.09
	JAMMU & KASHMIR	24380.11	0.00	0.00	0.00	24380.11
	JHARKHAND	5080.82	0.00	0.00	0.00	5080.82
	KARNATAKA	2606.59	3180.23	0.00	0.00	5786.82
	KERALA	22390.92	6645.35	0.00	0.00	29036.27
	MADHYA PRADESH	623.76	0.00	0.00	0.00	623.76
	MAHARASHTRA	8661.59	253.33	1709.47	0.00	10624.39
	MANIPUR	3833.21	0.00	0.00	0.00	3833.21
	MEGHALAYA	217.27	0.00	0.00	0.00	217.27
	MIZORAM	0.00	146.00	0.00	0.00	146.00
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	70873.27	5086.90	18099.92	0.00	94060.09
	PUDUCHERRY	336.92	0.00	2475.47	0.00	2812.39
	PUNJAB	21061.54	0.00	17512.60	0.00	38574.14
	RAJASTHAN	4241.02	0.00	0.00	0.00	4241.02
	SIKKIM	1125.46	0.00	0.00	0.00	1125.46
	TAMIL NADU	19277.66	312.89	0.00	0.00	19590.55
	TELANGANA	6583.56	0.00	0.00	0.00	6583.56
	TRIPURA	1391.44	0.00	0.00	0.00	1391.44
	UNION GOVERNMENT	26473.14	1449.19	0.00	0.00	27922.33
	UTTAR PRADESH	76535.32	0.00	4976.49	0.00	81511.81
	UTTARAKHAND	32736.85	0.00	0.00	0.00	32736.85
	WEST BENGAL	0.00	0.00	0.00	0.00	0.00
	Total (99)	524760.27	18655.40	72941.98	0.00	616357.65

Table A3: Distribution of (revenue+capital) expenditure by sub-major head of accounts and State

(Rs in lakh)						
Year	State	Flood Control (01)	Anti-Sea Erosion (02)	Drainage (03)	General (80)	Total (99)
1	2	3	4	5	6	7
2000-2016	ANDHRA PRADESH	200120.53	0.00	171715.17	0.00	371835.70
	ARUNACHAL PRADESH	63343.83	0.00	100.00	0.00	63443.83
	ASSAM	474714.36	0.00	0.00	0.00	474714.36
	BIHAR	881023.57	0.00	22926.69	0.00	903950.26
	CHHATTISGARH	8846.40	0.00	2988.34	0.00	11834.74
	DELHI	39248.77	3895.19	126994.64	0.00	170138.60
	GOA	29770.26	12788.25	13487.15	0.00	56045.66
	GUJARAT	85718.80	0.00	49589.62	0.00	135308.42
	HARYANA	151190.75	0.00	0.00	0.00	151190.75
	HIMACHAL PRADESH	90989.90	0.00	0.00	0.00	90989.90
	JAMMU & KASHMIR	155098.36	47.29	45.54	0.00	155191.19
	JHARKHAND	15204.54	0.00	0.00	0.00	15204.54
	KARNATAKA	27060.39	15218.55	0.00	0.00	42278.94
	KERALA	77975.76	72154.51	0.00	0.00	150130.27
	MADHYA PRADESH	10076.21	0.00	0.00	0.00	10076.21
	MAHARASHTRA	41904.40	32247.82	17773.00	0.00	91925.22
	MANIPUR	73543.40	0.00	0.00	840.30	74383.70
	MEGHALAYA	5626.42	0.00	0.00	0.00	5626.42
	MIZORAM	0.00	2103.24	0.00	0.00	2103.24
	NAGALAND	0.00	0.00	0.00	0.00	0.00
	ODISHA	302553.28	26606.72	72215.19	0.00	401375.19
	PUDUCHERRY	9107.49	535.17	22332.95	0.00	31975.61
	PUNJAB	162709.80	0.00	119710.72	0.00	282420.52
	RAJASTHAN	10640.67	0.00	0.00	0.00	10640.67
	SIKKIM	14206.85	0.00	1358.85	0.00	15565.70
	TAMIL NADU	262527.57	25018.74	1699.11	0.00	289245.42
	TELANGANA	8550.07	0.00	31.59	0.00	8581.66
	TRIPURA	26940.34	0.00	0.00	0.00	26940.34
	UNION GOVERNMENT	236623.03	19287.09	0.00	0.00	255910.12
	UTTAR PRADESH	534972.35	0.00	72610.62	0.00	607582.97
	UTTARAKHAND	98780.01	0.00	1.90	0.00	98781.91
	WEST BENGAL	432185.51	2586.31	119896.77	23264.61	577933.20
	Total (99)	4531253.62	212488.88	815477.85	24104.91	5583325.26

Table A4: The Quantum of Damage due to Floods/Heavy Rains During 1953-2017

Sl. No.	Year	Area affected in m.ha.	Population affected in million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human live Lost Nos.	Damage to Public Utilities in Crore	Total damages Crops, Houses & Public utilities in Rs. Crores (col 6+8+11)
				Area in m.ha.	Value in Rs. Crore	Nos.	Value in Rs. Crore				
1	2	3	4	5	6	7	8	9	10	11	12
1	1953	2.290	24.280	0.930	42.080	264924	7.420	47034	37	2.900	52.400
2	1954	7.490	12.920	2.610	40.520	199984	6.561	22552	279	10.150	57.231
3	1955	9.440	25.270	5.310	77.800	1666789	20.945	72010	865	3.980	102.725
4	1956	9.240	14.570	1.110	44.440	725776	8.047	16108	462	1.140	53.627
5	1957	4.860	6.760	0.450	14.120	318149	4.979	7433	352	4.270	23.369
6	1958	6.260	10.980	1.400	38.280	382251	3.896	18439	389	1.790	43.966
7	1959	5.770	14.520	1.540	56.760	648821	9.418	72691	619	20.020	86.198
8	1960	7.530	8.350	2.270	42.550	609884	14.309	13908	510	6.310	63.169
9	1961	6.560	9.260	1.970	24.040	533465	0.889	15916	1374	6.440	31.369
10	1962	6.120	15.460	3.390	83.180	513785	10.655	37633	348	1.050	94.885
11	1963	3.490	10.930	2.050	30.170	420554	3.701	4572	432	2.740	36.611
12	1964	4.900	13.780	2.490	56.870	255558	4.588	4956	690	5.149	66.607
13	1965	1.460	3.610	0.270	5.870	112957	0.195	7286	79	1.070	7.135
14	1966	4.740	14.400	2.160	80.150	217269	2.544	9071	180	5.736	88.430
15	1967	7.120	20.460	3.270	133.310	567995	14.264	5827	355	7.857	155.431
16	1968	7.150	21.170	2.620	144.610	682704	41.112	130305	3497	25.373	211.095
17	1969	6.200	33.220	2.910	281.900	1268660	54.423	270328	1408	68.112	404.435
18	1970	8.460	31.830	4.910	162.780	1434030	48.606	19198	1076	76.441	287.827
19	1971	13.250	59.740	6.240	423.130	2428031	80.241	12866	994	129.113	632.484
20	1972	4.100	26.690	2.450	98.560	897301	12.460	58231	544	47.174	158.194

Table A4: The Quantum of Damage due to Floods/Heavy Rains During 1953-2017

Sl. No.	Year	Area affected in m.ha.	Population affected in million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human live Lost Nos.	Damage to Public Utilities in Crore	Total damages Crops, Houses & Public utilities in Rs. Crores (col 6+8+11)
				Area in m.ha.	Value in Rs. Crore	Nos.	Value in Rs. Crore				
1	2	3	4	5	6	7	8	9	10	11	12
21	1973	11.790	64.080	3.730	428.030	869797	52.482	261016	1349	88.489	569.001
22	1974	6.700	29.450	3.330	411.640	746709	72.434	16846	387	84.942	569.016
23	1975	6.170	31.360	3.850	271.490	803705	34.097	17345	686	166.050	471.637
24	1976	11.910	50.460	6.040	595.030	1745501	92.160	80062	1373	201.495	888.685
25	1977	11.460	49.430	6.840	720.610	1661625	152.290	556326	11316	328.948	1201.848
26	1978	17.500	70.450	9.960	911.090	3507542	167.574	239174	3396	376.100	1454.764
27	1979	3.990	19.520	2.170	169.970	1328712	210.606	618248	3637	233.627	614.203
28	1980	11.460	54.120	5.550	366.370	2533142	170.851	59173	1913	303.283	840.504
29	1981	6.120	32.490	3.270	524.560	912557	159.630	82248	1376	512.314	1196.504
30	1982	8.870	56.010	5.000	589.400	2397365	383.869	246750	1573	671.607	1644.876
31	1983	9.020	61.030	3.290	1285.850	2393722	332.327	153095	2378	873.429	2491.606
32	1984	10.710	54.550	5.190	906.090	1763603	181.308	141314	1661	818.164	1905.562
33	1985	8.380	59.590	4.650	1425.370	2449878	583.855	43008	1804	2050.043	4059.268
34	1986	8.810	55.500	4.580	1231.580	2049277	534.410	60450	1200	1982.535	3748.525
35	1987	8.890	48.340	4.940	1154.640	2919380	464.490	128638	1835	950.590	2569.720
36	1988	16.290	59.550	10.150	2510.900	2276533	741.600	150996	4252	1377.800	4630.300
37	1989	8.060	34.150	3.010	956.740	782340	149.820	75176	1718	1298.770	2405.330
38	1990	9.303	40.259	3.179	695.610	1019930	213.733	134154	1855	455.266	1708.920
39	1991	6.357	33.889	2.698	579.015	1134410	180.421	41090	1187	728.893	1488.329
40	1992	2.645	19.256	1.748	1027.578	687489	306.284	78669	1533	2010.670	3344.532

Table A4: The Quantum of Damage due to Floods/Heavy Rains During 1953-2017

Sl. No.	Year	Area affected in m.ha.	Population affected in million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human live Lost Nos.	Damage to Public Utilities in Crore	Total damages Crops, Houses & Public utilities in Rs. Crores (col 6+8+11)
				Area in m.ha.	Value in Rs. Crore	Nos.	Value in Rs. Crore				
1	2	3	4	5	6	7	8	9	10	11	12
41	1993	11.439	30.409	3.206	1308.627	1926049	528.324	211193	2864	1445.534	3282.485
42	1994	4.805	27.548	3.963	888.622	914664	165.206	52315	2078	740.762	1794.590
43	1995	5.245	35.932	3.245	1714.787	2001898	1307.894	62438	1814	679.627	3702.308
44	1996	8.049	44.729	3.827	1124.491	726799	176.589	73208	1803	861.393	3005.743
45	1997	4.569	29.663	2.258	692.743	505128	152.504	27754	1402	1985.934	2831.181
46	1998	10.845	47.435	7.495	2594.167	1932874	1108.783	107098	2889	5157.771	8860.721
47	1999	7.765	27.993	1.753	1850.873	1613260	1299.057	91289	745	462.830	3612.760
48	2000	5.382	45.013	3.580	4246.622	2628855	680.943	123252	2606	3936.979	8864.544
49	2001	6.175	26.463	3.964	688.481	716187	816.474	32704	1444	5604.461	7109.416
50	2002	7.090	26.323	2.194	913.092	762492	599.368	21533	1001	1062.083	2574.543
51	2003	6.120	43.201	4.268	7307.230	775379	756.481	15161	2166	3262.154	11325.866
52	2004	5.314	43.725	2.888	778.694	1664388	879.601	134106	1813	1656.090	3314.385
53	2005	12.562	22.925	12.299	2370.923	715749	380.531	119674	1455	4688.219	7439.672
54	2006	1.096	25.224	1.822	2850.668	1497428	3636.848	266945	1431	13303.926	19790.922
55	2007	7.145	41.402	8.795	3121.532	3280233	2113.108	89337	3389	8049.037	13283.677
56	2008	3.427	29.910	3.186	3401.563	1566809	1141.891	101780	2876	5046.481	9589.935
57	2009	3.844	29.537	3.592	4232.609	1235628	10809.795	63383	1513	17509.353	32551.758
58	2010	2.624	18.297	4.994	5887.380	293830	875.952	39706	1582	12757.253	19520.586
59	2011	1.895	15.973	2.718	1393.847	1152518	410.475	35982	1761	6053.570	7857.892
60	2012	2.141	14.689	1.950	1534.108	174526	240.572	31558	933	9169.968	10944.648

Table A4: The Quantum of Damage due to Floods/Heavy Rains During 1953-2017

Sl. No.	Year	Area affected in m.ha.	Population affected in million	Damage to Crops		Damage to Houses		Cattle Lost Nos.	Human live Lost Nos.	Damage to Public Utilities in Crore	Total damages Crops, Houses & Public utilities in Rs. Crores (col 6+8+11)
				Area in m.ha.	Value in Rs. Crore	Nos.	Value in Rs. Crore				
1	2	3	4	5	6	7	8	9	10	11	12
61	2013	7.546	25.927	7.484	6378.078	699525	2032.830	163958	2180	38937.843	47348.751
62	2014	12.775	26.505	8.007	7255.151	311325	581.978	60196	1968	7710.948	15548.077
63	2015	4.478	33.203	3.374	17043.948	3959191	8046.969	45597	1420	32200.182	57291.099
64	2016	7.065	26.555	6.658	4052.723	278240	114.676	22367	1420	1507.926	5675.325
65	2017	5.887	42.872	5.140	7369.000	1153388	9204.600	8640	2026	4219.885	20793.485
	Total	466.147	2083.138	256.187	109642.643	80618467	53594.944	6031316	107498	203950.039	368374.687
	AVG	7.171	32.048	3.941	1686.810	1240284	824.538	92789	1654	3137.693	5667.303
	MAX	17.500	70.450	12.299	17043.948	3959191	10809.795	618248	11316	38937.843	57291.099
	Year	1978	1978	2005	2015	2015	2009	1979	1977	2013	2015